Draft Environmental Impact Report
SCH No. 2024050835

Highland Grove (TTM 38927)

Riverside County, California



Lead Agency
Riverside County
Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501

Draft Environmental Impact Report | March 4, 2026

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General Plan Amendment No. 240072(GPA 240072)
Change of Zone No. 2400026 (CZ 2400026)
Tentative Tract Map No. 38927 (TTM 38927)
Agricultural Preserve Diminishment No. 240006 (APD 240006)

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Appendix B	Air Quality Impact Analysis
Appendix C1	Biological Resources Assessment & MSHCP Consistency Analysis
Appendix C2	Determination of Biologically Equivalent or Superior Preservation (DBESP)
Appendix C3	Aquatic Resources Delineation Report
Appendix D	Cultural Resources Assessment Update
Appendix E	Energy Analysis
Appendix F	Geotechnical Investigation
Appendix G	Greenhouse Gas Analysis
Appendix H	Phase I Environmental Site Assessment (ESA)
Appendix I1	Preliminary Hydrology Study
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Appendix K	Noise Impact Analysis
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ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
§	Section
A-1	Light Agriculture
A-1-1	Light Agriculture, Minimum 1-acre Lot Size
A-2	Heavy Agriculture
AB	Assembly Bill
ABAU	Adjusted Business As Usual
ACL	Applied Ceramic Label
ACS	American Community Survey
A-D	Agriculture-Dairy
ADA	Americans with Disabilities Act
ADT	average daily traffic
AERMOD	American Meteorological Society/EPA Regulatory Model
AFY	acre-feet/year
AIA	Airport Influence Area
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commissions
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
ANFO	ammonium nitrate mixed with fuel oil
ANSI	American National Standards Institute
A-P	Light Agriculture with Poultry
A-P	Alquist-Priolo
APN	Asssessor Parcel Number
APSA	Aboveground Petroleum Storage Act
ATF	Bureau of Alcohol, Tobacco, Firearms, and Explosives
ATP	Active Transportation Plan
AQIA	Air Quality Impact Assessment
AQMP	Air Quality Management Plan
AST	Aboveground Storage Tank
B	Basin
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
bgs	below ground surface
BMP	Best Management Practice

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
C&D	Construction and Demolition
C/V	Citrus/Vineyard
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CadnaA	Computer Aided Noise Abatement
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	Governor's Office of Emergency Services
Cal-OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	California Geological Energy Management Division
CalGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAPSSA	Criteria Area Plant Species Survey Area
CARB	California Air Resources Board
CBSC	California Building Standards Code
CCAA	California Clean Air Act
CCAEJ	Center for Community Action and Environmental Justice
CCR	California Code of Regulations
CCRUS	Carbon Capture, Removal, Utilization, and Storage
CD	Consistency Determination
CD-CR	Community Development – Commercial Retail
CD-LI	Community Development – Light Industrial
CDC	California Department of Conservation
CDE	California Department of Education
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDP	Census Designated Place
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFGC	California Fish and Game Code

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGC	California Government Code
CH_4	methane
CIWMP	Countywide Integrated Waste Management Plan
CLCA	California Land Conservation Act
CLOMR	Conditional Letter of Map Revision
CMP	Congestion Management Program
CMUTD	California Manual on Uniform Traffic Control Devices
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
COG	Council of Governments
COP	Community Oriented Policing
COPPS	Community Oriented and Policing Problem Solving
CPUC	California Public Utilities Commision
CRA	Colorado River Aqueduct
CRA	Cultural Resources Analysis
CREC	Controlled Recognized Environmental Condition
CRMP	Cultural Resource Monitoring Program
CRPR	California Rare Plant Rank
CSA	Community Service Area
CSSA	California Species of Special Concern
CTC	California Transportation Commission
CTR	California Toxics Rules
CTR	Commute Trip Reduction
CUPA	California Unified Program Agency
CVAG	Coachella Valley Association of Governments
CVCC	Coachella Valley Conservation Commission
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVSIP	Coachella Valley PM_{10} State Implementation Plan
CVWD	Coachella Valley Water District
CWA	Clean Water Act
cy	cubic yards
CZ	Change of Zone

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
D	Urban and Built-Up Land
dB	Decibel
dBA	A-weighted Decibel
DBESPD	Determination of Biologically Equivalent or Superior Preservation
DEH	Department of Environmental Health
d.g.	decomposed granite
DIF	Development Impact Fee
DMA	Drainage Management Area
DOE	Department of Energy
DOE	Determination of Eligibility
DOSH	Division of Occupational Safety and Health
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DTSC	Department of Toxic Substances Control
du/ac	dwelling units per acre
DWA	Desert Water Agency
EA	Energy Analysis
EA	Environmental Assessment
EAC	Existing plus Ambient Growth plus Cumulative
EI	Expansion Index
EIA	Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMFAC	EMission FACtor Model
EMWD	Eastern Municipal Water District
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERIS	Environmental Risk Information Services
ESA	Endangered Species Act
ESA	Environmental Site Assessment
ESFR	Early Suppression Fast Response
ETC	Employee Transportation Coordinator

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
EV	Electric Vehicle
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FE	federally endangered
FEHA	Fair Employment and Housing Act
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FIMA	Federal Insurance and Mitigation Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FT	federally fhreatened
FTA	Federal Transit Administration
FYI	For Your Information
G	Grazing Land
g/VMT	grams per vehicle miles traveled
g/idle-hr	grams per idle-hour
GBN	Ground-Based Noise
GBV	Ground-Based Vibration
GCC	Global Climate Change
GHG	greenhouse gas
GHGA	Greenhouse Gas Analysis
GIS	Geographic Information Systems
GLO	General Land Office
GPA	General Plan Amendment
gpd	gallons per day
GRH	Guaranteed Ride Home
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GVWR	gross vehicle weight rating
GWh	gigawatt hour
GWP	Global Warming Potential

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
HANS	Habitat Acquisition and Negotiation Strategy
HBW	Home-Based Work
HCA	Housing Crisis Act
HCD	Housing and Community Development
HCP	Habitat Conservation Plan
HDR	High Density Residential
HDT	Heavy Heavy-Duty Trucks
HFC	hydrofluorocarbon
HI	Hazard Index
HMBEP	Hazardous Materials Business Emergency Plan
HMIS	Hazardous Materials Inventory Statements
HMMP	Hazardous Materials Management Plan
HMTA	Hazardous Materials Transportation Act
HMTUSA	Hazardous Materials Transportation Uniform Safety Act
HRA	Health Risk Assessment
HREC	Historical Recognized Environmental Site Condition
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Amendments
HU	Hydrologic Unit
HWCL	Hazardous Waste Control Law
I	Interstate
I-P	Industrial Park
IA	Implementing Agreement
ICAO	International Civil Aviation Organization
IEPR	Integrative Energy Policy Report
IID	Imperial Irrigation District
in/hr	inches per hour
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent Service Operator
ISO	International Organization for Standardization
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
ITIP	Interregional Transportation Improvement Plan
ITP	incidental take permits

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
IWMA	Integrated Waste Management Act
JPA	Joint Powers Authority
Kvt	Val Verde Tonalite
kWh	kilowatt hours
L	Farmland of Local Importance
L	Low Potential
LACM	Natural History Museum of Los Angeles
LDA	Light-Duty-Auto vehicles
LDT	Light-Duty-Trucks
Leq	equivalent continuous sound pressure level
LI	Light Industrial
LID	Low Impact Development
Lmax	maximum noise level
LOMR	Letter of Map Revision
LOS	Level of Service
LRA	Local Responsibility Area
LSA	Lake and Streambed Alteration
LST	Localized Significance Threshold
LTF	Local Transportation Fund
LTO	Licensed Timber Operators
Lw	reference sound power level
MBTA	Migratory Bird Treaty Act
MCL	Maximum Contaminant Level
MCY	motorcyle
MDR	Medium Density Residential
MDAB	Mojave Desert Air Basin
MDT	Medium Heavy-Duty Trucks
MEISC	Maximally Exposed Individual School Child
MEIR	Maximally Exposed Individual Receptor
MEIW	Maximally Exposed Individual Worker
mg/L	milligrams per liter
mgd	million gallons per day
MHDR	Medium-High Density Residential

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
MHDT	Medium Heavy-Duty Trucks
MICR	maximum individual cancer risk
MM	Mitigation Measures
MMRP	Mitigation, Monitoring, and Reporting Program
MPO	Metropolitan Planning Organization
M-SC	Manufacturing - Service Commercial
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MVA	megavolt-ampere
MVAP	Mead Valley Area Plan
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWELO	Model Water Efficient Landscape Ordinance
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NDA	No Development Alternative
NEPA	National Environmental Policy Act
NEPSSA	Narrow Endemic Plant Species Survey Area
NESHAP	National Emissions Standards for Hazardous Air Pollutant
NETR	Nationwide Environmental Title Research
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPA	No Project (Existing General Plan) Alternative
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	Non-Point Source
NPS	National Park Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
NVA	Noise and Vibration Analysis
NVIA	Noise and Vibration Impact Assessment
NWW	Non-Wetland Water
O_2	oxygen
O_3	Ozone
O.D.	Outside Diameter
OAL	Office of Administrative Law
ODC	Ozone Depleting Compound
OEHHA	Office of Environmental Health Hazard Assessment
OHV	off-highway vehicle
OIH	Office of Industrial Hygiene
OPR	Office of Planning and Research
OS-R	Open Space - Recreation
OSFM	Office of the State Fire Marshall
OSHA	Occupational Safety and Health Act
P	Prime Farmland
PA	Program Agency
PA	Production/Attraction
PA	Public Address
Pb	lead
PCB	polychlorinated biphenyls
PCE	Passenger Car Equivalent
PGAm	modified Peak Ground Acceleration
PM	Particulate Matter
pph	persons per household
Ppm	parts per million
PPT	Plot Plan
PPV	Peak Particle Velocity
PRC	Public Resources Code
PRIMP	Paleontological Resource Impact Mitigation Program
PRPA	Paleontological Resources Preservation Act
PSIA	Palm Springs International Airport
PSUSD	Palm Springs Unified School District
PV	photovoltaic
PVC	polyvinyl chloride

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
Qal	Quaternary-age alluvium
Qs	Quanternary-age dune sand
R-1	One-Family Dwellings
R-A	Residential - Agricultural
RAMV	Rural Association of Mead Valley
RBC	Rocks Biological Consulting
RC-VLDR	Rural Community – Very Low Density Residential
RCA	Regional Conservation Authority
RCDEH	Riverside County Department of Environmental Health
RCDWR	Riverside County Department of Waste Resources
RCFD	Riverside County Fire Department
RCFCWCD	Riverside County Flood Control and Water Conservation Authority
RCNM	Roadway Construction Noise Model
RCPG	Regional Comprehensive Plan and Guide
RCPLS	Riverside County Public Library System
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
REC	Recognized Environmental Condition
REMEL	Reference Energy Mean Emission Level
RPF	Registered Professional Forester
RHNA	Regional Housing Needs Assessment
RMM	Riverside Municipal Museum
RMS	root mean square
RNOW	Riverside Neighbors Opposing Warehouses
ROG	Reactive Organic Gas
ROW	Right-of-Way
RPA	Reduced Project Alternative
RPS	Renewables Portfolio Standard
RR	Regulatory Requirements
R-R-1/2	Rural Residential, Minimum ½-Acre Lot Size
RTA	Riverside Transit Agency
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RTPA	Regional Transportation Planning Agency

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
RUWMP	Regional Urban Water Management Planning
RWQCB	Regional Water Quality Control Board
RWRF	Regional Water Reclamation Facility
S	Farmland of Statewide Importance
s.f.	square feet
SAA	Streambed Alteration Agreement
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SBA	Small Building Alternative
SBCM	San Bernadino County Museum
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCG	Southern California Gas Company
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SDNHM	San Diego Natural History Museum
SE	State Endangered
SFP	School Facilities Program
SGMA	Sustainable Groundwater Management Act
SHA	Safe Harbor Agreement
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SHRC	State Historic Resources Commission
SIC	Standard Industrial Classification Code
SIP	State Implementation Plan
SKR HCP	Stephens' kangaroo rat Habitat Conservation Plan
SM	silty sand
SMARA	Surface Mining and Reclamation Act
SNUR	Significant New Use Rule
SO_2	sulfur dioxide
SO_X	sulfur oxides
SOC	Statement of Overriding Considerations
SORE	small off-road engine
SP	gravelly sand
SP	Service Population

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
SR	State Route
SRA	Source Receptor Area
SRA	State Responsibility Area
SSAB	Salton Sea Air Basin
SSC	Species of Special Concern
STA	Sunline Transit Agency
STA	State Transit Assistance
STIP	Statewide Transportation Improvement Program
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	Storm Water Resources Control Board
TA	Traffic Analysis
TAC	toxic air contaminant
TCR	Tribal Cultural Resource
TDA	Transportation Development Act
TDS	total dissolved solid
TEA-21	Transportation Equity Act for the 21st Century
THP	Timber Harvesting Plan
TIA	Traffic Impact Analysis
tpd	tons per day
TPM	Tentative Parcel Map
TRU	Transportation Refrigeration Unit
TSCA	Toxic Substances Control Act
TUMF	Transportation Uniform Mitigation Fee
U	Unique Farmland
UNFCCC	United Nations Framework Convention on Climate Change
U.S.	United States
USACE	United States Army Corps of Engineers
USCB	United States Census Bureau
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VCP	vitrified clay pipe
VdB	Decibel notation

ACRONYMS, ABBREVIATIONS, AND UNITS OF MEASURE

Acronym	Definition
VHFHSZ	Very High Fire Hazard Severity Zones
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
vph	vehicles per hour
VVUSD	Val Verde Unified School District
W-2	Controlled Development Areas
WAIRE	Warehouse Actions and Investments to Reduce Emissions
WCVAP	Western Coachella Valley Area Plan
WDR	Waste Discharge Requirement
WL	Watch List
WMI	Watershed Management Initiative
WPCO	Warehouse Points Compliance Obligation
WQMP	Water Quality Management Plan
WRP	Water Reclamation Plant
WRP	Water Recycling Plan
WSA	Water Supply Assessment
WSC	Western Science Center
X	Other Land
ZEV	zero-emission vehicle
ZORI	Zones of Required Investigation

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000, *et seq.* requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

This Draft Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2024050835, was prepared in accordance with CEQA Guidelines Article 9, §§ 15120-15132 to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Project, which herein consists of applications for a General Plan Amendment (GPA 240072), Change of Zone (CZ 2400026), Tentative Tract Map (TTM 38927), and an Agricultural Preserve Diminishment for the El Sobrante No. 1 Agricultural Preserve (APD 240006), which collectively are referred to herein as the "Project" or "proposed Project." This EIR does not recommend approval or denial of the proposed Project; rather, this EIR is a source of factual information regarding potential impacts that the Project may cause to the physical environment. The Draft EIR will be available for public review for a minimum period of 45 days. After consideration of public comment, the County of Riverside will consider certifying the Final EIR and adopting required findings.

This Executive Summary complies with State CEQA Guidelines Section 15123, "Summary." This EIR includes a description of the proposed Project and evaluates the physical environmental effects that could result from Project implementation. The County of Riverside determined that the scope of this EIR should cover 21 subject areas. The scope includes all of the subject areas listed in Appendix G to the CEQA Guidelines and in consideration of public comment received by the County in response to this EIR's Notice of Preparation (NOP) and during a publicly-noticed Scoping Session, which occurred on June 3, 2024. The NOP, and written comments received by the County in response to the NOP, are attached to this EIR as *Technical Appendix A*. In consideration of public comment on the NOP, the 21 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

1. Aesthetics
2. Agriculture and Forestry Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology and Soils
8. Greenhouse Gas Emissions
9. Hazards and Hazardous Materials
12. Mineral Resources
13. Noise
14. Paleontological Resources
15. Population and Housing
16. Public Services
17. Recreation
18. Transportation
19. Tribal Cultural Resources
20. Utilities and Service Systems

10. Hydrology and Water Quality
11. Land Use and Planning
21. Wildfire

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. For each of the aforementioned subject areas, this EIR describes: 1) the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (May 20, 2024); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures imposed by the County of Riverside on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1, *Mitigation Monitoring and Reporting Program*. The County of Riverside applies mitigation measures that it determines: 1) are feasible and practical for project applicants to implement; 2) are feasible and practical for the County of Riverside to monitor and enforce; 3) are legal for the County to impose; 4) have an essential nexus to the Project's impacts; and 5) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to impose mitigation measures that are duplicative of mandatory regulatory requirements.

This EIR also discusses alternatives to the proposed Project. Alternatives are described that would attain most of the Project's objectives while avoiding or substantially lessening the proposed Project's significant adverse environmental effects. A full discussion of Project alternatives is found in Section 6.0, *Alternatives*.

S.2 PROJECT SYNOPSIS

S.2.1 LOCATION AND REGIONAL SETTING

As depicted on EIR Figure 2-2, the Project site is within the Victoria Grove community of the Lake Matthews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County, and is located within the Sphere of Influence (SOI) of the City of Riverside. The City of Riverside boundary is located approximately 1.1-mile north of the Project site. The Project site is located 0.3-mile north of El Sobrante Road, 0.1-mile east of McAllister Street, approximately 2.7 miles southeast of State Route (SR) 91, approximately 5.8 miles east of Interstate 15 (I-15), and approximately 9.3 miles west of Interstate 215 (I-215). From a local perspective, and as depicted on Figure 2-2, the 111.6-acre Project site is located north of El Sobrante Road, east of McAllister Street, and west/southwest of Travertine Drive. The Project site encompasses Assessor Parcel Numbers (APNs) 270-060-005, 270-060-009, 270-060-016, 270-070-001, 270-070-002, and 270-160-004. The Project site is located in Section 32, Township 3 South, Range 5 West, San Bernardino Baseline and Meridian. (Google Earth, 2024; RCIT, n.d.)

S.2.2 PROJECT OBJECTIVES

The underlying purpose of the proposed Project is to develop a low-density residential community that provides recreational and open space areas and minimizes impacts to the Victoria Grove community. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To efficiently develop an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages.

B. To develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration.

C. To increase the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities.

D. To assist Riverside County in meeting its Regional Housing Needs Assessment (RHNA) allocation for Above Moderate income units by developing a property with low density residential uses.

E. To provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.

S.2.3 Project Summary Description

The Project as evaluated by this EIR consists of applications for a General Plan Amendment, Change of Zone, Tentative Tract Map, and an Agricultural Preserve Diminishment for a 111.6-acre property (herein, "Project site") located east of McAllister Street and north of El Sobrante Road in the Victora Grove community of the Lake Mathews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County. Collectively, approval of these discretionary actions would allow for the development of the Project site with 206 single-family detached residential units, one park, two detention basins, and open space. Specifically, the Project Applicant is requesting the following governmental approvals from the County of Riverside to implement the Project (refer to Chapter 3.0, *Project Description*, for a complete description of the Project's construction and operational characteristics):

- **General Plan Amendment No. 240072 (GPA 240072)** is proposed to reconfigure the Project site's existing land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)" to accommodate the residential lotting proposed as part of TTM 38927. Specifically, under existing conditions the RC-VLDR land use designation is clustered in the northeastern portions of the Project site, while the remaining portions of the site are designated for RC-LDR land uses. With approval of GPA 240072, the RC-VLDR land use designation would be reconfigured to extend along the eastern boundary of the Project site. The total acreage of the RC-VLDR and RC-LDR land use designations on site would remain unchanged at 6.7 acres and 104.9 acres, respectively; thus, approval of GPA 240072 would not allow for an increase in residential density on site as beyond what already is allowed on site under existing conditions.

- **Change of Zone No. 2400026 (CZ 2400026)** is proposed to change the Project site's existing zoning classification from "Light Agricultural, 10-Acre Minimum Lot Size (A-1-10)" to "One-Family

Dwelling Zone, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)." Approval of CZ 2400026 would allow for residential development on site on minimum 10,000 square-foot (s.f.) lots, consistent with the site's adopted General Plan land use designations of RC-VLDR and RC-LDR.

- **Tentative Tract Map No. 38927 (TTM 38927)** is proposed to subdivide the 111.6-acre Project site to accommodate a total of 206 residential lots on approximately 57.6 acres; two detention basins on 3.3 acres; one park site on approximately 1.9 acres; 25 lots for manufactured slopes on approximately 10.3 acres; 7 undisturbed open space lots on approximately 14.6 acres; and 17 lots for private on-site roadways on approximately 23.9 acres. Proposed residential lots would include a mixture of lot sizes ranging in size from 10,023 s.f. to 25,688 s.f. Access to the Project site would be accommodated via a proposed on-site roadway, Street A. Street A would connect to Travertine Road near the Project's northeastern boundary, would extend southerly through the western portions of the Project site, and would connect to a roadway proposed along the southern Project boundary as part of the adjacent Tentative Tract Map 38605 that would provide a connection to El Sobrante Road to the south.

- **Agricultural Preserve Diminishment No. 240006 (APD 240006)** is proposed to authorize the diminishment of El Sobrante Agricultural Preserve No. 1, Map No. 18 to remove the 111.6-acre property from El Sobrante Agricultural Preserve No. 1. A Notice of Non-Renewal previously was filed for the property, and the property is no longer subject to a Williamson Act Contract; thus, APD 240006 only would remove the property from Agricultural Preserve No. 1, Map No. 18.

S.3 Areas of Controversy and Issues to be Resolved

CEQA Guidelines § 15123(b)(2) requires that areas of controversy known to the Lead Agency (Riverside County) be identified in the Executive Summary. Substantive issues raised in response to the NOP are summarized in Table 1-1 in EIR Section 1.0. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and the general public during the NOP review period. The table is not intended to list every comment received by the County during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP are addressed in this EIR. Based on comments received during the NOP review period, Project impacts to the environment under the issues of biological resources, cultural resources, tribal cultural resources, and utilities/service systems (solid waste) were identified as potential areas of concern.

S.4 Project Alternatives

S.4.1 No Development Alternative (NDA)

The No Development Alternative (NDA) considers no development on the Project site beyond that which occurs under existing conditions. As such, the Project site would continue to consist of 111.6 acres of partially-disturbed undeveloped lands that are routinely disced for fire abatement purposes. Under the NDA, no improvements would be made to the Project site and none of the Project's roadway, utility, or other infrastructure improvements would occur. This alternative was selected by the lead agency to compare the

environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

S.4.2 No Project Alternative (NPA)

The No Project Alternative (NPA) assumes development of the Project site in accordance with the site's existing General Plan and land uses, and based on the mid-point densities of the site's existing land use designations as specified by Appendix E to the Riverside County General Plan. Thus, the NPA would not result in the reconfiguration of the Project site's existing RC-VLDR and RC-LDR land use designations. Based on the site's existing General Plan land use designations and the mid-point densities specified in Table E-1 of Appendix E to the General Plan, the NPA would allow for development of the 111.6-acre property with up to 162 dwelling units. In addition, it is assumed that a 1.9-acre park would be constructed on site to meet the recreational needs of future residents under the NPA. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site's existing General Plan and Lake Mathews/Woodcrest Area Plan (LMWAP) land use designations.

S.4.3 Reduced Project Alternative (RPA)

The Reduced Project Alternative (RPA) considers development of the Project site with residential uses similar to the proposed Project, but with minimum one-acre lots sizes and at an overall average density of 0.75 dwelling units per acre (du/ac), consistent with the mid-point density identified by Appendix E to the General Plan for the RC-VLDR land use designation. Accordingly, under the RPA, the Project site would be developed with 83 dwelling units on minimum one-acre lot sizes, along with one park site on approximately 0.9-acre. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would result in developing the Project site with less residential density, which would serve to reduce the total amount of Vehicle Miles Traveled (VMT) generated by the Project site in comparison to the proposed Project.

S.5 EIR Process

As a first step in the CEQA compliance process, Riverside County determined that the proposed Project likely would result in significant environmental effects, and distributed a Notice of Preparation (NOP) for public review on May 20, 2024. An Initial Study was not prepared for the Project, and thus this EIR evaluates all of the environmental subjects listed in Appendix G to the CEQA Guidelines, as set forth in the County's standard Environmental Assessment Checklist form. This EIR has been prepared as a Project EIR pursuant to CEQA Guidelines § 15161. As described by CEQA Guidelines § 15161, a Project EIR is the most common type of EIR that: 1) examines the environmental impacts of a specific development project; 2) should focus primarily on the changes in the environment that would result from the development of the project; and 3) shall examine all phases of the project, including planning, construction, and operation.

This EIR represents the independent judgment of Riverside County (as the Lead Agency) and evaluates the physical environmental effects that could result from constructing and operating the proposed Project. Acting

as Lead Agency, the County of Riverside will consider the following issues regarding the proposed Project: a) evaluation of this EIR to determine if the physical environmental impacts are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures and the potential addition, modification to, or deletion of mitigation measures, standard conditions of approval, or Project design features; c) consideration of alternatives to the Project that would reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project's unavoidable and unmitigable significant effects on the environment.

Before taking action to approve the Project, the County of Riverside (serving as the Lead Agency) has the obligation to: (1) ensure this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects Riverside County's independent judgment; (4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§ 15090-15093).

S.6 Summary of Impacts, Mitigation Measures and Conclusions

S.6.1 Effects Found Not to be Significant

An Initial Study was not prepared for the proposed Project because the County determined that an EIR clearly was required. As such, this EIR evaluates all of the environmental topics identified in Appendix G to the CEQA Guidelines and in the County's standard Environmental Assessment Checklist form. There were no issues found to be not significant as a result of the Project's NOP process.

S.6.2 Impacts of the Proposed Project

Table S-1, *Mitigation Monitoring and Reporting Program*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines § 15123(a). Also presented are the mitigation measures recommended by Riverside County to further avoid adverse environmental impacts or to reduce their level of significance. After the application of all feasible mitigation measures, the Project would result in one significant and unavoidable environmental effect, as summarized below.

- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Buildout of the residential uses proposed as part of the Project would result in a vehicle miles traveled (VMT) per capita that is 39.5% above the County's significance threshold of 15.2 home-based (HB) VMT per capita. As noted by the County Guidelines, Transportation Demand Management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant through use of the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhous Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021 Handbook). For residential land use projects, the 2021 Handbook provides a list of Neighborhood Design measures that reduce VMT. However, the maximum achievable reduction

for these measures as noted in the 2021 handbook is limited to 10%. Therefore, even with implementation of all feasible trip reduction measures, including those listed in Mitigation Measure MM 4.18-1, the Project would be unable to reduce its VMT impact to below the impact threshold. It is also recognized that as the Project area and surrounding communities develop as envisioned under the County of Riverside's General Plan, new residential, retail, and other development would be implemented. These actions could collectively alter transportation patterns, improve the region's jobs/housing ratio, reduce VMT, and support implementation of new or alternative TDM measures. There are no means currently, however, to quantify any VMT reductions that could result from such future growth patterns. Accordingly, even with implementation of Mitigation Measure MM 4.18-1, Project impacts due to VMT would remain significant and unavoidable on a direct and cumulatively-considerable basis.

Table S-1 Mitigation Monitoring and Reporting Program

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring parties	Implementation Stage
4.1 Aesthetics					
Summary of Impacts					
Threshold a.: There are no officially-designated or eligible State scenic highway corridors within the Project's viewshed; however, El Sobrante Road is a County eligible scenic highway. Although El Sobrante Road is identified as a County eligible scenic highway, the Project site does not comprise a visual resource visible from this eligible scenic highway. Development of the property with residential and park uses would represent a change to the distance views of the property from segments of El Sobrante Road; however, the construction of homes on site would appear as a continuation of on-going development in the surrounding area. Furthermore, the Project would be developed in a manner that is not visually offensive, and would be visually compatible with existing and planned developments in the surrounding area. Therefore, the Project would not have a substantial effect upon a scenic highway corridor, and impacts would be less than significant.	Less-than-Significant Impact	**RR 4.1-2** The Project is required to comply with Riverside County Ordinance No. 915, which is intended to provide minimum requirements for outdoor lighting in order to reduce light trespass. Ordinance No. 915 provides regulations on adequate lighting shielding, glare, and light trespass in order to ensure all development in Riverside County installs lighting in a way that does not jeopardize the health, safety, or general welfare of Riverside County residents and degrade their quality of life.	Project Applicant	Riverside County Building & Safety Department	Prior to issuance of building permits
Threshold b. and c.: Under existing conditions, the Project site is largely composed of vacant lands covered by grasses and shrubs, with shrubs and trees near the on-site streams. There are no prominent rock outcroppings or unique landmark features on the Project site under existing conditions. In addition, the majority of the existing trees on site would be preserved within proposed open space lots, with the removal of trees being limited to the proposed	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
roadway crossings over the existing drainages that occur along the eastern site boundary and in the western and southwestern portions of the Project site. Accordingly, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features, and impacts would be less than significant. While implementation of the Project as proposed would obstruct some views of the surrounding area, public views of these visual resources within the Project's viewshed still would be available from areas surrounding the Project site. As such, the Project would not obstruct any prominent scenic vista or view open to the public, and impacts would be less than significant. In addition, the Project's proposed residential uses would not comprise an aesthetically offensive use, as they would consist of typical residential construction with each residential lot being landscaped with groundcover, shrubs, and trees. Although the Project would result in a change to the existing visual character or quality of public views of the site and its surroundings, the land uses proposed as part of the Project would be visually compatible with other existing rural residential uses in the local area. Accordingly, the Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and impacts would be less than significant. Threshold d.: The Project site is located approximately 2.9 miles northwest of the limits of Zone B of the Mt. Palomar Lighting Policy area. Therefore, the Project is not subject to the provisions of Ordinance No. 655. As such, the Project has no potential to impact the nighttime use of Mt. Palomar Observatory as protected	No Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
through Riverside County Ordinance No. 655, and no impact would occur. Thresholds e. and f.: Development on the Project site would be subject to Riverside County Ordinance No. 915, which requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Furthermore, none of the Project's proposed building materials would consist of reflective materials, except for the proposed windows, which would not be mirrored and would have similar low-potential glare characteristics as do other glass windows on residential buildings in the Project vicinity. Impacts would be due to light and glare less-than-significant.	Less-than-Significant Impact				
4.2 Agriculture and Forestry					
Summary of Impacts					
Threshold a.: The Project would result in direct impacts to 111.6 acres of "Farmland of Local Importance." Accordingly, the Project would not convert any land designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use as defined by the FMMP, and no impact would occur. Threshold b.: Although the Project would conflict with the site's existing zoning classification, the Project Applicant is proposing to rezone the Project site for "One Family Dwellings, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)" land uses as part of Change of Zone No. 2400026 (CZ 2400026), consistent with the site's underlying General Plan land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural	No Impact Less-than-Significant Impact	**RR 4.2-1** Prior to Project occupancy, the provisions of Riverside County Ordinance No. 625 shall apply. Ordinance No. 625 requires that when lands are developed adjacent to properties zoned primarily for agricultural purposes (that support agricultural operations that have been in place for at least three years and not considered a nuisance operation at the time the operation began), future land buyers must be notified of any agricultural operations that are on-going in the area, and mandate that such agricultural uses shall not be the subject of nuisance complaints.	N/A	N/A	

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Community – Low Density Residential (RC-LDR)." Accordingly, with approval of CZ 2400026, the Project would not conflict with existing agricultural zoning, and impacts would be less than significant. No active agricultural uses occur on site under existing conditions, and as such the Project would result in no impacts due to a conflict with existing agricultural uses on site. Although the Project site continues to be located within El Sobrante Agricultural Preserve No. 1, the Project Applicant has filed an application for Agricultural Preserve Diminishment No. 240006 (APD 240006), which would remove the 111.6-acre property from the boundaries of the El Sobrante Agricultural Preserve No. 1. With approval of APD 240006, the Project would not conflict with any agricultural preserves, and impacts would be less than significant.					
Threshold c.: Although the Project site occurs adjacent to agriculturally-zoned property located south, southeast, southwest, and northwest of the Project site, the Project would be subject to the provisions of Riverside County Ordinance No. 625, which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land. Mandatory compliance with Ordinance No. 625 would ensure that Project-related construction and operational activities would not indirectly cause or contribute to the conversion of off-site farmland to non-agricultural use. Based on the mandatory compliance with Ordinance No, 625, impacts would be less than significant.	Less-than-Significant Impact				
Threshold d.: Assuming mandatory compliance with Riverside County Ordinance No. 625, there are no components of the Project that would	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Impacts would be less than significant. Thresholds e., f., and g.: There are no forest lands in the Project vicinity, and no lands in the Project vicinity are zoned for timberland, timberland production, or forest uses. The Project would not result in the conversion of forest land to non-forest use. No impact would occur.	No Impact				
4.3 Air Quality					
Summary of Impacts					
Threshold a.: The Project's regional and localized construction- and operational-source emissions would not exceed applicable regional significance thresholds or LSTs. Additionally, although the Project is inconsistent with the site's existing General Plan land use designation and zoning classification, the Project's development intensity is consistent with the development intensities allowed within the General Plan. As discussed in the analysis of Thresholds b. and c. the Project's construction and long-term operational activities would not exceed any of the SCAQMD Regional Thresholds or LSTs. As such, the Project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant. Threshold b.: Project construction-and operational-related regional emissions would not exceed any of the SCAQMD Regional Thresholds for criteria pollutants. As such, Project regional construction- and operational-related emissions would not result in a	Less-than-Significant Impact Less-than-Significant Impact	**RR 4.3-1** The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities, such as earth-moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, Riverside County shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. o All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions. o The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.	Project Applicant; Construction Contractors	Riverside County Building & Safety Department	Prior to issuance of grading permits

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be less than significant. Threshold c.: Project-related construction emissions would not exceed the SCAQMD LSTs for any criteria pollutant, and long-term operation of the Project would not expose sensitive receptors to substantial pollutant concentrations. Additionally, the Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, the Project would not expose sensitive receptors, which are located within one (1) mile of the Project site, to substantial pollutant concentrations, and impacts would be less than significant. Threshold d.: The Project does not propose land uses typically associated with emitting objectionable odors. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. The proposed Project also would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.	Less-than-Significant Impact Less-than-Significant Impact	• The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 113, Table of Standards, by requiring that all architectural coatings must consist of low VOCs (i.e., VOCs of less than 50 grams per liter [g/L]) unless otherwise specified in the SCAQMD Table of Standards. • The Project is required to comply with applicable SCAQMD rules for construction activities on the Project site. In addition to the SCAQMD requirements listed above, additional SCAQMD rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 431.2 (Low Sulfur Fuel) and Rule 1186 / 1186.1 (Street Sweepers). • The Project is required to comply with the provisions of SCAQMD Rule 402, "Nuisance" which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
4.4 Biological Resources					
Summary of Impacts					
Threshold a: The Project would not conflict with the MSHCP Reserve Assembly requirements. Prior to mitigation, the proposed Project would result in unavoidable permanent impacts to 1.77 acres of riparian/riverine resources, which represents a significant impact due to a potential conflict with MSHCP Section 6.1.2. Although no least Bell's vireo nests were identified during biological surveys, riparian habitat on-site may become occupied by nesting least Bell's vireo prior to implementation of the proposed Project. Construction of the proposed Project could potentially impact nesting least Bell's vireos if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the species' breeding season (March 15 through September 30). Construction activities could also impact least Bell's vireos nesting in areas within 500 feet of the activities. Accordingly, Project impacts to 1.44 acres of riparian habitat considered suitable for the least Bell's vireo and indirect impacts to riparian habitat within 500 feet of proposed construction activities represents a potential conflict with MSHCP Section 6.1.2 with respect to riparian birds. This is evaluated as a significant impact of the proposed Project for which mitigation would be required. No vernal pools or features indicative of the historic presence of vernal pools were observed on the Project site and vernal pools are unlikely to form or persist on site due to a long history of agricultural-related disturbances; thus, no impacts to vernal pools or sensitive fairy shrimp species would occur as a result of the Project. The Project site is not located within the MSHCP NEPSSA area; thus,	Less than Significant with Mitigation Incorporated	**MM 4.4-1** In order to mitigate Project impacts to 1.77 acres of areas under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB) (consisting of 0.19-acre wetland waters and 1.44 acres of impacts to riparian/wetland habitat regulated by the RWQCB under Section 13260 of the California Water Code), and in order to mitigate Project impacts to 1.77 acres of areas subject to jurisdiction by the California Department of Fish and Wildlife (CDFW) (consisting of impacts 1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream), prior to the issuance of grading permits the Project Applicant shall off-set impacts to 1.77 acres of riparian/riverine resources through on-site mitigation at a 2:1 ratio (3.54 acres), including the rehabilitation and establishment of riparian habitat . The potential on-site mitigation sites include at a minimum 1.82 acres of rehabilitation area and 1.76 acres of establishment area. The final amount will be determined during the preparation of a Habitat Mitigation and Monitoring Plan (HMMP), but in all cases a minimum of 3.54 acres of mitigation shall be provided. The required mitigation area shall be located in Drainages 1 and 2. As a component of the required mitigation, the Project Applicant shall prepare a Habitat Mitigation and Monitoring Plan (HMMP) for review and approval by the Riverside County Environmental Programs Department (EPD), Santa Ana Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). The required HMMP shall include information on the plant palette for reestablishment and rehabilitation, site preparation requirements and timeline, maps showing the location of restoration, performance standards for the reestablishment and rehabilitation area, and methods for non-native species management. Prior to commencement of grading activities, the required mitigation areas shall be established as required by the approved HMMP, and this area shall be fenced in accordance with Mitigation Measure MM 4.4-6. The Project Applicant shall be responsible for ensuring that the performance criteria are met as established and required by the approved HMMP.	Project Applicant, Project Biologist	Riverside County Planning Department, RWQCB, CDFW	Prior to issuance of grading permits

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
no impacts to narrow endemic plant species would occur with implementation of the proposed Project and no impact would occur due to a conflict with MSHCP Section 6.1.3. The Project site is not located within or in close proximity of any Criteria Cells or designated conservation areas, and all of the drainages that would convey runoff from the Project site would convey flows northerly towards the City of Riverside and away from areas proposed for conservation under the MSHCP; thus, the Project has no potential to conflict with the MSHCP UWIG (MSHCP Section 6.1.4), and no impact would occur. Although no burrowing owls or characteristic sign were detected within or immediately adjacent to the Project site during the focused surveys, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins; thus, the Project has the potential to result in impacts to the burrowing owl, which represents a significant impact due to a conflict with MSHCP Section 6.3.2. Project impacts due to a conflict with the MSHCP would be significant on both a direct and cumulatively-considerable basis. Implementation of Mitigation Measure MM 4.4-1 would ensure that Project permanent impacts to 1.44 acres of riparian habitat (of which 0.19-acre is wetlands) and permanent impacts to 0.33-acre of riverine features are mitigated through the on-site enhancement, rehabilitation, and establishment of riparian habitat including Goodding's willow–red willow riparian woodland and mulefat thickets at a minimum 2:1 ratio, which would provide for higher quality riparian habitat with more canopy cover available, thereby increasing the values and functions of the drainage and providing a biological improvement to riparian habitat compared to		**MM 4.4-2** In accordance with MSHCP Objective 6, prior to issuance of grading permits or other permits authorizing ground disturbance or discing, the Project Applicant shall retain a qualified biologist to perform a burrowing owl survey at all potentially suitable habitat sites within the Project's limits of disturbance within 30 days prior to commencement of any ground-disturbing activities at the Project site, as discussed below. • Pre-Construction Survey: The pre-construction survey shall be performed by a qualified biologist that will survey the site for the presence/absence of burrowing owls within 30 days prior to commencement of ground-disturbing activities at the Project site. If burrowing owls are detected on-site during the pre-construction survey, the owls shall be relocated/excluded from the site outside of the breeding season following accepted protocols, and subject to the approval of the RCA and Wildlife Agencies (i.e., CDFW and/or USFWS). • Burrowing Owl Management Plan: In the event that burrowing owl is determined to be present, or in the event that an assumption is made that the burrowing owl occurs on-site, a burrowing owl management plan shall be prepared and implemented in coordination with the Western Riverside County Regional Conservation Authority (RCA) and CDFW that shall detail the relocation of owls from the Project site, passively and/or actively. If additional site visits determine the species is absent, then the pre-construction survey (as discussed above) shall instead be implemented. A copy of the results of the pre-construction survey (and all additional surveys), as well as copies of the Burrowing Owl Management Plan, if required, shall be provided to the County of Riverside Planning Department for review and approval (in the case of the Burrowing Owl Management Plan) prior to any vegetation clearing and/or ground disturbance activities. **MM 4.4-3** If ground-disturbing or vegetation-removing Project activities are initiated in riparian habitat during the breeding season	Project Applicant, Project Biologist Project Applicant, Project Biologist	Riverside County Planning Department, RWQCB, CDFW Riverside County Planning	Within 30 days prior to vegetation removal or ground-disturbing activities Within 7 days prior to construction in riparian

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
what currently exists on site. The on-site mitigation also would provide contiguous habitat for the least Bell's vireo which would allow for additional vireo territories to be established at an equivalent or superior number. When considered alongside the proposed on-site riparian rehabilitation and establishment within Drainages 1 and 2, which would improve habitat quality, structure, and long-term suitability for least Bell's vireo, the Project would meet the conservation intent of Objective 3 by maintaining and enhancing the long-term conservation value of occupied riparian habitat, notwithstanding localized reductions in the width of undeveloped adjacent lands. Thus, implementation of the required mitigation would reduce the Project's direct and indirect impacts to the least Bell's vireo to below a level of significance. Implementation of Mitigation Measures MM 4.4-7 through MM 4.4-9 would mitigate for potential indirect impacts to impacts to aquatic features and associated riparian habitat and wetlands by requiring fencing of on-site aquatic features and complying with applicable water quality requirements. Implementation of Mitigation Measure MM 4.4-2 and MM 4.4-3 would ensure that appropriate pre-construction surveys are conducted prior to ground disturbing activities, in accordance with MSHCP Objective 6 for the burrowing owl, and would require preparation and implementation of a Burrowing Owl Management Plan in the event any burrowing owl individuals are identified during the pre-construction surveys. With implementation of the required mitigation, Project impacts due to a conflict with MSHCP Sections 6.1.2 and 6.3.2 pertaining to riparian/riverine resources and the burrowing owl, respectively, would be reduced to less-than-significant levels.		for least Bell's vireo (March 15 through September 30), the Project Applicant shall implement a pre-construction survey for the species. The pre-construction survey for least Bell's vireo shall be implemented by a qualified biologist within any affected riparian habitat on the project site, as well as in riparian habitat (on-site or off-site) within 500 feet of the Project activities. The survey shall be implemented within 7 days of the initiation of Project activities. If more than 7 days passes following implementation of the survey, an additional pre-construction survey shall be implemented. If the pre-construction survey is negative for least Bell's vireo nests, no further action is necessary. If nesting least Bell's vireo are detected within 500 feet of planned Project activities, the Project Applicant shall implement Mitigation Measure MM 4.4-4. If nesting least Bell's vireos are detected in the 1.44 acres of riparian habitat that will be permanently impacted by the Project, the Project Applicant shall implement Mitigation Measures MM 4.4-4 and MM 4.4-5. **MM 4.4-4** If an active least Bell's vireo nest is located during the pre-construction survey required per Mitigation Measure MM 4.4-3, a qualified biologist shall establish and demarcate a 500-foot avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s). Construction personnel shall be instructed not to enter the ESAs, and the biologist(s) shall ensure that ESA boundaries are maintained. The ESA buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. **MM 4.4-5** If an active least Bell's vireo nest is found in the 1.44-acre riparian habitat that would be permanently impacted by the proposed Project, the Project Applicant shall establish a 500-foot Environmentally Sensitive Area (ESA) around the active least Bell's vireo nest(s) until the young have fledged. The Project Applicant shall also prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP) report that details on-site and/or off-site mitigation to off-set loss of occupied least Bell's vireo habitat. The Project Applicant shall consult with the California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and Regional Conservation	 Project Applicant, Project Biologist Project Applicant, Project Biologist	Department, RWQCB, CDFW Riverside County Planning Department, EPD Riverside County Planning Department, CDFW, USFWS, RCA	habitat during breeding season During Construction (if active nests are identified) During Construction (if active nest is found within impact area); DBESP prior to habitat disturbance

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Threshold b and c: Most special-status plant species considered in the analysis were determined to have no or low potential to occur on-site due to the absence of suitable habitat or the lack of recent records in the Project vicinity. One special-status plant species, paniculate tarplant, was determined to be present on the Project site. The paniculate tarplant has a CNPS ranking of 4.2 and was observed on the Project site during a Rare Plant Survey conducted by FCS biologists on July 25, 2024. Based on the relatively low sensitivity ranking (CNPS 4.2), broad distribution of the species, and an impact to a low number of tarplants (460) which would not negatively impact the regional population, impacts to these special-status plants would be less than significant and no mitigation is required. Of the sensitive animal species with a potential to occur on site, the red-diamond rattlesnake, Cooper's hawk, white-tailed kite, loggerhead shrike, yellow warbler, coastal California gnatcatcher, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit are listed as covered species by the MSHCP, while the Stephens' kangaroo rat is covered by the SKR HCP. Therefore, impacts to these species would be less than significant with compliance with the MSHCP and payment of SKR HCP and MSHCP open space mitigation fees pursuant to Riverside County Ordinance Nos. 663 and 810. Although no burrowing owls or characteristic sign were detected within or immediately adjacent to the Project site during the focused surveys, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins; thus, the Project impacts to the burrowing owl would be potentially significant prior to mitigation. In addition, the 1.44 acres of riparian habitat on-site	Less than Significant with Mitigation Incorporated	Authority (RCA) to determine appropriate mitigation for the loss of least Bell's vireo habitat due to Project implementation. The outcome of the consultation shall determine the need for on-site or off-site mitigation for least Bell's vireo, including habitat area mitigation ratios, which shall be detailed in the DBESP. At a minimum, the Project Applicant shall mitigate for the loss of suitable least Bell's vireo habitat at a minimum 3:1 ratio through purchase of mitigation credits from the Riverpark Mitigation Bank, Skunk Hollow Mitigation Bank, or other approved mitigation bank, subject to agreement by the CDFW, USFWS, and RCA. **MM 4.4-6** If ground-disturbing or vegetation-removing construction activities are planned within the least Bell's vireo breeding season (March 15 through September 15) and conducted within the 500-foot ESA buffer, prior to conducting any grading or noise-generating project-related disturbance that may exceed 60 dBA, a temporary noise-attenuating wall shall be erected along the portion of the perimeter of the temporary impact boundary that occurs within 328 feet (100 meters) of the occupied least Bell's vireo habitat within Drainage 1 and 2. The required noise-attenuating wall shall be in place prior to commencement of construction activities within the ESA during the least Bell's vireo breeding season, and these requirements also shall be included as part of the DBESP required pursuant to Mitigation Measure MM 4.4-5. **MM 4.4-7** Prior to construction, the on-site limits of the aquatic features and associated riparian habitat shall be delineated with fencing or flagging (orange plastic snow fence, orange silt fencing, or stakes and flagging) and designated as an Environmentally Sensitive Area (ESA). No construction activities and/or access would be permitted within the ESA designated areas. If work occurs within the ESA areas, all work shall cease until the issue has been resolved through the appropriate regulatory agencies and the County. ESA fencing and/or flagging shall be maintained in good repair by the Contractor and shall be removed upon completion of Project construction. The Project Applicant shall ensure that silt-laden runoff is not allowed to enter the aquatic features. Erosion control measures shall be utilized throughout all phases of construction where sediment runoff from the proposed Project may	Project Applicant, Project Biologist Project Applicant, Project Biologist	Riverside County Planning Department, RWQCB, CDFW Riverside County Planning Department, RWQCB, CDFW	If ground-disturbing or vegetation-removing activities are planned within the 500-foot ESA during the breeding season for the least Bell's vireo Prior to and During Construction

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
is considered occupied by least Bell's vireo, and a significant direct and/or indirect impact could occur to the least Bell's vireo if Project construction activities were to commence or occur within suitable habitat and/or within 500 feet of suitable habitat for the least Bell's vireo during the least Bell's vireo breeding season (March 15 through September 30). Additionally, the Project site contains trees that could provide suitable bat roosting habitat, including for special-status bats such as the pocketed free-tailed bat and western yellow bat. Direct and indirect impacts could occur to roosting bats due to removal of potential roosting habitat during Project construction. Accordingly, Project impacts to special-status bats, including the pocketed free-tailed bat and western yellow bat, would be significant and mitigation would be required. No impacts to sensitive vernal pool fairy shrimp species would occur with implementation of the Project. However, the Project site contains vegetation with the potential to support native nesting birds, a significant impact could occur to nesting birds if grading or development were to occur to nesting birds if grading or development were to occur during the nesting season (February 1 to August 31); thus, Project impacts to nesting birds would be significant prior to mitigation. Implementation of Mitigation Measure MM 4.4-2 would ensure that appropriate pre-construction surveys are conducted prior to ground disturbing activities, and would require preparation and implementation of a Burrowing Owl Management Plan in the event any burrowing owl individuals are identified during the pre-construction surveys. Mitigation Measures MM 4.4-3 and MM 4.4-5, in conjunction with Mitigation Measure MM 4.4-1, would ensure potential Project impacts to least Bell's vireo are		enter the aquatic features. Best Management Practices (BMPs) to avoid erosion and uncontrolled stormwater runoff shall be implemented. BMPs typically include silt fencing, coir rolls, and/or straw bale dikes. **MM 4.4-8** The Project shall comply with all applicable water quality regulations, including obtaining and complying with those conditions established in Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit. Standard Best Management Practices (BMPs), which may include but are not limited to silt fencing, gravel berm, and fiber rolls, shall be installed to prevent any sediment and stormwater flows from entering the riverine area. A Project-specific Water Quality Management Plan and/or a Storm Water Pollution Prevention Plan (SWPPP) shall be implemented for the proposed Project and shall detail project-specific BMPs. **MM 4.4-9** Prior to approval of grading or building permits, Riverside County shall condition the permit(s) to require implementation of the following Best Management Practices (BMPs) during the construction phase: • Time construction activities to avoid impact to sensitive biological resources and protect water quality. To the extent possible, construction activities shall occur during the dry season, between April 15 and October 15, or as otherwise determined by permitting agencies and in compliance with Section 401 of the Federal Clean Water Act. • Locate equipment maintenance, refueling, and staging areas at least 100 feet from creeks or other aquatic habitat. Conduct refueling behind a containment barrier that prevents spilled or leaked fuel from entering the aquatic habitat. All equipment servicing shall be conducted within designated areas with appropriate setbacks from the aquatic features. All motorized equipment used during construction shall be inspected for oil, fuel, and coolant leaks prior to initiating work. • Implement a SWPPP as part of the proposed Project, to ensure that sediment and contaminants from	Project Applicant, Project Construction Contractors Project Applicant, Project Construction Contractors	Riverside County Planning Department, RWQCB Riverside County Planning Department, RWQCB, CDFW	Prior to and During Construction Prior to and During Construction

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
reduced to less-than-significant levels by requiring appropriate buffers and by requiring additional consultation with the Wildlife Agencies in the event that any active least Bell's vireo nest is found in the 1.44-acre riparian habitat that would be permanently impacted by the Project. The on-site mitigation required by Mitigation Measure MM 4.4-1 also would provide contiguous habitat for the least Bell's vireo which would allow for additional vireo territories to be established at an equivalent or superior number. When considered alongside the proposed on-site riparian rehabilitation and establishment within Drainages 1 and 2, which would improve habitat quality, structure, and long-term suitability for least Bell's vireo, the Project would meet the conservation intent of Objective 3 by maintaining and enhancing the long-term conservation value of occupied riparian habitat, notwithstanding localized reductions in the width of undeveloped adjacent lands. Thus, implementation of the required mitigation would reduce the Project's direct and indirect impacts to the least Bell's vireo to below a level of significance. Mitigation Measure MM 4.4-6 would ensure that Project-related construction activities within the 500-foot ESA buffer would be subject to noise restrictions. In the event that Project construction activities occur during the nesting season for birds (February 1 to September 15), Mitigation Measures MM 4.4-10 through MM 4.4-13 would ensure pre-construction nesting surveys are conducted prior to commencement of construction activities, and further requires appropriate avoidance of any active nests that may be identified. Implementation of the required mitigation would reduce Project impacts to the burrowing owl and nesting birds to below a level of significance.		construction areas do not enter creek channels or other aquatic habitat. • Use only native plant species for reseeding and re-planting to minimize the expansion of exotic plants. Mitigation plantings should be implemented in accordance with applicable regulatory agency permit requirements and consistently with MSHCP requirements. **MM 4.4-10** The following shall be made conditions of all grading permits to reduce construction-related impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA). These items also shall be included as notes on grading plans, and shall be specified in bid documents issued to prospective construction contractors. *"Vegetation clearing shall be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible. If avoidance of the nesting season is not feasible, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist shall establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers shall be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The biologist shall review and verify compliance with these nesting boundaries and shall verify the nesting effort has finished. Work may resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to Riverside County for mitigation monitoring compliance record keeping. If*	Project Applicant, Project Biologist	Riverside County Planning Department	Prior to and During Construction (if occurring during nesting season)

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring parties	Implementation Stage
Threshold d.: There are no wildlife movement corridors on the Project site. The aquatic features on and adjacent to the Project site may provide movement opportunities for common wildlife species, but the construction and operation of the Project would not impact the corridor or influence wildlife movement within it. Additionally, the MSHCP identifies linkages and corridors to provide for the regional movement of wildlife, and does not identify the Project site as being located within any planned or existing linkages or corridors. Therefore, impacts to wildlife movement corridors would be less than significant.	No Impact	*vegetation removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds."* **MM 4.4-11** A qualified biologist with relevant roosting bat experience shall conduct a survey of the Project site to determine whether active bat roosts are located on or directly adjacent to the Project site. The survey shall be conducted no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction in connection with each individual development phase. The survey shall be conducted during an appropriate time of day to maximize detectability of roosting bats. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.).	Project Applicant, Project Biologist	Riverside County Planning Department, CDFW	No less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction and during construction activities
Threshold e.: The Project site contains a total of 5.52 acres of Goodding's willow–red willow riparian woodland located in and adjacent to the drainages that border the northeastern and western boundaries of the Project site that is considered a Sensitive Vegetation Community by CDFW (ranked S3). There are no other sensitive natural communities present on the Project site. The Project Applicant proposes to develop a span bridge that would result in permanent impacts to 1.44 acres of this riparian habitat. Accordingly, Project impacts to 1.44 acres of Goodding's willow–red willow riparian woodland habitat represents a significant impact of the proposed Project for which mitigation would be required. Implementation of Mitigation Measure MM 4.4-1 would ensure that Project impacts to 144 acres of riparian habitat (of which 0.19-acre are wetlands) and 0.33-acre of impacts to riverine features are mitigated through the on-site enhancement, rehabilitation, and establishment of riparian habitat including Goodding's willow–red willow riparian woodland and mulefat thickets at a minimum 2:1	Less-than-Significant Impact with Mitigation Incorporated	If the biologist determines or presumes bat roosts are present, the biologist shall exclude the bats from suitable cavity spaces by installing one-way exclusion devices. After the bats vacate the space, the biologist shall close off the space to prevent recolonization. Construction activities in connection with the subject individual development phase shall only commence after the biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). If bats are present outside the exclusion and eviction period (October 2 through April 31), then the Project Applicant shall coordinate with California Department of Fish and Wildlife (CDFW) to establish an appropriate buffer. **MM 4.4-12** To maintain consistency with Multiple Species Habitat Conservation Plan (MSHCP) requirements during construction, prior to issuance of grading or building permits the Riverside County Building & Safety Department shall impose conditions of approval requiring compliance with or implementation of the following Construction Minimization Measures, per Section 7.5.3 of the MSHCP:	Riverside County Building & Safety Department, Project Applicant, Construction Contractor	Riverside County Planning Department, RCA	During Construction Activities

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
ratio, which would provide for higher quality riparian habitat with more canopy cover available, thereby increasing the values and functions of the drainage and providing a biological improvement to riparian habitat compared to what currently exists on site. Threshold f: The Project site includes 1.32 acres and 7,449 linear feet of potential waters of the State regulated by the RWQCB and 6.65 acres (5.52 acres of riparian/wetland stream and 1.13 acres of non-riparian stream) of aquatic features and associated riparian habitat regulated pursuant to the CDFW Streambed Alteration Program. The Project site also includes 0.19-acre of State wetlands. Implementation of the proposed Project would result in 1.77 acres of permanent impacts to potential waters of the State (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) regulated by the RWQCB under Section 13260 of the California Water Code and 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of permanent impacts to aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program. This is a significant impact and mitigation would be required. Implementation of Mitigation Measure MM 4.4-1 would ensure that Project permanent impacts to 1.77 acres (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) of potential waters of the State regulated by the RWQCB and Project impacts to 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of potential impacts to aquatic features and associated riparian habitat regulated pursuant to the CDFW Streambed Alteration Program are mitigated through the aquatic features and associated riparian habitat	Less-than-Significant Impact with Mitigation Incorporated	• Plans for water pollution and erosion control shall be prepared. The plans shall describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. • Plans for water pollution and erosion control shall be prepared. The plans shall describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. • If vegetation removal must occur during this avoidance period, then a nest survey by a qualified biologist shall be required. The nest survey shall be conducted for five consecutive days and no more than 3 days prior to clearing. If an active nest is observed, then the nest location shall be fenced off surrounding a minimum 300-foot (500-foot for raptors) radius buffer zone. The buffer zone shall not be disturbed until the nest is inactive. • Sediment and erosion control measures shall be implemented until such time as soils are determined to be successfully stabilized. • Short-term stream diversions, if needed, shall be accomplished by use of sandbags or other methods that shall result in minimal instream impacts. Short-term diversions shall consider effects on wildlife. • Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activities to minimize the transport of sediments off-site. • Settling ponds where sediment is collected shall be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds shall be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care shall be exercised during removal of silt fencing to minimize release of debris or sediment into streams. • No erodible materials shall be deposited into water courses. Brush, loose soils, or other debris material shall			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
and wetlands regulated pursuant to the CDFW Streambed Alteration Program are mitigated through the on-site enhancement, rehabilitation, and establishment of riparian habitat including Goodding's willow–red willow riparian woodland and mulefat thickets at a minimum 2:1 ratio, which would provide for higher quality riparian habitat with more canopy cover available, thereby increasing the values and functions of the drainage and providing a biological improvement to riparian habitat compared to what currently exists on site. Implementation of Mitigation Measures MM 4.4-7 through MM 4.4-9 mitigate for impacts to impacts to aquatic features and associated riparian habitat and wetlands by requiring all aquatic features to be fenced during construction activities and mandating compliance with standard water quality measures and requirements. Implementation of the required mitigation would reduce the Project's impacts to federally-protected wetlands and waters subject to jurisdiction by the Corps, Regional Board, and CDFW to less-than-significant levels. Threshold g: Aside from the SKR HCP and MSHCP, which are addressed under the analysis of Threshold a., the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). There are no oak trees or vegetation communities containing oak trees within the Project site. As such, the Project has no potential to result in a conflict with the County's Oak Tree Management Guidelines. Additionally, Riverside County Ordinance No. 559 applies to properties located above 5,000 feet above mean sea level (amsl) in elevation,	No Impact	not be stockpiled within stream channels or on adjacent banks. • The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall occur on pre-existing access routes to the greatest extent possible. • Equipment storage, fueling, and staging areas shall be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types. **MM 4.4-13** To maintain consistency with Multiple Species Habitat Conservation Plan (MSHCP) requirements, prior to issuance of grading or building permits the Riverside County Building & Safety Department shall impose conditions of approval requiring compliance with or implementation of the following Best Management Practices (BMPs) during the construction phase of the proposed project: 1. A condition shall be placed on grading permits requiring a qualified biologist to conduct Worker Environmental Awareness Program (WEAP) training for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act and the MSHCP, the need to adhere to the provisions of the Endangered Species Act and the MSHCP, the penalties associated with violating the provisions of the Endangered Species Act, the general measures that are being implemented to conserve the species of concern as they relate to the proposed Project, and the access routes to and Project site boundaries within which the proposed project activities must be accomplished. 2. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible. 3. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat.	Riverside County Building & Safety Department, Project Applicant, Project Biologist, Construction Contractor	Riverside County Planning Department, RCA, CDFW, RWQCB, USFWS	Prior to and During Construction

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
while the maximum elevation at the Project site is approximately 1,348 feet amsl; thus, Riverside County Ordinance No. 559 is not applicable to the proposed Project. Accordingly, and aside from potential impacts due to a conflict with the MSHCP (as addressed under the analysis of Threshold a.), the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur.		4. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to the City, United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and/or Regional Water Quality Control Board (RWQCB), as applicable, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas. 5. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks. 6. The qualified project biologist shall monitor construction activities for the duration of the proposed Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint. 7. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species. 8. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible. 9. To avoid attracting predators of the species of concern, the Project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s). 10. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the proposed project and shall be specified in the construction plans. Construction limits shall be fenced with orange snow screens. Exclusion fencing			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
		should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas. 11. The County shall have the right to access and inspect the project site to determine its compliance with project approval conditions, including these BMPs. RR 4.4-1: The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements. • Prior to issuance of grading permits, the Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to Riverside County Ordinance No. 810, *Establishing an Interim Open Space Mitigation Fee*. • Prior to issuance of grading permits, the Project Applicant shall make payment of fees pursuant to the Stephen's Kangaroo Rat Habitat Conservation Plan and Riverside County Ordinance No. 663, *Establishing the Riverside County Stephens' Kangaroo Rat Habitat Conservation Plan and Setting Mitigation Fees*. • Prior to issuance of grading permits or other permits authorizing ground-disturbing activities associated with the Project, the Project Applicant shall provide the Riverside County Planning Department with copies of the appropriate Wildlife Agency permits to address permanent impacts to 1.77 acres of permanent impacts to potential waters of the State (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) regulated by the RWQCB under Section 13260 of the California Water Code and 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of permanent impacts to aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program. Permits required include, but may not be limited to, a Waste Discharge Order pursuant to Section 13260 of the	As specified by RR 4.4-1	As specified by RR 4.4-1	As specified by RR 4.4-1

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
		California Water Code from the Santa Ana Regional Water Quality Control Board (Regional Board), and a Section 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Wildlife (CDFW).			
4.5 Cultural Resources					
Summary of Impacts					
Threshold a. and b.: Although no significant historical resources, as defined by the CRHR and CEQA, were identified as part of the Project's CRA update on the Project site, there is a potential for previously-undiscovered historical resources to occur beneath the surface of areas planned for physical impact (i.e., grading) as part of the Project. Potential impacts to previously-undiscovered historical resources on the Project site would be significant on both a direct and cumulatively-considerable basis prior to mitigation. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-8 would ensure that any historical resources identified on site or within the Project's off-site improvement areas during ground-disturbing activities are appropriately treated, including if necessary curation of the historical artifact(s) at the Western Science Center in Hemet or as directed by the County Archaeologist. Implementation of the required mitigation would ensure that any potential impacts to subsurface historical sites or resources would be reduced to less-than-significant levels.	Less-than-Significant with Mitigation Incorporated	**MM 4.5-1 060 – Planning-CUL.1**: **Controlled Grading.** The bedrock milling features at cultural site(s) P-33-026661 Features G and H, and P-33-026663 Feature A will be impacted during construction activities and the souls surrounding them will be disturbed. To address controlled grading in this area, a plan will be developed and included in the CRMP by the Project Archaeologist. The controlled grading plan shall require the systematic removal of the ground surface to allow for the identification, documentation and recovery of any subsurface cultural deposits. Results of the controlled grading program shall be included in the Phase IV monitoring report. **MM 4.5-2 060 – Planning-CUL.2**: **ECS Sheet – Resource Relocation and Reburial Area.** Prior to issuance of grading permits: the developer/applicant shall provide evidence to the Riverside County Planning Department that an Environmental Constraints Sheet has been included in the Grading Plans. This sheet shall indicate avoidance of site P-33-026660 and P-33-026661 Features A to F. The Sheet shall also indicate an area to be used for relocation of the bedrock milling features that cannot be avoided by this Project. This shall include P-33-26661 Features G and H and P-33-026663 Feature A. In addition, a permanent space within this area will be predetermined and designated on a confidential map for reburial of any artifacts that will be impacted and/or discovered during grading.	Project Applicant/Project Archaeologist Project Applicant/Project Archaeologist	County Archaeologist County Archaeologist/Native American Monitor	During ground-disturbing activities and in the event that cultural resources are uncovered Prior to issuance of a grading permit
Threshold c. and d.: Implementation of the proposed Project would result in direct physical impacts to sites P-33-026659 and P-33-026663. Sites P-33-026659 and P-33-026663 are not eligible for the NRHP or CRHR, and therefore do not comprise pre-historic resources under	Less-than-Significant with Mitigation Incorporated	**MM 4.5-3 060 – Planning-CUL.3**: **Feature Relocation.** Site(s) P-33-026661 Features G and H, and p-33-026663 Feature A cannot be avoided through Project design. Prior to grading permit issuance, the Project Supervisor and Project Archaeologist and a representative from the consulting Tribe(s) shall meet onsite to	Project Applicant/Project Archaeologist	County Archaeologist/Native American Monitor	Prior to issuance of a grading permit and during ground disturbing activities

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
CEQA and historic properties under Section 106 of the NHPA. Nevertheless, given the presence of previously-identified archaeological resources within the Project vicinity, including within the Project site, there is a potential for the Project site to contain unidentified surface or subsurface archaeological resources. Therefore, potential impacts to previously unidentified sub-surface pre-historic resources represents a significant impact of the proposed Project for which mitigation would be required. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-8 would ensure that any previously-undiscovered archaeological sites or resources identified on site or within the Project's off-site improvement areas during ground-disturbing activities are appropriately treated as directed by the Archaeological Monitor, County Archaeologist, and Native American Monitor. Implementation of the required mitigation would reduce the Project's potential impacts to subsurface archaeological sites or resources to below a level of significance. Threshold e.: The Project site and off-site improvement areas do not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Although the Project Applicant would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq., the Project's potential impacts to buried human remains would be significant on a direct and cumulatively-considerable basis prior to mitigation. In the event that human remains are discovered during construction activities, Mitigation Measure MM 4.5-9 would require the Project Applicant to comply with the applicable	Less-than-Significant with Mitigation Incorporated	determine the strategy for relocating the milling features to a permanent open space area predetermined and designated on a confidential map. Before construction activities are allowed to start and using professional archaeological methods, any visible artifacts shall be recovered and recorded, and photo documentation of each feature in situ shall occur The current Department of Parks and Recreation forms for the sites shall be updated, detailing which features were relocated, the process through which this was done, and updated maps using sub meter GIS technology to document the new location of each feature. The relocation information shall be included in the Phase IV Monitoring Report. **MM 4.5-4 060 – Planning-CUL.4**: **Native American Monitor.** Prior to the issuance of grading permits, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for a Native American Monitor. The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. The developer/permit applicant shall submit a fully executed copy of the agreement to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition. This agreement shall not modify any condition of approval or mitigation measure. **MM 4.5-5 060 – Planning-CUL.5**: **Project Archaeologist.** Prior to issuance of grading permits, the applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist (Project Archaeologist) has been contracted to implement a Cultural Resource Monitoring Program (CRMP). In consultation with the consulting tribes, a Cultural Resource Monitoring Plan shall be developed that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried	Project Applicant/Project Archaeologist Project Applicant/Project Archaeologist	County Archaeologist/Native American Monitor County Archaeologist	Prior to ground disturbing activities During ground-disturbing activities and prior to grading permit issuance

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with Mitigation Measure MM 4.5-9, State law, and applicable regulatory requirements would reduce the Project's potential impacts to buried human remains to less-than-significant levels.		archaeological resources associated with this project. A fully executed copy of the contract and a wet-signed copy of the Monitoring Plan shall be provided to the County Archaeologist to ensure compliance with this condition of approval. Working directly under the Project Archaeologist, and adequate number of qualified Archaeological Monitors shall be present to ensure that all earth moving activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist. **MM 4.5-6 060 – Planning-CUL.6**: **Temporary Fencing.** Temporary fencing shall be required for the protection of cultural site(s) P-33-026660 and P-33-026661 Features A to F during grading activities. Prior to commencement of grading or brushing, the project archaeologist shall confirm the site boundaries and determine an adequate buffer for protection of the site(s). The applicant shall direct the installation of fencing under the supervision of the project archaeologist and Native American Monitor. The fencing can be removed only after grading operations have been completed. **MM 4.5-7 070 – Planning-CUL.1**: **Artifact Disposition.** In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources and provide evidence to the satisfaction of the County Archaeologist that all archaeological materials revocered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), have been handled through the following methods. Any artifacts identified and collected during construction and grading activities are not to leave the project area and shall remain onsite in a secure location until final disposition. 1. *Historic Resources:* All historic archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), have been curates at the	Project Applicant/Project Archaeologist Project Applicant/ Project Archaeologist	County Archaeologist/Native American Monitor County Archaeologist/Native American Monitor (itf tribal resources are involved)	Prior to and during ground-disturbing activities Post-Construction (following recovery of artifacts)

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring parties	Implementation Stage
		Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid. 2. *Prehistoric and/or Tribal Cultural Resources:* One of the following treatments shall be applied. a. Preservation-in-place, if feasible is the preferred option. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources. b. Reburial of the resources on the Project property. The measures for reburial shall be culturally appropriate as determined through consultation with the consulting Tribe(s) and include, at least, the following: i. Measures to protect the reburial area from any future impacts in perpetuity. Reburial shall not occur until all required cataloguing (including a complete photographic record) and analysis have been completed on the cultural resources, with the exception that sacred and ceremonial items, burial goods, and Native American human remains are excluded. ii. No cataloguing, analysis, or other studies may occur on human remains grave goods, and sacred and ceremonial items. iii. Any reburial processes shall be culturally appropriate and			

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring parties	Implementation Stage
		approved by the consulting tribe(s). iv. Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the County and SCIC. v. Any artifacts identified and collected during construction grading activities are not to leave the project area and shall remain onsite in a secure location until final disposition.			
		MM 4.5-8 070 – Planning-CUL.2: **Deed Restriction.** At the conclusion of all construction activities, the Project proponent and landowner shall record a deed restriction on the avoidance areas (and the reburial location, if used) with the County to restrict development of these areas in the future. Deed restrictions shall not disclose the nature of the avoidance areas. A copy of the deed restriction(s) shall be submitted to the County planning staff as proof of compliance prior to the issuance of certificates of occupancy for the Project.	Project Applicant /Project Archaeologist	County Archaeologist	Post-Construction (upon completion of mitigation monitoring)
		MM 4.5-9 070 – Planning-CUL.3: **Phase IV Monitoring Report.** Prior to Grading Permit Final Inspection, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the TLMA website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance to procedures stipulated in the Cultural Resources Management Plan.	Project Applicant/ Construction Contractor/Project Archaeologist	County Archaeologist	Post-construction (prior to grading final inspection)

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
		MM 4.5-10 070 – Planning-CUL.4: Tribal Monitoring Notes. Prior to Grading Final, a complete set of Tribal Monitoring Notes shall be submitted to the County Archaeologist. Upon receipt and approval of the notes, the condition will be cleared.	Project Applicant/Project Archaeologist	County Archaeologist	Post-construction (prior to grading final inspection)
4.6 Energy					
Summary of Impacts					
Threshold a: Project construction and operations would not result in the inefficient, wasteful, or	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A	N/A

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would, therefore, not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California. As such, Project impacts due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant requiring no mitigation. Threshold b: Energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other single-family residential projects of similar scale and intensity that are operating in California, as the Project would be subject to current regulatory requirements, such as the 2022 version of Title 24, which was not in effect when most existing residential developments were constructed. Based on the analysis presented herein, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and impacts would be less than significant.	Less-than-Significant Impact	**RR 4.6-1** The following are applicable regulations and design requirements within the County of Riverside. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements. • Renewable Portfolio Standards (SB 100): Increases California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. • CCR Title 13, Motor Vehicles, Section 2449(d)(3): Idling. Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.			
4.7 Geology and Soils					
Summary of Impacts					
Thresholds a. and c.: The potential for surface fault rupture to occur at the site is considered low. Impacts due to rupture of a known	Less than Significant with Mitigation Incorporated	**MM 4.7-1** Prior to issuance of grading or building permits, the Riverside County Building and Safety Department shall verify that all of the recommendations given in the Project's November	Project Applicant, Construction Contractors	Riverside County Building and Safety Department	Prior to issuance of grading or building permits

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
earthquake would therefore be less than significant. However, the Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. A significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). Therefore, impacts would be potentially significant and mitigation is required to ensure compliance with the site-specific recommendations of the Project's Geotechnical Evaluation. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address seismic-related hazards in conformance with the CBSC and the Riverside County Building Code. With implementation of the required mitigation, impacts due to strong seismic ground shaking would be reduced to less-than-significant levels. Threshold b.: Based on site observations and subsurface investigations conducted by Leighton, the potential for liquefaction or dynamic settlement at the Project site due to an earthquake event is very low. It is estimated that the total settlement would be less than ½ inch and differential settlement would be ¼ inch in 40 feet horizontal distance after the recommended remedial grading is completed. However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). Accordingly, prior to mitigation implementing the Geotechnical Evaluation recommendations, the proposed Project has the potential to be	Significant Direct Impact	17, 2023 "Geotechnical Due Diligence Evaluation, Proposed Highland Grove IV Lake Matthews Area, Riverside County, California," prepared by Leighton and Associates, Inc., and included as Technical Appendix F to the Project's EIR, are incorporated into the construction and grading plans. Alternatively, the Project shall comply with the findings and recommendations of any geotechnical studies that may be required in association with future grading and/or building permits. **RR 4.7-1** The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements. • The Project is required to comply with the provisions of County Ordinance Nos. 457 and 460. Ordinance No. 457 requires that all projects comply with California Building Codes and the International Building Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public, and includes requirements related to erosion. Ordinance No. 460 sets forth soil erosion control requirements and requires preparation and implementation of a wind erosion control plan. • The Project is required to comply with the provisions of SCAQMD Rule 403, by addressing blowing dust from the Project's construction activities. • The Project is required to comply with the provisions of the County's National Pollution Discharge Elimination System (NPDES) permit, and the future-required Storm Water Pollution Prevention Plan (SWPPP). Compliance with the NPDES permit and the future-required SWPPPs would ensure an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) are implemented to reduce or eliminate sediment discharge to surface water from stormwater and non-stormwater discharges.			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
subject to seismic-related ground failure, including liquefaction. This is evaluated as a significant impact for which mitigation would be required. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address liquefaction and dynamic settlement hazards, including measures related to remedial grading. With implementation of the required mitigation, impacts due to strong seismic ground shaking would be reduced to less-than-significant levels.					
Threshold d: The Project site is not susceptible to landslide hazards and impacts would be less than significant. Impacts due to lateral spreading, collapse hazards, and rockfall hazards could occur if proposed grading and development is not conducted in accordance with the site-specific recommendations of the Project's Geotechnical Update (*Technical Appendix F*). This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required. mplementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address the potential for lateral spreading and collapse hazards. With implementation of the required mitigation, impacts due to lateral spreading and collapse would be reduced to less-than-significant levels.	Less than Significant with Mitigation Incorporated				
Threshold e: According to mapping information available from Riverside County GIS, the Project site is not "susceptible" to ground subsidence. The nearest lands subject to subsidence hazards occurs approximately 0.4-mile southwest of the Project site. Accordingly, the Project would not be located on a geologic	No Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence, and no impact would occur.					
Threshold f: The Project site is not subject to volcanic hazards. The Project site is located approximately 0.6-mile north of Lake Mathews, and is situated at a lower elevation than the dam. However, any seiches that may occur in association with Lake Mathews would not result in inundation of the Project site, as any flows generated by seiches that would reach the Project site would be conveyed through the existing natural drainages on site, such that proposed residential structures would not be subject to inundation during such events. Thus, impacts due to seiche hazards would be less than significant. Although the Project site and surrounding areas exhibit undulating topography, due to the relatively shallow depth to bedrock that occurs across the Project site, the risk of mudflow associated with these hill forms would be low. As such, impacts due to mudflow hazards would be less than significant.	Less-than-Significant Impact				
Threshold g.: The Project site would be graded in a manner that largely approximates the site's existing topographic conditions. The Project would require a total of approximately 605,038 cy of cut and fill. Earthwork activities are expected to balance on site and no import or export of soils would be required. Thus, the Project would not result in a substantial change in topography or ground surface relief features, and impacts would be less than significant.	Less-than-Significant Impact				
Threshold h: All proposed slopes on site would be constructed at a gradient of 2:1. Although proposed manufactured slopes would measure	Less than Significant with Mitigation Incorporated				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
up to 35 feet in in height, site-specific recommendations are provided in the Project's Geotechnical Evaluation (*Technical Appendix F*) which would minimize impacts. However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation. Accordingly, prior to mitigation implementing the Geotechnical Evaluation recommendations, the Project has the potential to cause significant impacts as a result of creating slopes higher than 10 feet. This is evaluated as a potentially significant impact for which mitigation would be required. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to ensure that any slopes higher than 10 feet would be grossly stable. With implementation of the required mitigation, impacts associated with unstable slopes would be reduced to less-than-significant levels.					
Threshold i.: Field visits conducted by McAlister as part of the Project's Phase I ESA did not identify the presence of any septic systems, and there are no existing sewer lines within the Project site. As such, no impact associated with subsurface sewage disposal systems would occur.	No Impact				
Threshold l.: Sewer service to the proposed Project would be provided by the WMWD, and no septic tanks or alternative wastewater disposal systems are proposed as part of the Project. Accordingly, no impact would occur.	No Impact				
Thresholds j. and m.: The Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required	Less-than-Significant Impacts				

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring parties	Implementation Stage
to obtain an NPDES permit for construction activities and adhere to a Stormwater Pollution Prevention Plan (SWPPP) as well as SCAQMD Rule 403 and Riverside County Ordinance Nos. 457 and 460. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Furthermore, the Project is required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term. Accordingly, impacts would be less-than-significant. Threshold k.: Impacts due to expansive soils could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the of the Project's Geotechnical Evaluation (*Technical Appendix F*). This is evaluated as a potentially significant impact for which mitigation would be required. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address expansive soils on site. With implementation of the required mitigation, impacts associated with expansive soils would be reduced to less-than-significant levels.	Less than Significant with Mitigation Incorporated				
4.8 Greenhouse Gas Emissions					
Summary of Impacts					
Threshold a: The annual GHG emissions associated with construction and long-term	Less than Significant with Mitigation	**MM 4.8-1** Prior to issuance of building permits, the Project Applicant shall demonstrate that appropriate building construction	Project Applicant	Riverside County Planning Department	Prior to issuance of building permits

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
operation of the proposed Project are estimated to be approximately 3,875.85 $MTCO_2e$ per year; therefore, the proposed Project would exceed the County's screening threshold of 3,000 $MTCO_2e$/yr. Although the Project would be required to achieve 100 points pursuant to the CAP Screening Tables, and in order to provide a conservative analysis of the Project's impacts due to GHGs, it is concluded that the Project's cumulatively-considerable impacts due to GHG emissions would be potentially significant prior to mitigation. The Riverside County CAP Update (November 2019) qualifies as a "Plan for the Reduction of Greenhouse Gas Emissions," pursuant to State CEQA Guidelines Section 15183.5(b). Pursuant to State CEQA Guidelines Sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously-adopted plan or mitigation program. Additionally, Tier 2 of the SCAQMD interim thresholds for GHG emissions indicates that if a project is consistent with a qualifying local GHG reduction plan, it would not result in a significant impact due to GHG emissions. Implementation of Mitigation Measure MM 4.8-1 would ensure that the proposed Project is fully consistent with the Riverside County CAP Update (November 2019) by requiring the Project Applicant to demonstrate that implementing building permit applications have incorporated measures to achieve a minimum of 100 points pursuant to the CAP Update Screening Tables. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County's GHG Technical Report and support the GHG emissions reduction targets established under the	Incorporated	measures shall apply to achieve a minimum of 100 points per Appendix D to the Riverside County 2019 Climate Action Plan (CAP) Update. The conceptual measures anticipated for the Project are listed in Appendix 3.2 to the Project's Greenhouse Gas Analysis (GHGA) technical report (appended to the Project's EIR as Technical Appendix G). The conceptual measures may be replaced with other measures as listed in Appendix D to the 2019 Riverside County CAP Update, as long as they are replaced at the same time with other measures that in total achieve a minimum of 100 points per Appendix D to the 2019 Riverside County CAP Update. The County shall verify implementation of the identified measures prior to final building inspection. **MM 4.8-2** Prior to issuance of building permits, and in accordance with measure R2-CE1 of the County's Climate Action Plan (CAP) Update, future implementing building permits that involve more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development shall be required to offset the energy demand through renewable energy production. Renewable energy production shall be onsite generation of at least 20% of energy demand for commercial, office, industrial or manufacturing development, meet or exceed 20% of energy demand for multi-family residential development, and meet or exceed 30% of energy demand for single-family residential development. **RR 4.8-1** The Project would be required to comply with all mandates imposed by the State of California and SCAQMD aimed at the reduction of GHG emissions. Those that are applicable to the Project and that would assist in the reduction of greenhouse gas emissions are listed below: • Global Warming Solutions Act of 2006 (AB32). • Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles. • Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.	Project Applicant	Riverside County Planning Department, Building & Safety Department	Prior to issuance of building permits

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
CAP Update. Implementation of Mitigation Measure MM 4.8-2 would ensure that the Project accommodates onsite renewable energy production as needed to meet 30% of the Project's overall energy demand. With implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2, the Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and the Project's cumulatively-considerable impact due to GHG emissions would be reduced to less-than-significant levels. Threshold b: The Project would be consistent with or otherwise would not conflict with the CARB 2022 Scoping Plan. However, the Project has the potential to conflict with the Riverside County CAP Update if the Project were unable to achieve 100 points pursuant to the CAP Screening Tables. This is evaluated as a cumulatively-considerable impact of the proposed Project. Projects that garner at least 100 points through application of the CAP Update Screening Table measures are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP Update. Pursuant to Mitigation Measure MM 4.8-1, the Project Applicant would be required to implement Screening Table Measures that would provide a minimum of 100 points pursuant to the CAP Update Screening Tables (Appendix D to the CAP Update). Implementation of Mitigation Measure MM 4.8-2 would ensure that the Project accommodates onsite renewable energy production as needed to meet 30% of the Project's overall energy demand. With implementation of Mitigation Measures MM	Less than Significant with Mitigation Incorporated	• Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions. • Renewable Portfolio Standards (SB 100). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to achieve a target of 50% renewable resources by December 31, 2026, and to achieve a 60% target by December 31, 2030.. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. • Senate Bill 32 (SB 32). Requires the state to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
4.8-1 and MM 4.8-2, the Project would be fully consistent with the 2019 CAP Update. The CAP Update evaluates and quantifies reductions out to Year 2030. The CAP Update states that "Through 2050, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG missions from new development. Additionally, it is assumed that the State measures would keep being updated and reinforced to further reduce emissions. With these assumptions, Riverside County's emissions would decrease to a level below the reduction target by 2050." Thus, compliance with the CAP Update would serve to meet and support the reduction targets established Senate Bill 32 and the CARB 2022 Scoping Plan. As such, with implementation of the required mitigation, Project impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would be reduced to less-than-significant levels.					
4.9 Hazards and Hazardous Materials					
Summary of Impacts					
Thresholds a and b: There are known hazardous materials located within areas that would be physically impacted by the Project. During Project construction and operation, mandatory compliance with federal, State, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.	Less-than-Significant Impact No Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A	N/A

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Threshold c: The proposed Project would be required to comply with all applicable provisions of County policies and ordinances related to public safety, including but not limited to Ordinance No. 457, which establishes the County's building and fire protection regulations and includes measures requiring the provision of adequate emergency access and other measures to address fire hazard safety. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. There are no components of the proposed Project with the potential to conflict with the County's LHMP. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.					
Threshold d: There are no existing or planned schools within one-quarter mile of the Project site. The nearest school the Project site is the Lake Matthews Elementary School, located approximately 0.6-mile west of the Project site. With mandatory regulatory compliance, 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, and impacts would be less than significant.	Less-than-Significant Impact				
Threshold e: The analysis conducted by McAlister included a review of regulatory databases, and determined that the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, the Project would not create a significant hazard to the public or the environment due to the Project site's inclusion	No Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and no impact would occur. Threshold f., g., and h.: The Project site is not located within two miles of a public airport or within an airport land use plan, and there are no components of the proposed Project that would affect airport operations. The closest airport is the Riverside Municipal Airport located roughly 5.4 miles north of the Project site. The Project site is located outside of the compatibility zones for the Riverside Municipal Airport, indicating that the Project site is not subject to airport-related hazards. Therefore, the Project would not result in an inconsistency with an Airport Master Plan, would not require review by the Airport Land Use Commission, and would not result in a safety hazard for people residing or working in the Project area. Impacts would be less than significant. Threshold i.: There are no active private airstrips or heliports within a 10-mile radius of the Project site. Accordingly, the Project would not result in a safety hazard for people residing or working in the Project area due to private airstrips or heliports, and no impact would occur.	Less-than-Significant Impact No Impact				
4.10 Hydrology and Water Quality					
Summary of Impacts					
Threshold a., b., and i.: The Project would be served potable water by the WMWD, and no groundwater wells are proposed on site; thus, Project direct impacts to groundwater supplies would be less than significant. Additionally, Project-related runoff would be conveyed to downstream facilities where groundwater recharge would continue to occur. Additionally,	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required. **RR 4.10-1** The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.	N/A	N/A	N/A

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
water quality impacts during construction, including potential impacts due to a conflict with the Santa Ana River Basin Plan and potential impacts to groundwater quality, would be less than significant. In addition, with implementation of the proposed Project, all runoff generated on site would be appropriately treated by the Project's EDBs and biotreatment facilities prior to ultimate discharge into the Santa Ana River watershed. Thus, the Project would not adversely affect surface or groundwater quality. Accordingly, the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge; and would not conflict with the Santa Ana River Basin Plan or result in adverse groundwater quality impacts. Impacts would be less than significant.		• The Project Applicant is required to comply with the provisions of the Project's NPDES permit, and the Project's SWPPP. Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-stormwater discharges during construction activities.			
Thresholds c. and f.: Grading proposed as part of the Project generally would maintain the site's existing drainage patterns, with runoff continuing to confluence near the northwest Project boundary and conveyed off-site to existing drainages to the north. In addition, the Project improvements, including the proposed EDBs, would ensure that runoff from the Project site largely is similar to or reduced in comparison to result in slight decrease in the total peak flows from the Project site under post-development existing conditions; therefore, the Project would not result in the alteration of the existing alignment of any downstream receiving waters. Additionally, because existing drainage facilities downstream are adequately sized to accommodate peak runoff from the Project site	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
and surrounding areas under existing conditions, and because peak runoff from the Project site would slightly decrease with development of the Project site as proposed, the Project would not contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant.					
Threshold d: With mandatory adherence to the SWPPP requirements, effects associated with construction-related erosion, siltation, water quality, and flooding on downstream water sources and flood control systems would be maintained at a level below significance. With development of the Project site, portions of the Project site, including proposed roadways and residential building pads, would consist of impervious surfaces, with large portions of the Project site, including proposed open space areas and the portions of individual lots that would not be developed with residential homes, consisting of pervious surfaces. Thus, the potential for erosion hazards on site would be substantially decreased as compared to existing conditions with buildout of the Project site. Additionally, implementation of the Project's proposed drainage system would result in an slight decrease in peak flows from the Project site, indicating that the Project would not result in increased erosion hazards in areas tributary to the Project site. As such, long-term erosion impacts would be less than significant.	Less-than-Significant Impact				
Thresholds e. and g.: The Project site is located outside of mapped floodplains and is not subject to inundation due to flood hazards. The Project's proposed drainage system has been designed to preclude the potential for flooding hazards on site, in accordance with standard County	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
requirements. With implementation of the Project's proposed drainage system, the peak runoff from the Project site would slightly decrease as compared to existing conditions. As such, the Project would not substantially increase the rate of surface runoff in a manner which would result in flooding on-site or off-site and would not impede or redirect flood flows, and impacts would be less than significant.					
Threshold h.: The Project site is located approximately 30 miles northeast of the Pacific Ocean, and as such there is no potential for the Project site to be inundated with tsunamis. Additionally, and as discussed more fully under the analysis of Threshold g., areas planned for development on site are not located in areas subject to inundation during the 1% annual chance flood. Any seiche events that could result at Lake Mathews are unlikely to result in site inundation. Furthermore, any such potential site inundation that could occur most likely would be restricted to the existing drainage located along the west side of proposed Street A and would be highly unlikely to result in the inundation of any proposed residential lots. Accordingly, impacts due to site inundation from seiches would be less than significant. Although the Project site is located within the inundation zone in the event of a failure of Dike 1 (Saddle Dam 1) at the Lake Mathews Dam, because the Lake Mathews Dam is subject to regular inspection and maintenance by the MWD, and because the MWD has an EAP in place for the Lake Mathews Dam, the likelihood that there would be a failure of the Lake Mathews Dam is highly remote. Furthermore, only the westernmost portions of the Project site are subject to inundation from dam failure, and all potentially affected residential lots occur upstream of the Project's	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
proposed EDBs. The Project's EDBs have been designed to include biotreatment facilities to treat runoff prior to discharge from the Project site. Therefore, the Project would not result in the release of substantial water quality pollutants even in the unlikely event that the Project site is subject to inundation due to failure of Dike 1 (Saddle Dam 1) at the Lake Mathews Dam, and impacts would therefore be less than significant.					
4.11 Land Use and Planning					
Threshold a: The Project would not conflict with the General Plan, LMWAP, Connect SoCal, or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A	N/A
Threshold b: The Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community), and impacts would be less than significant.	Less-than-Significant Impact				
4.12 Mineral Resources					
Threshold a.: The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, with implementation of the proposed Project there would be no impact to known mineral resources.	No Impact	No impact would occur; therefore, mitigation measures are not required.	N/A	N/A	N/A
Threshold b.: The Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, and no impact would occur.	No Impact				
Threshold c.: The Project would not be an incompatible land use located adjacent to a State	No Impact				

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring Parties	Implementation Stage
classified or designated area or existing surface mine, and no impact would occur. Threshold d.: The Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no impact would occur.	No Impact				
4.13 Noise					
Threshold a.: The Project site occurs approximately 5.4 miles south of the Riverside Municipal Airport. According to Map RI-3 of the Airport Land Use Compatibility Plan (ALUCP) prepared for the Riverside Municipal Airport, the Project site is located more than five miles southwest of the nearest portion of the 60 dBA CNEL contour for the Riverside Municipal Airport. Therefore, because the Project's proposed residential uses would not be exposed to airport-related noise levels exceeding 60 dBA CNEL, the Project would not expose people residing or working in the Project area to excessive airport-related noise levels, and impacts would be less than significant. Threshold b.: There are no private airstrips within a 10-mile radius of the Project site. The nearest private airstrip to the Project site is the Perris Valley Airport, located approximately 13.6 miles southeast of the Project site. According to the ALUCP prepared for the Perris Valley Airport, the Project site is located well outside of the 55 dBA CNEL contour for this facility. As indicated under the analysis of Threshold a., the Project's residential land uses are considered "clearly acceptable" with exterior noise levels below 55 dBA CNEL. As such, the Project would not expose people residing or working in the Project area to excessive noise	Less-Than-Significant Impact Less-Than-Significant Impact	**MM 4.13-1** Prior to issuance of grading permits that will allow for rock crushing activities on site during construction activities, the Project Applicant shall identify the location(s) of all rock crushing activities on site on the proposed grading plan. The Riverside County Department of Building and Safety shall review the Project's grading plans to ensure that all rock-crushing equipment and activities would occur at a minimum distance of 160 feet from any residential property boundary. **MM 4.13-2** Prior to approval of any grading permits that require blasting activities and a blasting permit, the Project Applicant shall prepare and submit for County review and approval of a Blasting Noise and Vibration Monitoring and Abatement Plan ("Noise and Vibration Abatement Plan"). The required Noise and Vibration Abatement Plan shall include the name and qualifications of the person(s) responsible for monitoring and reporting blast vibrations. In addition, the Noise and Vibration Abatement Plan shall require a minimum of three seismographs for monitoring peak ground vibration and air-overpressure. The Noise and Vibration Abatement Plan also shall require that equipment and its use shall conform fully to the standards developed by the Vibration Section of the International Society of Explosive Engineers (ISEE). For all blasts, the Noise and Vibration Abatement Plan shall require monitoring of ground motion and air-overpressure at the nearest residential properties or other structure of concern. The Noise and Vibration Abatement Plan also shall specify a minimum trigger level for monitoring of 0.05 in/s for ground motion and 120 dB for air-overpressure. Additionally, the Noise and Vibration Abatement Plan shall require regular reporting of blasting and measurements to Riverside County, and shall include a copy of the instrument/software-generated blast monitoring report at each	Project Applicant, Construction Contractors Project Applicant, Project Noise Consultant	Riverside County Building & Safety Department Riverside County Building & Safety Department	Prior to issuance of grading permits Prior to issuance of any grading permits that require blasting activities and a blasting permit, and during blasting activities

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
levels associated with private airstrips, and no impact would occur. Threshold c.: Typical construction activities would generate noise levels up to 61.2 dBA Leq, which is below the County's 80 dBA Leq threshold for construction noise. Blasting noise may be noticeable but would be brief and would not exceed applicable OSMRE or CFR airblast standards. Therefore, these activities would result in less-than-significant impacts. However, because the final location of rock crushing operations is currently unknown, unmitigated noise levels could potentially exceed 80 dBA Leq within 160 feet of nearby sensitive receptors. This represents a potentially significant impact prior to mitigation. With mitigation, implementation of MM 4.13-1 would ensure rock crushing activities are located at least 160 feet from the nearest residential property line, reducing noise to below 80 dBA Leq and ensuring impacts remain less than significant. Operational noise, traffic-related noise, and interior/exterior noise at proposed residential uses would all remain below County significance thresholds, resulting in less-than-significant long-term noise impacts. Threshold d.: The residential uses proposed as part of the Project are not associated with excessive ground-borne vibration or ground-borne noise levels; thus, impacts due to excessive ground-borne vibration or ground-borne noise levels would be less than significant under long-term operating conditions. During normal construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.01 in/sec PPV at the nearest sensitive receptors and would not exceed the County of Riverside threshold of 0.04 in/sec	Less-Than-Significant with Mitigation Incorporated Less-Than-Significant with Mitigation Incorporated	instrument location that includes measured peak particle velocity in inches per second, peak air-overpressure in linear-scale decibels, and vibration and air-overpressure event plots, with date and time of event recording. In addition, the Noise and Vibration Abatement Plan shall include the following requirements: • Prior to commencement of any blasting, a pre-blast survey of the conditions of all existing property and aboveground utilities located within 300 feet of any potential blasting areas shall be conducted. The pre-blast survey shall include a photographic record of all visible and accessible structures, facilities, utilities, or other improvements. The survey shall document the interior and exterior conditions of all residential property and associated structures located within 500 feet of blasting areas. If property owners refuse surveys, provide copies of certified-mail letters documenting attempts to provide the survey by a third-party professional survey company. The required surveys shall include a description of the interior and exterior condition of the various structures examined. Descriptions shall include the locations of any cracks, damage, or other existing defects and shall include information needed to identify and describe the defect, if any, and to evaluate the construction operations on the defect. Survey records shall include photos of all cracks and other damaged, weathered, or otherwise deteriorated structural conditions. If necessary, macro lenses and flash illumination shall be used to ensure defects are shown clearly in the photographs. Photos shall contain an accurate date stamp. No blasting shall occur prior to completion of surveys of surrounding residential properties. Surveys also shall be repeated at facilities or properties where damage concerns have been expressed by individual residents, property owners, or other concerned parties. Details of any observed changes to surveyed structures and documenting photos shall be reported and submitted to Riverside County. • Blasting only shall be allowed Monday through Friday only between the hours of 8:00 a.m. and 5:00 p.m.			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
PPV at off-site receivers,; therefore, the Project-related vibration impacts during typical construction activities would be less than significant. However, during blasting activities the Project has the potential to expose nearby sensitive receptors to vibration levels exceeding the County of Riverside threshold of 0.04 in/sec PPV. Therefore, vibration impacts associated with Project blasting activities would represent a significant direct impact of the proposed Project for which mitigation would be required. Implementation of Mitigation Measure MM 4.3-2 would ensure that all future blasting activities occur on site in conformance with a County-approved blasting Noise and Vibration Abatement Plan. The mitigation would ensure that any potentially affected structures or utilities would be subject to inspections prior to commencement of any blasting activities, and additional surveys would be required where damage concerns have been expressed by individual residents, property owners, or other concerned parties. The provisions of the Noise and Vibration Abatement Plan also would impose restrictions on blasting activities within 100 feet and within 500 feet of residential structures, and would require monitoring of vibration levels during blasting. In the event that blasting activities exceed the specified vibration limit of 0.05 in/s for ground motion and 120 dB for air-overpressure, then all blasting activities would cease until a revised blasting plan is prepared and approved by Riverside County. Implementation of Mitigation Measure MM 4.3-2 would ensure that vibration-related impacts during construction-related blasting activities do not adversely affect any existing structures, and would reduce blasting-related vibration impacts to less-than-significant levels.		• No blasting shall occur closer than 100 feet from residential structures. In the event that non-rippable materials are encountered within 100 feet from any residential structure, alternative methods shall be employed to reduce blasting-related noise and vibration impacts. Alternative rock blasting within 100 feet of residential homes may include methods such as the drilling of holes in the largest area of rock, inserting expansive grout or small charges into each whole to fragment the rock into smaller pieces, and then crushing the pieces for transport or other use. • No more than a total of 2,000 pounds of explosive shall be detonated each day, excluding detonators. • All blasts located within 500 feet of any structures or above ground utilities shall be covered with woven steel cable or steel-cable and rubber-tire blasting mats with a minimum weight of 30 pounds per square foot. Woven polypropylene or similar weed-barrier fabric, covered with at least 6 inches of soil or sand shall be placed over blast areas to protect initiators before mats are placed. Mats shall be overlapped at least 3 feet and shall completely cover the blast area and extend at least three feet beyond the blast area in all directions. If any flyrock or blasted material is thrown more than 10 feet or half the distance to the nearest structure, whichever is less, blasting shall be suspended until the County's has approved a revised blasting plan showing revisions to assure adequate ground movement control. • Before blasts are covered, all loose soils above the blast shall be removed where feasible. Remaining ground located within 20 feet of the blast shall be thoroughly wetted with water to suppress airborne dust. Sand or soils placed over weed-barrier fabric shall be similarly wetted before placing blast mats. • If specified vibration limits are exceeded, blasting operations shall cease immediately and a revised blasting plan shall be submitted to the County. Blasting shall not resume until a revised blasting plan has been reviewed and the Contractor has expressed in writing			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
		the conditions that will be applied to further blasting work. Project grading and blasting contractors shall be required to ensure compliance with the Noise and Vibration Abatement Plan requirements and shall permit periodic inspection of the construction site by County of Riverside staff or its designee to confirm compliance. The requirements of the Noise and Vibration Abatement Plan also shall be specified in bid documents issued to prospective construction contractors. Riverside County shall review all monitoring reports to ensure compliance with the Noise and Vibration Abatement Plan, and shall have the authority to stop all blasting activities on site if it is determined that blasting activities are not being conducted in conformance with Noise and Vibration Abatement Plan and/or the above-listed requirements. **RR 4.13-1** The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements. • All construction activities and haul truck deliveries shall adhere to Section 2.i of Riverside County Ordinance No. 847, which prohibits construction activities that make loud noise from occurring between 6:00 p.m. and 6:00 a.m. during the months of June through September, and between 6:00 p.m. and 7:00 a.m. during the months of October through May, and on Sundays and federal holidays. Exceptions to these time restrictions may be granted pursuant to Section 7 of Ordinance No. 847 (e.g., if needed to accommodate nighttime concrete pouring activities).			
4.14 Paleontological Resources					
Threshold a.: The Project would not impact any known paleontological resources or unique geological features. However, there is a remote potential that fossils may be discovered during grading and earthmoving activities. This is considered a potentially significant impact on both a direct and cumulatively-considerable	Less-than-Significant Impact with Mitigation Incorporated	**MM 4.14-1** Prior to grading permit issuance, the Riverside County shall verify that the following applicable notes are included on the grading plans. Project contractors shall be required to ensure compliance with these notes and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance. These notes also shall	Project Applicant, Project Paleontologist	County Geologist, Riverside County Planning Department	Prior to the issuance of grading permits and during grading and ground-disturbing activities

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
basis. Although not anticipated, in the remote event that paleontological resources are uncovered during grading and earthmoving activities, Mitigation Measure MM 4.14-1 would ensure that the area where the resource(s) was identified is subject to monitoring, and would further ensure that any uncovered fossils are appropriately treated. With implementation of Mitigation Measure MM 4.14-1, the Project's potential impacts to previously-undiscovered paleontological resources would be reduced to less-than-significant levels.		be specified in bid documents issued to prospective construction contractors. These requirements only shall apply in the event that a paleontological resource(s) is uncovered during Project grading and earthmoving activities. 1. If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 100-foot radius buffer so as to protect the discovery from further potential damage, and a county-qualified paleontologist shall be consulted to assess the discovery. If the discovery is determined to be significant by the paleontologist, a Mitigation Monitoring and Reporting Program (MMRP) shall be initiated, which shall include notification of appropriate personnel involved and monitoring of earth disturbance activities: a. If a paleontological resource(s) are uncovered, monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources shall be performed by a qualified paleontologist or paleontological monitor. Monitoring shall be conducted full-time in areas of grading or excavation in undisturbed sedimentary deposits. b. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.			

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring parties	Implementation Stage
		c. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils shall be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes shall be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites shall be protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils shall be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site shall be determined with the use of handheld GPS units. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location. d. Isolated fossils shall be collected by hand, wrapped in paper, and placed in temporary collecting flats or five-gallon buckets. Notes shall be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place. e. Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
		scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, as many as 20 to 40 five-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment. f. In accordance with the "Microfossil Salvage" section of the Society of Vertebrate Paleontology guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth. g. In the laboratory, individual fossils shall be cleaned of extraneous matrix, any breaks shall be repaired, and the specimen, if needed, shall be stabilized by soaking in an archivally approved acrylic hardener (e.g., a solution of acetone and Paraloid B-72). h. Recovered specimens shall be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils. i. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable			

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
		storage (e.g., Western Science Center [WSC], Natural History Museum of Los Angeles County [LACM], San Diego Natural History Museum [SDNHM], San Bernardino County Museum [SBCM], or Riverside Municipal Museum [RMM]) shall be conducted. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the lead agency (i.e., Riverside County) shall be consulted on the repository/museum to receive the fossil material. j. A final report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, shall signify satisfactory completion of the Project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.			
4.15 Population and Housing					
Threshold a.: Under existing conditions, there are no existing residential homes or residents on the Project site. Implementation of the proposed Project would not result in the demolition of any existing homes and the Project would not displace any existing people or housing. As such, the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and no impact would occur. Threshold b.: The Project would entail development of the 111.6-acre Project site with	No Impact No Impact	Impacts would be less than significant; therefore, no mitigation measures are required.	N/A	N/A	N/A

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring Parties	Implementation Stage
206 single-family homes, thereby accommodating new housing opportunities within the County. The Project does not include any land uses, such as commercial retail or light industrial land uses, that would generate new employees or an increased demand for additional housing. Therefore, the Project would not create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income, and no impact would occur. Threshold c.: The Project's anticipated future population would be less than assumed for the Project site by the Riverside County General Plan. Accordingly, the Project would not result in substantial unplanned population growth in the area. Additionally, the Project's proposed roadway and other infrastructure (e.g., water, sewer, etc.) improvements have been designed and sized to serve the proposed Project, and would not indirectly induce growth in the local area. Thus, the Project would not induce substantial unplanned population growth in the area, either directly or indirectly, and impacts would be less than significant.	Less-than-Significant Impact				
4.16 Public Services					
Threshold a: With payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the Riverside County Fire Department would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new fire protection facilities that could result in a significant impact to the environment. Threshold b.: With payment of mandatory DIF fees, the proposed Project's potential direct and	Less-than-Significant Impact Less-than-Significant Impact	Impacts would be less than significant; therefore, no mitigation measures are required.	N/A	N/A	N/A

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
cumulatively-considerable impacts to the Riverside County Sheriff's Department would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new police protection facilities that could result in a significant impact to the environment.					
Threshold c.: The Project would generate approximately 111 students on an annual basis, but would not exceed the excess existing capacity at the Lake Mathews Elementary School, Frank Augustus Miller Middle School, or the Arlington High School. Although the RUSD may need to construct new school facilities to meet the growing demand within this part of Riverside County, the payment of mandatory school impact fees would ensure that the Project would not result in significant direct or cumulatively-considerable impacts to the ability of the RUSD to provide for school services. As such, the Project impacts would be less than significant.	Less-than-Significant Impact				
Threshold d.: Although the Project would contribute to a need for new or expanded library facilities, the Project would generate tax revenue and the Project developer would be required to contribute DIF fees, which would be used in part to provide for library space and/or new book volumes. Accordingly, with payment of DIF fees, Project impacts to library services and facilities are evaluated as less than significant on both a direct and cumulatively-considerable basis.	Less-than-Significant Impact				
Threshold e.: With payment of mandatory DIF fees, the Project would result in less-than-significant direct and cumulatively-considerable impacts to health services facilities, and the	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Project would not result in or require the construction of new health services facilities that could result in a significant impact to the environment.					
4.17 Recreation					
Thresholds a and d: The physical construction of the on-site recreational facilities (i.e., one park and a 10-foot-wide multi-purpose trail) has been addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources). Under each of these topics, Project impacts are determined to be less than significant, or mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no components of the planned recreational facilities on site that have not already been addressed and accounted for throughout this EIR. Accordingly, Project impacts due to parkland development on site would be less than significant, requiring no mitigation beyond that which is identified in other portions of this EIR.	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A	N/A
Thresholds b and c.: The Project would accommodate approximately 26.8 acres of parkland and passive recreational opportunities, and a multi-purpose trail, which would exceed the Project's parkland demand of 2.1 acres. In the event that the RPOSD does not credit all or a portion of the Project's on-site recreational amenities towards the Project's parkland dedication requirements, then the Project Applicant would be required to pay fees pursuant to Section 10.35 of Ordinance No. 460, which would provide funding to allow Riverside County to acquire and/or improve new parkland within the County. Thus, impacts due to a conflict with Riverside County's parkland	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
dedication requirements would be less than significant. Additionally, because the Project Applicant would be required to provide for adequate parkland on site or through in-lieu fees, any increase in the use of existing recreational facilities within the County by future Project residents would be off-set by existing County residents utilizing the Project's proposed recreational amenities and/or the recreational amenities to be accommodated by the Project Applicant's payment of in-lieu fees pursuant to Ordinance No. 460. Thus, the Project would not include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and impacts would be less than significant.					
4.18 Transportation					
Threshold a.: The proposed Project would be fully consistent with Connect SoCal, the Riverside County CMP, and the Riverside County General Plan Circulation Element. There are no components of the proposed Project that would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, or pedestrian facilities. Impacts would be less than significant. Threshold b.: Buildout of the residential uses proposed as part of the Project would result in a PA HB VMT per capita for the Project's proposed residential uses of 21.2, which would exceed the County's threshold of 15.2. Therefore, the Project would conflict with or be inconsistent with CEQA Guidelines § 15064.3(b), which represents a significant impact of the proposed Project. As noted by the County Guidelines, Transportation Demand	Less-than-Significant Impact Significant and Unavoidable Direct and Cumulatively-Considerable Impact	**MM 4.18-1** Prior to issuance of building permits for the proposed development, Riverside County shall review the building plans to ensure that the following measures have been accommodated by the Project: • The Project shall provide pedestrian and bicycle network improvements within the development to connect to existing off-site facilities. • Where applicable, the Riverside County Transportation Department shall ensure design of key intersections and roadways encourage the use of walking, biking, and transit. • The Project Applicant shall collaborate with the Riverside Transit Authority (RTA) to determine the feasibility of providing new or re-routing existing transit services to the site. **RR 4.18-1** The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance	Project Applicant	Riverside County Building & Safety Department	Prior to issuance of building permits

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant through use of the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhous Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021 Handbook). For residential land use projects, the 2021 Handbook provides a list of Neighborhood Design measures that reduce VMT. However, the maximum achievable reduction for these measures as noted in the 2021 handbook is limited to 10%. Therefore, even with implementation of all feasible trip reduction measures, including those listed in Mitigation Measure MM 4.18-1, the Project would be unable to reduce its VMT impact to below the impact threshold. It is also recognized that as the Project area and surrounding communities develop as envisioned under the County of Riverside's General Plan, new residential, retail, and other development would be implemented. These actions could collectively alter transportation patterns, improve the region's jobs/housing ratio, reduce VMT, and support implementation of new or alternative TDM measures. There are no means currently, however, to quantify any VMT reductions that could result from such future growth patterns. Accordingly, even with implementation of Mitigation Measure MM 4.18-1, Project impacts due to VMT would remain significant and unavoidable.		with applicable Riverside County regulations and design requirements. • Prior to issuance of building permits, the Project Applicant shall pay appropriate Development Impact Fee Program (DIF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 659. • Prior to final building inspection, the Project Applicant shall pay appropriate Western Riverside County Transportation Uniform Mitigation Fee Program Ordinance (TUMF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 824. • Prior to final building inspection for each phase of the proposed Project, the Project Applicant shall make fair-share contributions towards required transportation improvements, in accordance with Table 1-3 of the Project's Traffic Analysis (Technical Appendix M2 to this EIR).			
Threshold c.: All physical improvements planned as part of the Project would be in conformance with applicable Riverside County standards, and the Project's residential land uses are compatible with land uses in the surrounding	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
area. The Project would not substantially increase hazards due to a geometric design feature or due to incompatible land uses. Impacts would be less than significant.					
Threshold d.: Although the Project would result in the increased maintenance of roadways and would increase traffic on existing and planned roadways, any incremental increase in the need to maintain public roadway facilities would be offset by tax revenue generated by the Project's proposed land use. There are no components of the proposed Project that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, Project impacts would be less than significant.	Less-than-Significant Impact				
Threshold e.: Under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect existing traffic along El Sobrante Road or along Travertine Drive. Accordingly, the Project would not cause an effect upon circulation during the Project's construction phase, and impacts would be less than significant.	Less-than-Significant Impact				
Threshold f.: Under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated	Less-than-Significant Impact				

Summary of Impacts	Significance Determination	Mitigation Measures (MM)	Responsible Parties	Monitoring Parties	Implementation Stage
to adversely affect access to nearby uses or emergency access along Travertine Drive or El Sobrante Road. In addition, and in accordance with RCFD requirements, the Project also accommodates two points of EVA, from Travertine Drive to the north and from El Sobrante Road to the south, which would ensure adequate ingress and egress to/from the Project site in the event of an emergency (e.g., wildfires). The Project's proposed roadway connections also would serve to improve local emergency access in the local area by providing a new connection between Travertine Drive and El Sobrante Road. Accordingly, the Project would not result in inadequate emergency access or access to nearby uses, and impacts would be less than significant. Threshold g.: No construction or expansion of facilities for bicycles is proposed as part of the Project, aside from proposed sidewalks throughout the development and a proposed multi-purpose trail along proposed Street A. Impacts associated with proposed improvements to roadways and trails have been evaluated throughout this EIR, and impacts were determined to be less than significant or would be reduced to less-than-significant levels with the incorporation of mitigation measures.	Less-than-Significant Impact				
4.19 Tribal Cultural Resources					
Threshold a.: The Project has the potential to result in significant impacts to previously-undiscovered Tribal Cultural Resources. As such, Project impacts to Tribal Cultural Resources represent a potentially significant impact prior to mitigation. Implementation of EIR Mitigation Measures MM 4.5-1 through MM 4.5-10 would ensure monitoring of	Significant Direct and Cumulatively-Considerable Impact.	As specified by Mitigation Measures MM 4.5-1 and MM 4.5-10, included in EIR Subsection 4.5, *Cultural Resources*, shall apply.	As specified for Mitigation Measures MM 4.5-1 and MM 4.5-10	As specified for Mitigation Measures MM 4.5-1 and MM 4.5-10	As specified for Mitigation Measures MM 4.5-1 and MM 4.5-10

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
ground-disturbing activities by an Archaeological Monitor and Tribal Monitor and further would ensure the appropriate treatment of any Tribal Cultural Resources that may be identified during Project-related ground-disturbing activities. Implementation of the required mitigation would reduce potential Project impacts to Tribal Cultural Resources to below a level of significance.					
4.20 Utilities and Service Systems					
Threshold a.: Although the Project would require construction of new or expanded water, wastewater conveyance, and stormwater drainage systems, impacts associated with the construction of such facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water, sewer, and drainage improvements that have not already been addressed. As such, with the mitigation measures specified in this EIR, Project impacts due to water, sewer, and drainage improvements would be less than significant. Additionally, the Project's wastewater generation would represent approximately 0.34% of the WRCRWA Treatment Plant's daily capacity. Accordingly, the Project would not result in or require the expansion of the existing facilities at the WRCRWA Treatment Plant, and impacts would be less than significant.	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A	N/A
Threshold b.: The WMWD UWMP evaluated supply reliability during a single dry year,	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
multiple dry years, and a multiple year drought that could potentially occur through 2045. In all cases, WMWD's supplies were determined to be sufficient to meet existing and projected demands without any supply shortages. The Project would reconfigure the land use designations of the Project site, but would not affect the total acreage on site for RC-VLDR and RC-LDR land uses. As such, the Project would not result in an increase in the number of dwelling units allowed on site in comparison to the site's existing land use designations. Therefore, because the WMWD UWMP demonstrates that there would be sufficient water supplies through 2045 to serve existing and planned developments, and because the Project is consistent with the growth assumed by the UWMP for the Project site, it can be concluded that the WMWD would have sufficient water supplies available to serve the project from existing entitlements and resources. Therefore, impacts would be less than significant. Thresholds c and d.: Impacts associated with the Project's proposed sewer improvements are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements that have not already been addressed in pertinent sections of this EIR. As such, with the mitigation measures specified in this EIR, Project impacts due to proposed sewer improvements would be less than significant.	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
With respect to sewer treatment capacity, the Project's 47,380 gpd of wastewater would represent only approximately 0.34% of the WRCRWA Treatment Plant's total daily treatment capacity. Therefore, it can be concluded that the WRCRWA Treatment Plant would have adequate capacity to treat sewer flows generated by the Project, and the Project would not result in a determination by the wastewater treatment provider that serves or may service the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Accordingly, because adequate treatment capacity exists at the RWQCP to treat the Project's sewer flows, Project impacts to wastewater treatment capacity would be less than significant. Threshold e.: The Project's 0.23 tpd of solid waste would represent approximately 0.004% of the excess daily capacity at El Sobrante Landfill, approximately 0.01% of the excess daily capacity at the Badlands Landfill, and approximately 0.01% of the excess daily capacity at the Lamb Canyon Landfill. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for the El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill, it is anticipated that these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. Therefore, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, and would not otherwise impair the attainment of solid waste reduction goals, and impacts would be less than significant.	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Threshold e.: Regional solid waste facilities would have adequate capacity to handle solid waste generated by the Project's construction and operational phases. The Project would not 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. Accordingly, impacts would be less than significant.	Less-than-Significant Impact				
Threshold f.: With mandatory compliance to AB 939, AB 341, and RCDWR's programs and policies, the Project would not result in a significant impact due to noncompliance with regulations related to solid waste. A less-than-significant impact would occur.	Less-than-Significant Impact				
Threshold g.: Impacts associated with the construction or expansion of utility facilities would be less than significant or otherwise mitigated to the maximum feasible extent by this EIR. No additional mitigation would be required.	Less-than-Significant Impact				
4.21 Wildfire					
Threshold a.: The Project site and surrounding areas are not identified as evacuation routes, and the Project has no potential to conflict with the Riverside County LHMP. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and impacts would be less than significant.	Less-than-Significant Impact	Significant impacts would not occur; therefore, mitigation measures are not required.	N/A	N/A	N/A
Threshold b and e.: Implementation of the Project's proposed FMZs and alternative FMZs and radiant walls would ensure that the Project	Less-Than-Significant with Mitigation Incorporated				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
does not substantially exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Implementation of the FMZs and alternative FMZs and radiant walls also would ensure that the Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant impact of the proposed Project for which mitigation would be required. Implementation of Mitigation Measures MM 4.21-1 and MM 4.21-2 would ensure that FMZs, alternative FMZs, and radiant heat walls are incorporated into the design of the proposed development. Implementation of the Project's proposed FMZs and alternative FMZs and radiant walls would ensure that the Project does not substantially exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Implementation of the FMZs and alternative FMZs and radiant walls also would ensure that the Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Accordingly, with implementation of the required mitigation, Project impacts would be reduced to less-than-significant levels. Threshold c.: Impacts associated with Project implementation, including implementation of the recommended block wall/radiant heat walls	Less-than-Significant Impact				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
and FMZs, is evaluated within appropriate subject headings throughout this EIR, and in all cases impacts were determined to be less than significant, or would be reduced to less-than-significant levels with the implementation of mitigation measures. Accordingly, the Project would not include the installation or maintenance of infrastructure that may exacerbate fire risk, and the Project would not result in temporary or ongoing impacts to the environment beyond what is already evaluated and disclosed by this EIR. Impacts would be less than significant.					
Threshold d.: With implementation of the Project's FMZs and alternative FMZs and radiant heat walls, the proposed 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. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant impact of the proposed Project for which mitigation would be required. Implementation of Mitigation Measures MM 4.21-1 and MM 4.21-2 would ensure that FMZs, alternative FMZs, and radiant heat walls are incorporated into the design of the proposed development. With implementation of the Project's FMZs and alternative FMZs and radiant heat walls, the proposed 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, and	Less-Than-Significant with Mitigation Incorporated				

SUMMARY OF IMPACTS	SIGNIFICANCE DETERMINATION	MITIGATION MEASURES (MM)	RESPONSIBLE PARTIES	MONITORING PARTIES	IMPLEMENTATION STAGE
Project impacts would be reduced to less-than-significant levels.					

1.0 INTRODUCTION

1.1 PURPOSES OF CEQA AND LEGAL AUTHORITY FOR THIS EIR

This Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act ("CEQA"; Public Resources Code § 2100 et. Seq.), as amended, and the State CEQA Guidelines ("State CEQA Guidelines"; Title 14 California Code of Regulations § 15000 et. seq.), as amended. As stated by State CEQA Guidelines § 15002(a), the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed government actions (including the discretionary approval of land entitlement applications submitted by private parties);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if a project will be approved involving significant environmental effects.

The public agency with the principal responsibility for carrying out or approving a project or the first public agency to make a discretionary decision to proceed with a proposed project should ordinarily act as the "Lead Agency" pursuant to State CEQA Guidelines §§ 15050-15051. The County of Riverside is the Lead Agency for the proposed Project evaluated in this EIR.

Under CEQA, if a Lead Agency determines that there is substantial evidence in light of the whole record that a project may have a significant effect on the environment, the agency must prepare an Environmental Impact Report ("EIR"; State CEQA Guidelines § 15064(a)(1)). The purpose of an EIR is to inform public agency decision-makers and the public of the potentially significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project (State CEQA Guidelines § 15121(a)).

This EIR is an informational document that represents the independent judgment of the County of Riverside (as the Lead Agency) for use by the Riverside County decision-makers, responsible and trustee agencies, and members of the general public to evaluate the physical environmental effects that could result from constructing and operating the proposed Project. The County of Riverside has reviewed and, as necessary, directed revisions to all submitted drafts, technical studies, and reports supporting this EIR for consistency with County policies and requirements to ensure that this EIR reflects its own independent judgment. Governmental approvals requested from the County of Riverside by the Project Applicant include:

- Adoption by resolution of General Plan Amendment No. 240072 (GPA 240072)
- Adoption by ordinance of Change of Zone No. 2400026 (CZ 2400026)

- Adoption by resolution of Tentative Tract Map No. 38927 (TTM 38927);
- Adoption by resolution of Agricultural Preserve Diminishment No. 240006 ("APD 240006;" El Sobrante 1); and
- Certification of this EIR.

Other related discretionary and administrative actions that are required to construct and operate the Project described in this EIR are listed in Section 3.0, *Project Description*. This document complies with all criteria, standards, and procedures of CEQA §§ 21000 et seq. and State CEQA Guidelines §§ 15000 et seq.

As a first step in the CEQA compliance process, Riverside County determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by State CEQA Guidelines § 15161, is required. As stated in State CEQA Guidelines § 15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project" and "…examine all phases of the project including planning, construction, and operation." This EIR represents the independent judgment of Riverside County (as the Lead Agency) and evaluates the physical environmental effects that could result from constructing and operating the proposed Project. Acting as Lead Agency, Riverside County will consider the following issues regarding the proposed Project: a) evaluation of this EIR to determine if the physical environmental impacts are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures and the potential addition, modification to, or deletion of mitigation measures, standard conditions of approval, or Project design features; c) consideration of alternatives to the Project that would reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project's unavoidable and unmitigable significant effects on the environment.

Accordingly, and in conformance with State CEQA Guidelines § 15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project; (2) identify possible ways to minimize or avoid those significant effects; and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

Before taking action to approve the Project, the County of Riverside (serving as the Lead Agency) has the obligation to: (1) ensure this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision-making process; (3) make a statement that this EIR reflects Riverside County's independent judgment; (4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (State CEQA Guidelines §§ 15090-15093).

The roles and responsibilities of the County of Riverside Planning Commission and Board of Supervisors for Project-related approvals are as follows.

- **The Planning Commission**: The Planning Commission will recommend to the Board of Supervisors whether the Project's applications, which include GPA 240072, CZ 2400026, TTM 38927, and APD 240006 should be approved, modified, or denied, and will recommend to the Board of Supervisors whether to certify the Final EIR (FEIR) with or without modifications.

- **Board of Supervisors**: The Board of Supervisors will decide whether to approve, modify, or deny GPA 240072, CZ 2400026, TTM 38927, and APD 240006. Project-related approvals will be subject to a noticed public hearing held before the Board of Supervisors. Upon approval or conditional approval of the Project and certification of this EIR by the Board of Supervisors, the County would conduct additional discretionary and administrative level reviews as needed to implement the Project.

This EIR and all supporting technical appendices are available at the County of Riverside Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92501 during the County's regular business hours, or can be requested in electronic form by contacting the County Planning Department.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

The County of Riverside is the Lead Agency for the proposed Project, under whose authority this EIR has been prepared. For purposes of this EIR, the term "Project" refers to the Project's discretionary applications (GPA 240072, CZ 2400026, TTM 38927, and APD 240006) and the discretionary and ministerial actions required to implement the Project, as proposed, and all of the activities associated with Project implementation including planning, construction, and long-term operations.

In summary, the Project as evaluated herein consists of applications for a General Plan Amendment, Change of Zone, Tentative Tract Map, and an Agricultural Preserve Diminishment for a 111.6-acre property (herein, "Project site") located east of McAllister Street and north of El Sobrante Road in the Victora Grove community of the Lake Mathews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County. Collectively, approval of these discretionary actions would allow for the development of the Project site with 206 single-family detached residential units, one park, and open space. Specifically, the Project Applicant is requesting the following governmental approvals from the County of Riverside to implement the Project (refer to Chapter 3.0, *Project Description*, for a complete description of the Project's construction and operational characteristics):

- **General Plan Amendment No. 240072 (GPA 240072)** is proposed to reconfigure the Project site's existing land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)" to accommodate the residential lotting proposed as part of TTM 38927. Specifically, under existing conditions the RC-VLDR land use designation is clustered in the northeastern portions of the Project site, while the remaining portions of the site are designated for RC-LDR land uses. With approval of GPA 240072, the RC-VLDR land use designation would be reconfigured to extend along the eastern boundary of the Project site. The total acreage of the RC-VLDR and RC-LDR land use designations on site would remain unchanged at 6.7

acres and 104.9 acres, respectively; thus, approval of GPA 240072 would not allow for an increase in residential density on site as beyond what already is allowed on site under existing conditions.

- **Change of Zone No. 2400026 (CZ 2400026)** is proposed to change the Project site's existing zoning classification from "Light Agricultural, 10-Acre Minimum Lot Size (A-1-10)" to "One-Family Dwelling Zone, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)." Approval of CZ 2400026 would allow for residential development on site on minimum 10,000 square-foot (s.f.) lots, consistent with the site's adopted General Plan land use designations of RC-VLDR and RC-LDR.

- **Tentative Tract Map No. 38927 (TTM 38927)** is proposed to subdivide the 111.6-acre Project site to accommodate a total of 206 residential lots on approximately 57.8 acres; two detention basins on 3.3 acres; one park on approximately 1.9 acres; 25 lots for manufactured slopes on approximately 10.4 acres; 8 undisturbed open space lots on approximately 14.7 acres; and 17 lots for on-site public roadways on approximately 23.6 acres. Proposed residential lots would include a mixture of lot sizes ranging in size from 10,007 s.f. to 25,765 s.f. Access to the Project site would be accommodated via a proposed on-site roadway, Street A. Street A would connect to Travertine Road near the Project's northeastern boundary, would extend southerly through the western portions of the Project site, and would connect to a roadway proposed along the southern Project boundary as part of the adjacent Tentative Tract Map 38605 that would provide a connection to El Sobrante Road to the south.

- **Agricultural Preserve Diminishment No. 240006 (APD 240006)** is proposed to authorize the diminishment of El Sobrante Agricultural Preserve No. 1, Map No. 18 to remove the 111.6-acre property from El Sobrante Agricultural Preserve No. 1. A Notice of Non-Renewal previously was filed for the property, and the property is no longer subject to a Williamson Act Contract; thus, APD 240006 only would remove the property from Agricultural Preserve No. 1, Map No. 18.

1.3 CEQA Process Overview

CEQA (Public Resources Code, §§ 21000- 21177) requires that all public agencies within the State of California, having land use approval over project activities that have the potential to affect the quality of the environment, shall regulate such activities so that impacts to the environment can be prevented to the extent feasible. Such activity is reviewed and monitored through the CEQA process, as provided in the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387). CEQA distinguishes varied levels of documentation and public review based on a project's anticipated level of effect on the environment.

When it is determined through preliminary review that a project may likely have one or more significant effects upon the environment, then an Environmental Impact Report (EIR) must be prepared. The "scope" of the EIR may be determined through preparation of an Initial Study and a public scoping process. The EIR should consider both the potential project-specific (direct and indirect) and cumulative environmental impacts that could result from the implementation of the proposed project.

Pursuant to State CEQA Guidelines § 15121, the EIR is primarily an informational document intended to inform the public agency decision-makers and the general public of the potentially significant effects of a proposed project. The EIR should disclose all known potentially significant impacts; identify feasible means to minimize or mitigate those effects; and consider a number of feasible alternatives to the project that might further reduce significant impacts while still attaining the project objectives. The decision-makers must consider the information in an EIR before taking action on the proposed project. The EIR may constitute substantial evidence in the record to support the agency's action on the project.

The EIR is prepared by or under the direction of the Lead Agency, which for the proposed Project is the County of Riverside. The County of Riverside is the public agency that has the primary responsibility for approving or carrying out the Project. Further, Responsible and Trustee Agencies, which are public agencies that have a level of discretionary approval over some component of the proposed Project, may rely upon the EIR prepared by the County of Riverside.

An EIR is prepared in two key stages. First, a Draft EIR is prepared and distributed for public and agency review. Once comments on the Draft EIR are received, responses to those comments and any additional relevant project information are prepared and compiled in a Final EIR. Both of these documents (i.e., the Draft EIR and the Final EIR), along with any related technical appendices and reference sources, represent the complete record of the EIR. Throughout this document, the terms Final EIR or Draft EIR may be used interchangeably since both are part of the ultimate EIR record; however, "Draft EIR" may be used specifically when referring to information provided in the volume made available for the CEQA-required 45-day public review period.

In accordance with State CEQA Guidelines § 15087, this Draft EIR will be made available for review by the public and public agencies for a minimum period of 45 days to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (State CEQA Guidelines § 152049(a)). Responses to written comments received during the public review period will be included in the Final EIR. During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project's administrative record, will be considered by Riverside County decision-makers. If the Final EIR is certified and the Project approved, Riverside County and other public agencies with permitting authority over all, or portions, of the Project would be able to rely on the Final EIR as part of their permitting processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits.

1.4 EIR Scope, Format, and Content

1.4.1 EIR Scope

Pursuant to the procedural requirements of CEQA, on May 20, 2024, the County filed a Notice of Preparation (NOP) with the California Office of Planning and Research ("OPR") State Clearinghouse and the Riverside County Clerk to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP also was distributed to surrounding property owners, responsible and trustee agencies,

and other interested parties for a 30-day public review period that commenced on May 20, 2024 and concluded on June 19, 2024. The NOP was distributed for public review to solicit responses to help the County identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. Comments on the NOP were received from the following agencies and individuals:

- Native American Heritage Commission (NAHC);
- Riverside County Department of Waste Resources (RCDWR); and
- Endangered Habitats League (EHL).

In addition, a publicly-noticed EIR Scoping Meeting was held at the Riverside County Administrative Center, 12th Floor Conference Room A, located at 4080 Lemon Street, Riverside, California, 92501 on June 3, 2024, which provided members of the general public an additional opportunity to comment on the scope of environmental issues to be addressed in this EIR, although no comments on the scope of the Project's EIR were provided by the public during the Scoping Meeting.

An Initial Study was not prepared for the proposed Project because the County determined that an EIR was clearly required. As such, this EIR evaluates all of the environmental topics identified in Appendix G to the State CEQA Guidelines and in the County's standard Environmental Assessment Checklist form. Based on Appendix G and the County's Environmental Assessment Checklist form, and in consideration of all comments received by Riverside County on the NOP and during the EIR Scoping Meeting, Section 4.0 of this EIR evaluates the Project's potential to cause adverse effects to the following environmental issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Paleontological Resources
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire

The Project's potential to result in growth-inducing impacts are discussed in Section 5.0, *Other CEQA Considerations*, of this EIR. The NOP, public review distribution list, and written comments received by the County during the NOP public review period are provided in *Technical Appendix A* to this EIR. Please refer to Table 1-1, *Summary of NOP Comments*, for summarized comments received during NOP public review period.

Table 1-1 Summary of NOP Comments

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
Native American Heritage Commission (NAHC)	May 22, 2024	• Recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project • Notes AB 52 requirements, SB 18 provisions, and recommendations for the preparation of cultural resource assessments.	4.5, *Cultural Resources;* 4.19, *Tribal Cultural Resources*
Riverside County Department of Waste Resources (RCDWR)	June 10, 2024	• Recommends that the EIR consider quantitatively analyzing the Project's potential to exceed the local landfills' daily permitted capacity • Informs of El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill locations and disposal capacity • Informs of the requirement to comply with AB 75 • Recommends measures to help reduce the Project's anticipated solid waste impacts	4.20, *Utilities and Service Systems*
Endangered Habitats League (EHL), c/o Dan Silver	May 17, 2024	• Requests that the County include the EHL on all mailing and distribution lists for this project, including CEQA documents and public hearings • Requests a full analysis of the Project's potential biological impacts, including impacts due to a potential conflict with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)	4.4, *Biological Resources*

1.4.2 Use of This EIR

This EIR will be made available for review by the public and public agencies for a minimum period of 45 days to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (State CEQA Guidelines § 152049(a)). During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project's administrative record, will be considered by Riverside County decision-makers. If the Final EIR is certified and the Project approved, Riverside County and other public agencies with permitting authority over all, or portions, of the Project will be able to use the Final EIR as part of their permitting processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits.

1.4.3 Content and Organization of This EIR

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, Section 21000 et. seq. and California Code of Regulations, Title 14, Chapter 5). This EIR is organized in the following manner:

- **Section S.0, Executive Summary**, provides an overview of the EIR document and CEQA process. The Project, including its objectives, is described, and the location and regional setting of the Project site is documented. In addition, the Executive Summary discloses potential areas of controversy related to the Project, including those issues identified by other agencies and the public, and identifies potential alternatives to the proposed Project that would reduce or avoid significant impacts, as required by CEQA. Finally, the Executive Summary provides a summary of the Project's impacts, mitigation measures, and conclusions, in a table that forms the basis of the EIR's Mitigation Monitoring and Reporting Program.

- **Section 1.0, Introduction**, provides introductory information about the CEQA process and the responsibilities of the County of Riverside, serving as the Lead Agency for this EIR; a brief description of the Project; the purpose of this EIR; applications proposed by the Project Applicant that would require discretionary County approvals; permits and approvals required by other agencies; and an overview of the EIR format.

- **Section 2.0, Environmental Setting**, describes the environmental setting, including an overview of the regional and local setting, as well as descriptions of the Project site's physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR's NOP was released for public review on May 20, 2024. The setting discussion also addresses the relevant regional planning documents that apply to the Project site and vicinity.

- **Section 3.0, Project Description**, serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to State CEQA Guidelines § 15123. This Section provides a detailed description of the Project, including its purpose and main objectives; design features; landscaping; site drainage; utilities; grading and construction characteristics; and operational characteristics expected over the Project's lifetime. In addition, the discretionary actions required of the County of Riverside and other government agencies to implement the Project are discussed.

- **Section 4.0, Environmental Analysis**, provides an analysis of the potential direct, indirect, and cumulative impacts that may occur from implementing the proposed Project. The topics analyzed in this section include the topics summarized above under Section 1.4.1. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. The State CEQA Guidelines also describe the terms "effects" and "impacts" as being synonymous (State CEQA Guidelines § 15358).

In the environmental analysis subsections of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementing the proposed Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the proposed Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in State CEQA Guidelines § 15355 as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

The analyses in Section 4.0 are based in part upon technical reports that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and are cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be "roughly proportional" to the impacts of the Project. The discussion then indicates whether the identified mitigation measures would reduce impacts to below a level of significance. In most cases, implementation of the mitigation measures would reduce the adverse environmental impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations (SOC) would need to be adopted by the County of Riverside pursuant to State CEQA Guidelines § 15093.

- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the proposed Project.

- **Section 6.0, Project Alternatives**, describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of three alternatives is presented in Section 6.0.

- **Section 7.0, References**, cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted during preparation of this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference in locating the CEQA-required sections within this document.

Table 1-2 Location of CEQA Required Topics

CEQA Required Topic	State CEQA Guidelines Reference	Location in this EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§ 15126.2(b)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Impacts Which Would be Involved in the Proposed Action Should it be Implemented	§ 15126.2(c)	Subsection 5.2
Growth-Inducing Impacts of the Proposed Project	§ 15126.2(d)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Subsection 5.4
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Energy Conservation	Appendices F and G	Subsection 4.6

1.4.4 Incorporation by Reference

State CEQA Guidelines § 15147 states that the "information contained in an EIR shall include summarized… information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided." State CEQA Guidelines § 15150 allows for the incorporation "by reference all or portions of another document… [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the Riverside County Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92502, during the County's regular business hours or can be requested in electronic form by contacting the County's Planning Department. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

A. Notice of Preparation (NOP) and Written Comments on the NOP
B. Air Quality Impact Analysis
C1. Biological Resources Tech Report
C2. Determination of Biologically Equivalent or Superior Preservation
C3. Aquatic Resources Delineation Report
D. Cultural Resources Assessment Update
E. Energy Analysis
F. Geotechnical Due Diligence Evaluation
G. Greenhouse Gas Analysis
H. Phase I Environmental Site Assessment
I1. Hydrology Study
I2. Water Quality Management Plan
I3. HEC-RAS Analysis
J. General Plan Consistency Analysis
K. Noise
L. Paleontological Assessment
M1. VMT Assessment
M2. Traffic Analysis
N. Written Correspondence

Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed by the public. All references relied upon by this EIR are included as part of Riverside County's Administrative Record pertaining to the proposed Project.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code (§ 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also State CEQA Guidelines § 15082 and § 15086(a)). As defined by State CEQA Guidelines § 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A Trustee Agency is defined in State CEQA Guidelines § 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California." The Project would require approval by the following agencies:

- **Santa Ana Regional Water Quality Control Board (RWQCB)** is a Trustee Agency responsible for issuance of a Construction Activity General Construction Permit and National Pollutant Discharge Elimination System (NPDES) Permit to ensure that on-site water flows do not result in siltation, other erosional effects, or degradation of surface or subsurface water quality. The Santa Ana RWQCB also

would be responsible for issuing Waste Discharge Requirements (WDRs) for Project impacts to Santa Ana RWQCB jurisdictional areas pursuant to Section 401 of the Clean Water Act (CWA).

- **California Department of Fish and Wildlife (CDFW)** is a Trustee Agency responsible for issuance of a Section 1602 Streambed Alteration Agreement (SAA).

- **Riverside County Flood Control and Water Conservation District (RCFCWCD)** is a Responsible Agency and would be responsible for approving the Project's drainage infrastructure.

- **Western Municipal Water District (WMWD)** is a Responsible Agency that would review and approve proposed water and sewer connections.

- **Southern California Edison (SCE)** is a Responsible Agency for approval of electrical system connections.

- **Western Riverside County Regional Conservation Authority (RCA)** is a Responsible Agency for approval of the Project's Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

1.6 Areas of Controversy

Substantive issues raised in response to the NOP were previously summarized in Table 1-1. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and the general public during the NOP review period. The table is not intended to list every comment received by the County during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP are addressed in this EIR. Based on comments received during the NOP review period, concerns were raised regarding potential impacts to cultural and tribal cultural resources; biological resources; and potential impacts due to solid waste. There were no issues raised during the Scoping Meeting that was held on June 3, 2024. No other areas of controversy were identified as part of the NOP process, beyond comments regarding the Project's potential environmental effects as described above.

1.7 Issues To Be Resolved By The Decision-Making Body

The primary issues to be resolved by the decision-making body for the proposed Project involve the Project's significant and unavoidable impact under the issue area of Transportation due to the Project's level of Vehicle Miles Traveled (VMT) per capita, which is addressed in EIR Subsections 4.18. The Riverside County Board of Supervisors will need to evaluate whether the mitigation measures proposed to reduce the Project's unavoidable impact adequately reduce the Project's VMT impact to the maximum feasible extent. The Board of Supervisors also will make a determination as to whether the Project's benefits outweigh this adverse environmental effect in support of adopting a Statement of Overriding Consideration's pursuant to State CEQA Guidelines § 15093. Finally, the Board of Supervisors will decide whether to approve one of the Project alternatives in lieu of the proposed Project, if it is determined that one of the alternatives is feasible and its

approval would serve to substantially reduce or avoid the Project's significant unavoidable environmental impact due to VMT.

2.0 ENVIRONMENTAL SETTING

This Section 2.0 is provided pursuant to State CEQA Guidelines § 15125(a), and includes a description of the physical environmental conditions in the vicinity of the Project site and its off-site improvement areas from both a local and regional perspective as it existed at the time the Notice of Preparation (NOP) was published for this EIR, which occurred on May 20, 2024. This Section provides a brief overview of resources on and surrounding the Project site; additional detail regarding existing conditions for individual issue areas (e.g., biology, geology, etc.) is provided within the appropriate subsection headings within Section 4.0, *Environmental Analysis*, of this EIR.

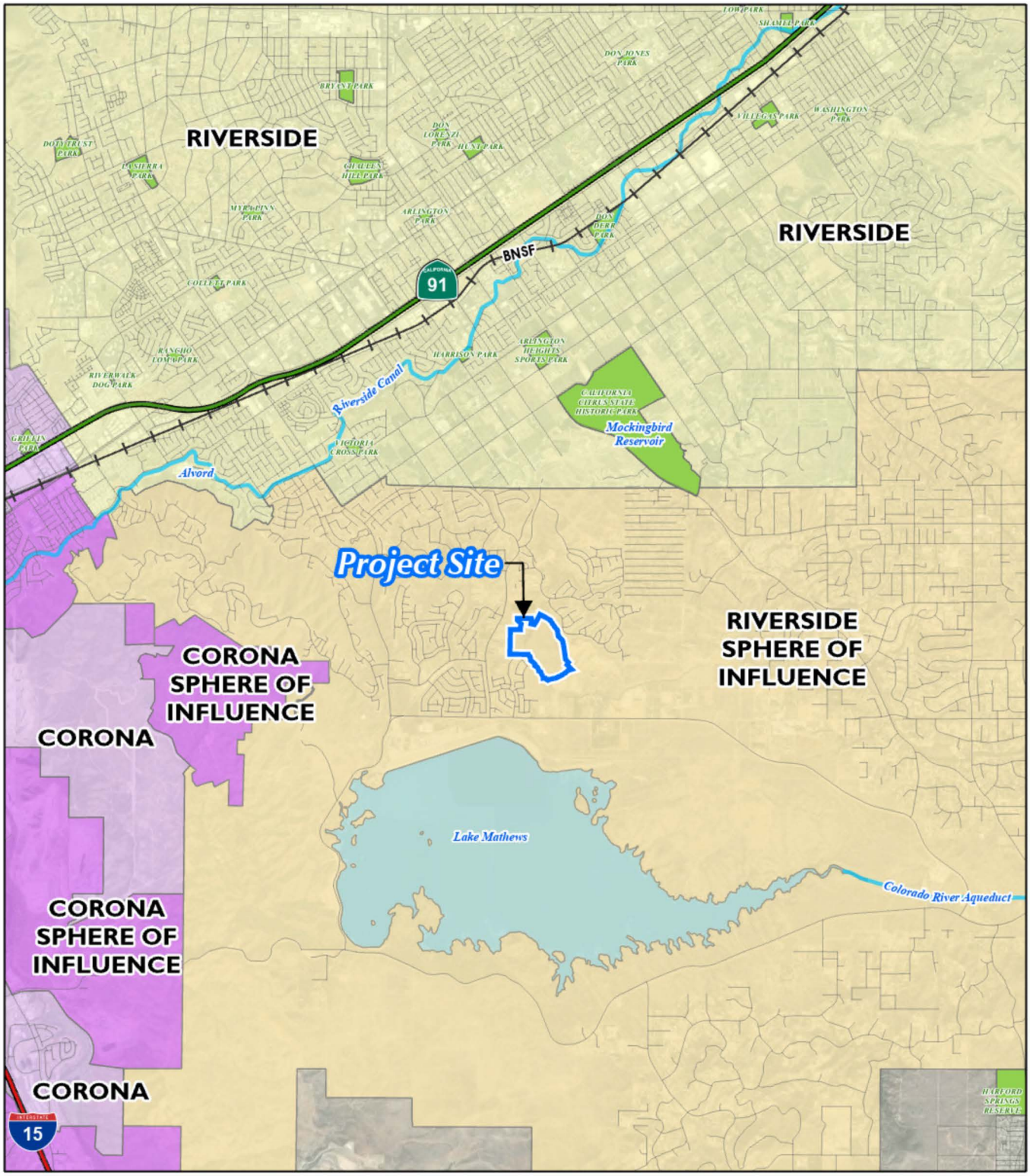
2.1 REGIONAL SETTING AND LOCATION

The 111.6-acre Project site is located within unincorporated western Riverside County, California. Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity. As shown, Riverside County abuts San Bernardino County to the north; Orange County to the west; and San Diego and Imperial Counties to the south. Riverside County is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square-mile region comprising western San Bernardino County, western Riverside County, and the eastern reaches of Los Angeles County. The Southern California Association of Governments (SCAG) estimates that Riverside County as a whole had a population in 2020 of 2,418,000. SCAG estimates that the population will increase to 2,992,000 million by 2050. (SCAG, 2024b, Table 12)

2.2 LOCAL SETTING AND LOCATION

The Project site is located within the western region of unincorporated Riverside County, California. As depicted in Figure 2-2, *Vicinity Map*, the Project site is within the Victoria Grove community of the Lake Matthews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County, and is located within the Sphere of Influence (SOI) of the City of Riverside. The City of Riverside boundary is located approximately 1.1-mile north of the Project site. The Project site is located 0.3-mile north of El Sobrante Road, 0.1-mile east of McAllister Street, approximately 2.7 miles southeast of State Route (SR) 91, approximately 5.8 miles east of Interstate 15 (I-15), and approximately 9.3 miles west of Interstate 215 (I-215). From a local perspective, and as depicted on Figure 2-2, the 111.6-acre Project site is located north of El Sobrante Road, east of McAllister Street, and west/southwest of Travertine Drive. The Project site encompasses Assessor Parcel Numbers (APNs) 270-060-005, 270-060-009, 270-060-016, 270-070-001, 270-070-002, and 270-160-004. The Project site is located in Section 32, Township 3 South, Range 5 West, San Bernardino Baseline and Meridian. (Google Earth, 2024; RCIT, n.d.)

As shown on Figure 2-3, *Aerial Photograph*, under existing conditions the Project site consists of undeveloped lands that are routinely disced for fire abatement purposes. Historically, the Project site was used for agricultural uses (orchards), although agricultural activities on site ceased in the mid-1990s and the orchards were cleared from the site in approximately 2005 and 2006. (McAlister GeoScience, 2024, p. 1) Two large drainages occur on or abutting the Project site, including one large drainage that traverses the northwestern

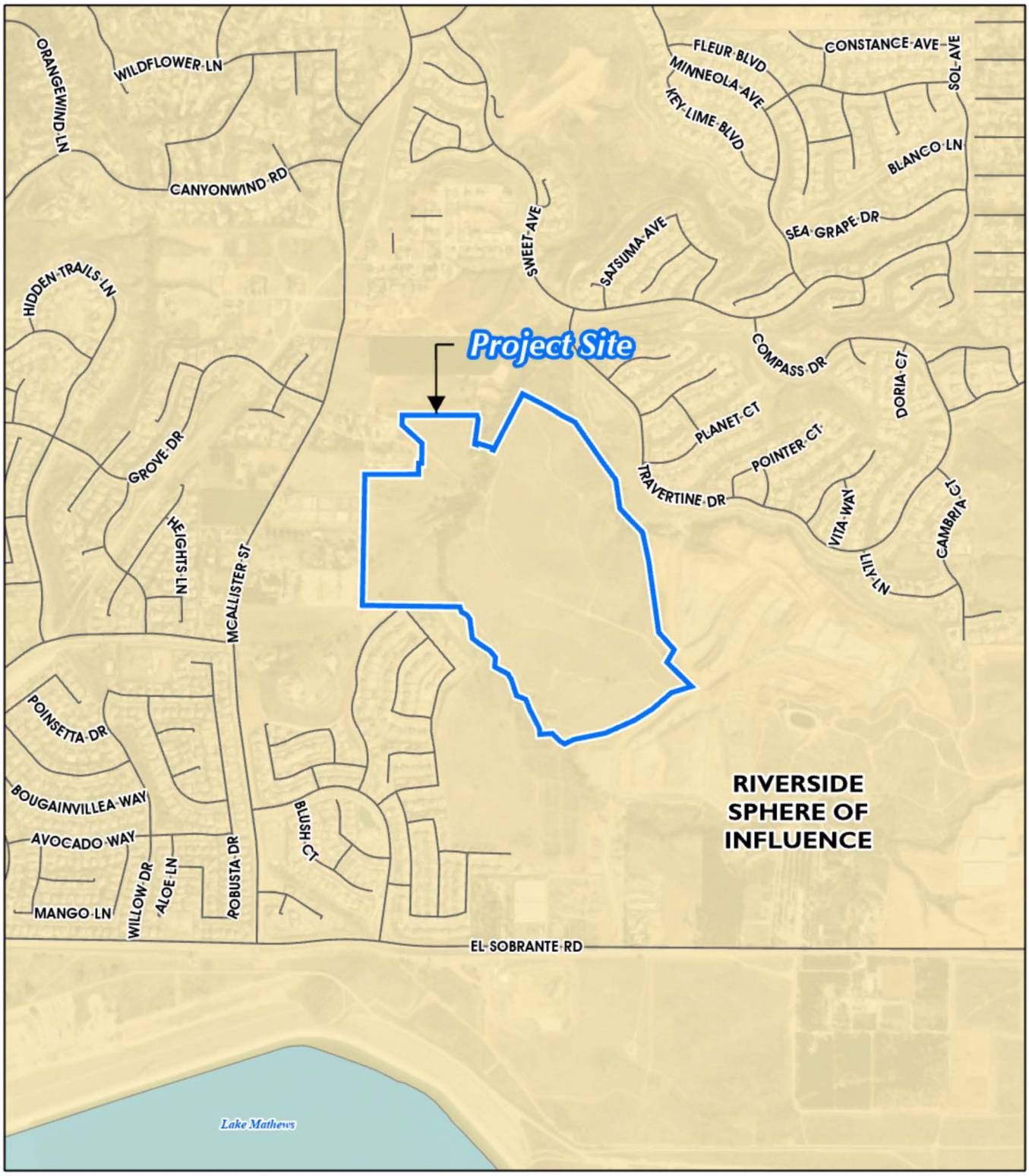


Source(s): ESRI, NearMap Imagery (May 2024), RCIT (2024)

Figure 2-1

0 0.375 0.75 1.5 Miles

Regional Map



Source(s): ESRI, NearMap Imagery (May 2024), RCIT (2024)

0 375 750 1,500
Feet

Figure 2-2

Vicinity Map



Source(s): ESRI, Nearmap Imagery (October 2025)

Figure 2-3

Aerial Photograph

portion of the Project site and along the site's southwestern boundary, and an additional drainage occurring along the eastern boundary of the site. As also shown, several dirt roads currently occur throughout the property.

2.3 SURROUNDING LAND USES AND DEVELOPMENT

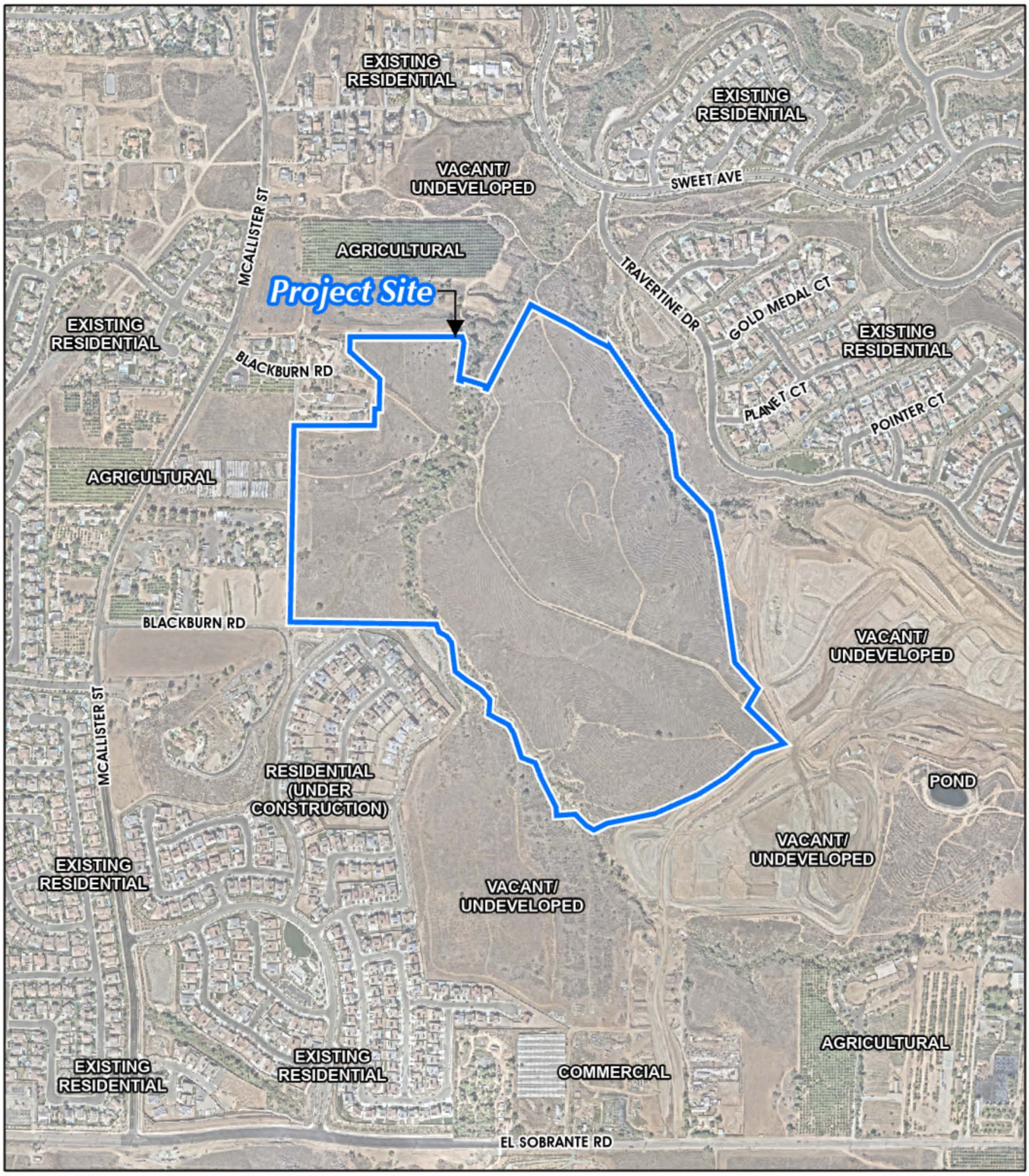
Land uses in the immediate vicinity of the Project site are illustrated on Figure 2-4, *Surrounding Land Uses and Development*. As shown, to the north of the Project site are undeveloped vacant lands, open space, and agricultural uses, beyond which are rural residential uses. To the northeast of the Project site is an existing medium-density single-family residential community. To the southeast of the Project site are undeveloped vacant land, a freshwater pond, and agricultural uses. To the south of the Project site are undeveloped vacant land and agricultural uses, with large-lot single-family homes and commercial businesses along El Sobrante Road. Lake Mathews also occurs approximately 0.6-mile southwest of the Project site and to the south of El Sobrante Road. Land uses to the west and southwest of the Project site include a medium-density residential tract that is currently under construction and several existing large-lot rural residential uses, with medium-density and rural residential uses and agricultural uses occurring to the west of McCallister Street.

2.4 LOCAL PLANNING CONTEXT

State CEQA Guidelines § 15125(d) requires that EIRs identify the general plans and regional plans that are applicable to the project under evaluation, and recognize potential inconsistencies. Plans that are applicable to the Project evaluated herein are summarized below, with additional information provided in the applicable resource discussions in Section 4.0, *Environmental Analysis*.

2.4.1 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (RTP/SCS)

SCAG is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. In April 2024, SCAG's Regional Council adopted the *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* ("Connect SoCal"). Connect SoCal is the applicable Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the Project. Connect SoCal embodies a collective vision for the region's future, prepared with input by local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses, and stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. Connect SoCal plans for a large number of transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six CTCs and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices. The goals of Connect SoCal are to: 1) build and maintain an integrated multimodal transportation network; 2) develop, connect and sustain communities that are livable and thriving; 3) create a healthy region for the people of today and tomorrow; and 4) support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents. (SCAG, 2024a)



Source(s): ESRI, Nearmap Imagery (October 2025)

Figure 2-4

0 250 500 1,000 Feet

Surrounding Land Uses and Development

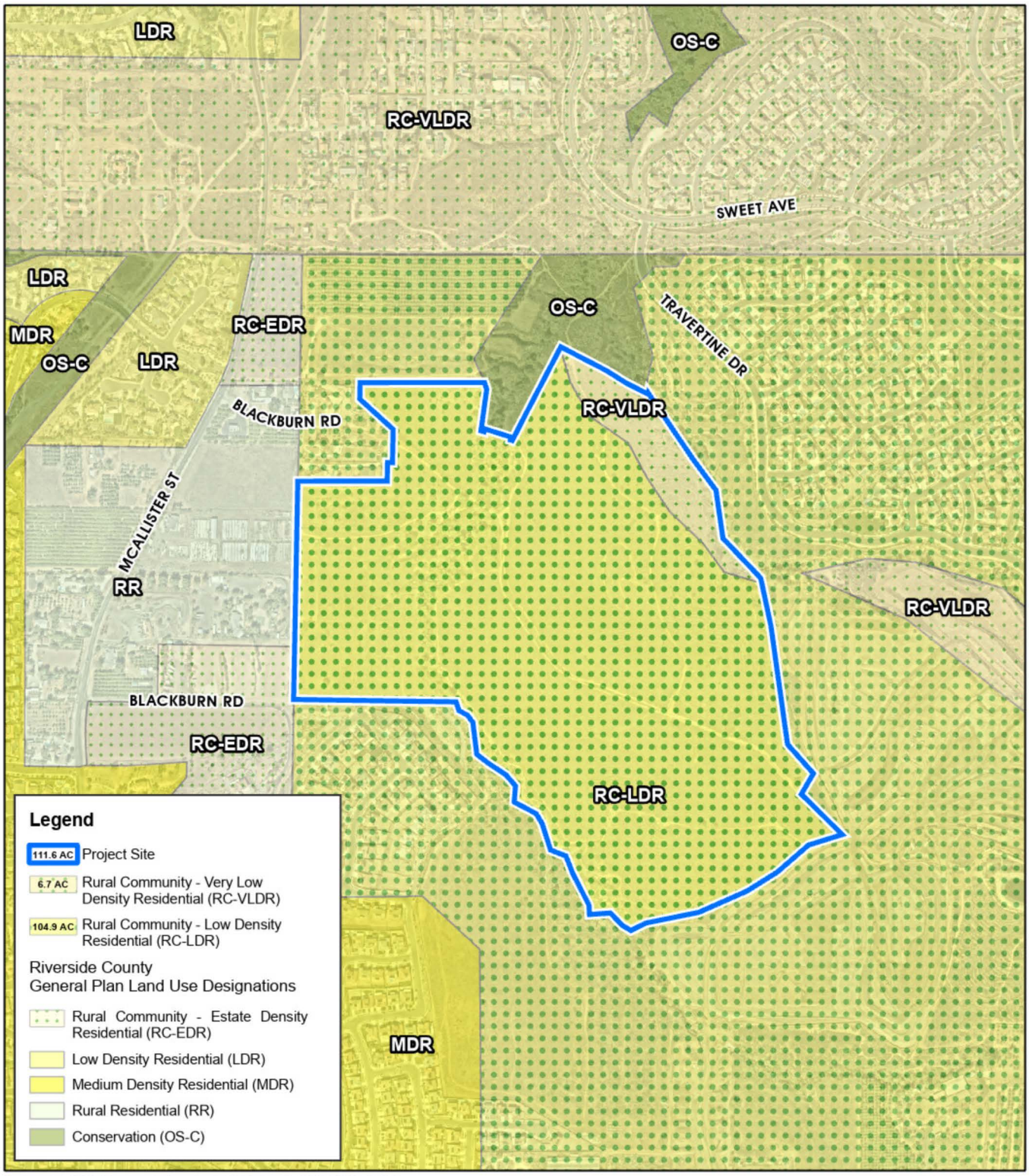
2.4.2 South Coast Air Quality Management District Air Quality Management Plan (AQMP)

The Project site is the South Coast Air Basin (SCAB), which is managed by the South Coast Air Quality Management District (SCAQMD). The SCAB includes parts of San Bernardino, Los Angeles, and Riverside counties and all of Orange County. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. Currently, the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are exceeded in most parts of the SCAB. In response, and in conformance with California Health & Safety Code § 40702 et seq. and the California Clean Air Act, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the State and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. Each version of the plan is an update of the previous plan and has a 20-year horizon with a revised baseline. In December 2022, the SCAQMD released the Final 2022 AQMP (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, State, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal Clean Air Act (CAA) requirements[1]. The 2022 AQMP is based on assumptions provided by the EMission FACtor model (EMFAC) developed by the California Air Resources Board (CARB) for motor vehicle information and assumptions provided by SCAG for demographics. The air quality levels projected in the 2022 AQMP are based on the assumption that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2020 RTP/SCS. The 2022 AQMP also assumes that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development. (SCAQMD, 2022)

2.4.3 Riverside County General Plan and Lake Matthews/Woodcrest Area Plan (LMWAP)

The prevailing planning document for the Project site and its surrounding area is the Riverside County General Plan. The Project site is located within the Lake Mathews/Woodcrest Area Plan (LMWAP) portion of the Riverside County General Plan. As depicted on Figure 2-5, *Existing General Plan Land Use Designations*, the County's General Plan and LMWAP designate the 111.6-acre Project site for "Rural Community – Very Low Density Residential (RC-VLDR)" land uses on 6.7 acres and "Rural Community – Low Density Residential (RC-LDR)" land uses on 104.9 acres. The RC-VLDR land use designation is intended to allow for single-family detached residences on large parcels of 1 to 2 acres, while limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. The RC-LDR land use designation is intended to allow for

[1] Although the SCAG has since adopted the 2024-2050 RTP/SCS, the 2022 AQMP relied on information from the 2020-2045 RTP/SCS, which was the current version of the RTP/SCS at the time the 2022 AQMP was adopted.



Source(s): ESRI, Nearmap Imagery (October 2025). RCIT (2024)

Figure 2-5

0 225 450 900 Feet

Existing General Plan Land Use Designations

single-family detached residences on large parcels of 0.5 to 1 acre, while limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. (Riverside County, 2021b, Figure 3 and Table 1)

2.4.4 City of Riverside General Plan

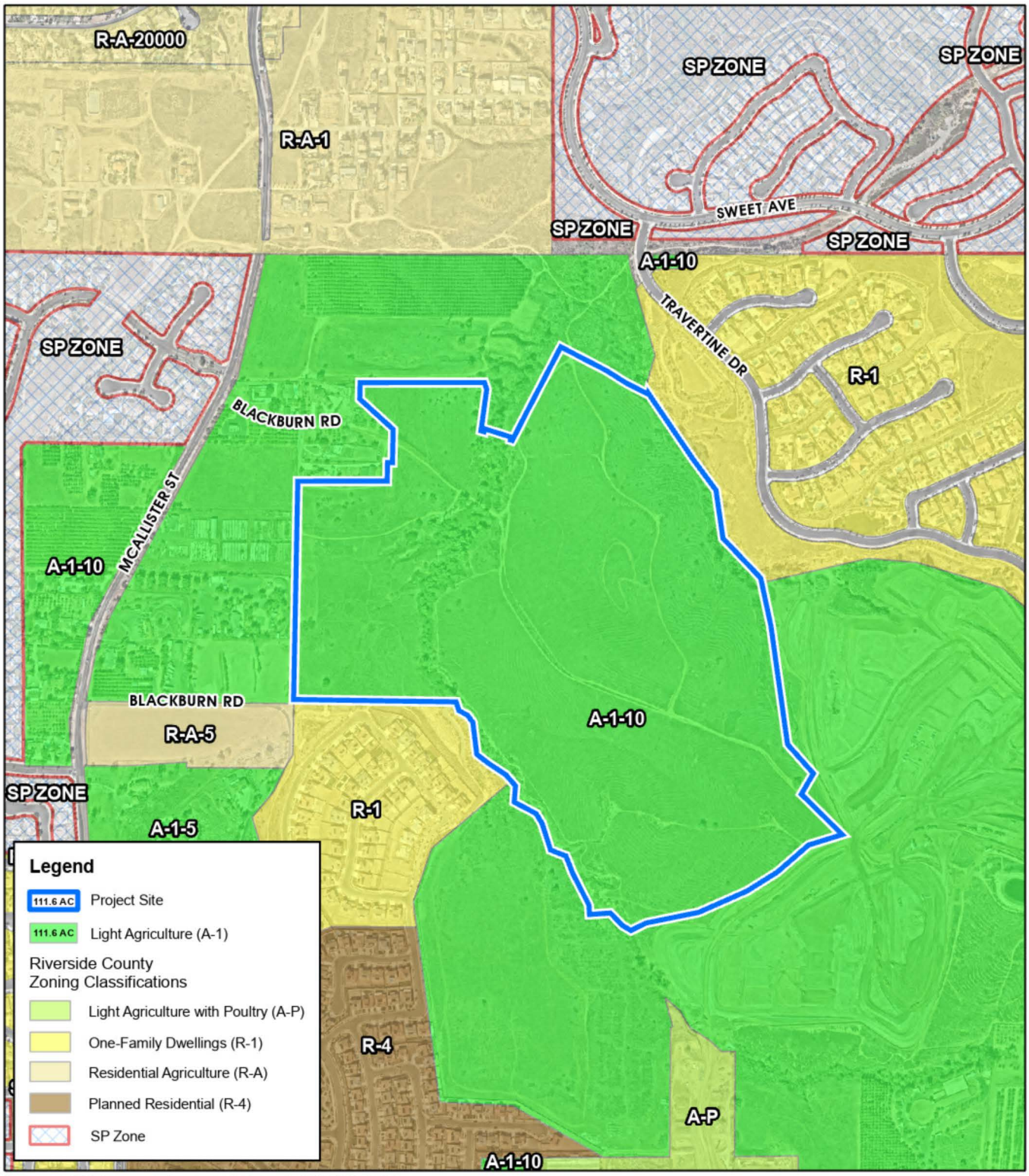
The City of Riverside General Plan was last amended in August 2019. The plan provides a foundation for City policies and actions and guides both the physical development of the City and the provision of public infrastructure and services. The Project is located within the City of Riverside's Sphere of Influence (SOI). The County of Riverside is currently responsible for the administration of land use decisions within the SOI. The City of Riverside assigns a pre-zoning designation for the areas within the SOI, and the City of Riverside General Plan pre-zones the Project site for "A – Agricultural," which is intended to provide for the managed production of natural resources and agricultural land and to encourage continued agricultural production during the General Plan planning period. Incidental residential uses also are permitted at a maximum density of 0.2 dwelling units per acre. (City of Riverside, 2019, Figure LU-10 and Table LU-3)

2.4.5 Zoning

The Riverside County Land Use Ordinance (Ordinance No. 348) is intended to implement the Riverside County General Plan's land use plan. As shown on Figure 2-6, *Existing Zoning Classifications*, the Project site is zoned "Light Agriculture, 10-Acre Minimum Lot Size (A-1-10)." The A-1-10 zoning classification allows for single-family dwellings on minimum 10-acre lot sizes, and also allows for a range of agricultural and equestrian uses. (RCIT, n.d.; Riverside County, 2023)

2.4.6 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), a regional Habitat Conservation Plan (HCP), was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and participating entities. The intent of the Western Riverside County MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP identifies Criteria Cells and Cell Groups, in which habitat conservation efforts are targeted. The Project site is not located within or adjacent to any MSHCP Criteria Cells or Cell Groups, indicating that the Project site is not targeted for conservation under the MSHCP. The nearest lands located within an MSHCP Criteria Cell or Cell Group occurs approximately 1.2 miles southwest of the Project site. Although the Project site is not targeted for conservation by the MSHCP, the MSHCP also identifies a number of additional survey and conservation requirements. The Project site is not located within an MSHCP Survey area for amphibians, mammals, or invertebrates (including the Delhi Sands flower-loving fly survey area), although the Project site occurs within an MSHCP burrowing owl survey area. The Project site is not located within a Narrow Endemic Plant Species Survey Area (NEPSSA) or a Criteria Species Survey Area (CASSA). (RCA, n.d.) Refer to EIR Subsection 4.4, *Biological Resources*, for a complete description of applicable MSHCP requirements and the Project's consistency with the MSHCP.



Source(s): ESRI, Nearmap Imagery (October 2025). RCIT (2024)

0 225 450 900 Feet

Figure 2-6

Existing Zoning Classifications

2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to State CEQA Guidelines § 15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was released for public review. The NOP for this EIR was released for public review on May 20, 2024. The following subsections provide a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. The site's current physical conditions and surrounding areas previously were depicted on Figure 2-3. More detailed information regarding the Project's site's environmental setting as it relates to a specific environmental issue area is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 LAND USE

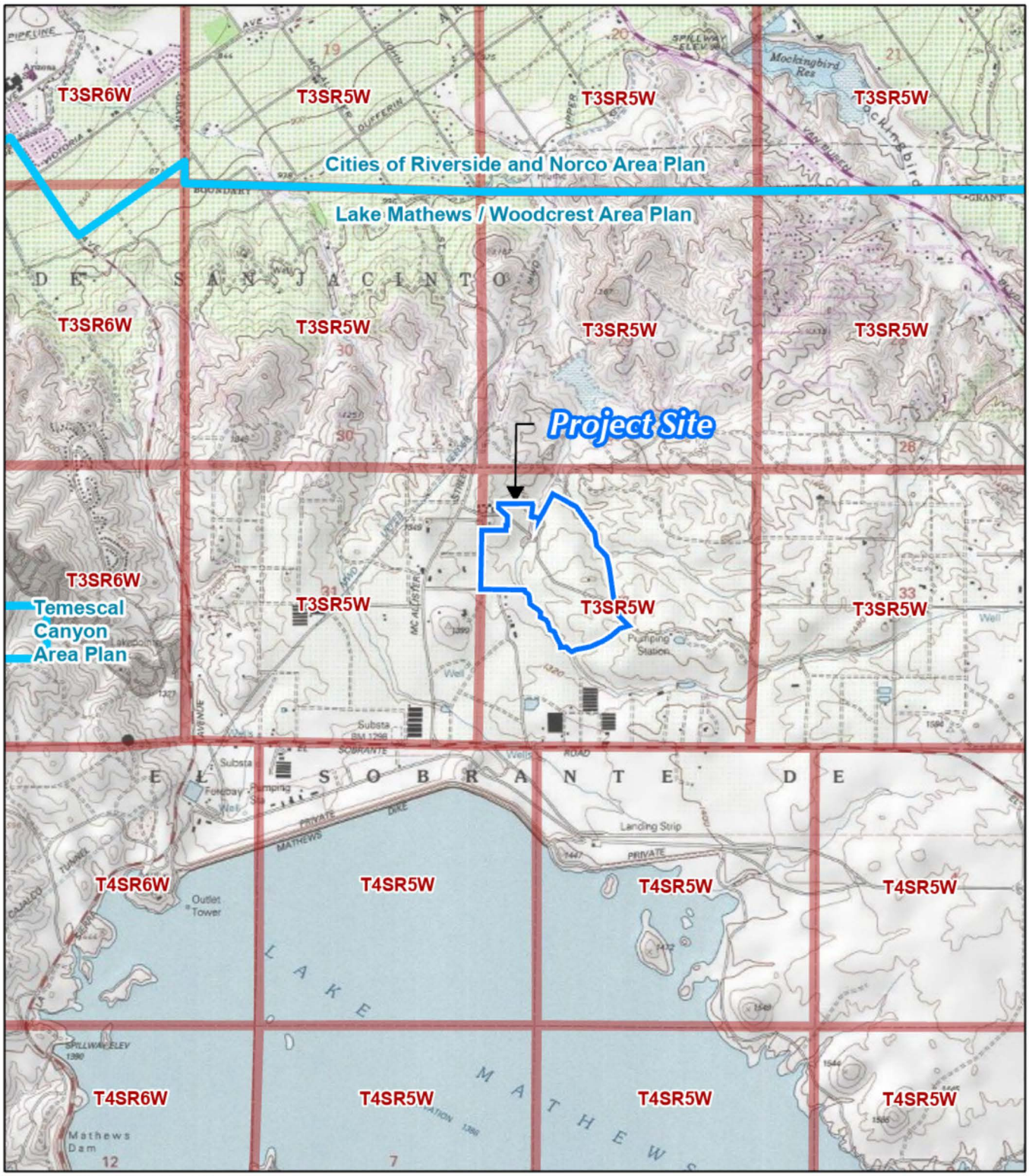
The existing land use condition of the Project areas is shown on Figure 2-5. As shown, under existing conditions, the Project site consists of undeveloped lands that are routinely disced for fire abatement purposes. Historically, the Project site was used for agricultural uses (orchards), although agricultural activities on site ceased in the mid-1990s and the orchards were cleared from the site in approximately 2005 and 2006. (McAlister GeoScience, 2024, p. 1) Two large drainages occur on or abutting the Project site, including one large drainage that traverses the northwestern portion of the Project site and along the site's southwestern boundary, and an additional drainage occurring along the eastern boundary of the site. As also shown, several dirt roads currently occur throughout the property.

2.5.2 SITE TOPOGRAPHY

As shown on Figure 2-7, *USGS Topographic Map*, the Project site consists of a relatively flat property that is bisected by an existing stream. Lands to the east and west of the existing stream generally slope downward in elevation towards the stream, with the northeastern portions of the Project site draining to a separate drainage that traverses along the northeastern boundary of the Project site. Elevations range from approximately 1,180 feet above meal sea level (amsl) near the north central portion of the Project site to 1,348 feet amsl near the southeast corner of the Project site. (Google Earth, 2024)

2.5.3 AIR QUALITY AND CLIMATE

The Project site is located in the SCAB within the jurisdiction of SCAQMD. The SCAB encompasses a 6,745-square-mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west, the San Gabriel, San Bernardino, the San Jacinto Mountains to the north and east, and San Diego County to the south. The SCAB is within the jurisdiction of the SCAQMD, the agency charged with bringing air quality in the SCAB into conformity with federal and State air quality standards. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and State air quality standards. (Urban Crossroads, 2024a, p. 9)



Source(s): ESRI, USGS (2013), RCIT (2024)

Figure 2-7

0 875 1,750 3,500 Feet

USGS Topographic Map

As documented in the Project's Air Quality Impact Analysis (*Technical Appendix B* to this EIR), although the climate of the SCAB is characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. More than 90% of the SCAB's rainfall occurs from November through April. Temperatures during the year range from an average minimum of 36°F in January to over 100°F maximum in the summer. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Ana[s]" each year. (Urban Crossroads, 2024a, p. 9)

2.5.4 Agriculture and Forestry Resources

Under existing conditions, the Project site is not being actively used for agriculture, but was used for agriculture (orchards) in the past. Agricultural activities on site ceased in the mid-1990s and the orchards were cleared from the site in approximately 2005 and 2006 (McAlister GeoScience, 2024, p. 1). As more fully discussed in EIR Subsection 4.2, *Agriculture and Forestry Resources*, the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP) identifies "Important Farmland" to include lands mapped as "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland." As mapped pursuant to the FMMP, the entire Project site contains "Farmland of Local Importance." Thus, under existing conditions the Project site does not contain any "Important Farmland" types.

The Project site was previously part of the El Sobrante Agricultural Preserve No. 1 and previously was under an active Williamson Act contract. A Notice of Nonrenewal previously was filed in 1982 to remove the Project site from the Williamson Act Contract, and as of 1992 the property no longer is subject to a Williamson Act Contract. Under existing conditions, the Project site continues to be located within El Sobrante Agricultural Preserve No. 1.

2.5.5 Biological Resources

Under existing conditions, the Project site consists predominantly of agricultural fields in the southern portion of the site, containing a nursery and soil piles, and open, dense grassland in the northern portion of the site. Vegetation communities present on the Project site include Blue Elderberry Grove, Godding's Willow – Red Willow Riparian Woodland and Forest, Mulefat Thickets, Ruderal/Disturbed, and Wild Oats and Annual Brome Grasslands. Of these natural plant communities, the Goodding's Willow – Red Willow Riparian Woodland is ranked by the CDFW as S3 and is considered a sensitive natural community by CDFW. In addition, the Project site contains 17 open and vegetated ephemeral and intermittent channels (with two segments consisting of culvert pipes) and one Freshwater Forested/Shrub Wetland, for a total length of 7,449 linear feet, covering an aggregate area of approximately 1.32 acres. Refer to EIR Subsection 4.4, *Biological Resources*, for a complete description of the existing biological conditions associated with the Project site and the Project's off-site improvement areas.

2.5.6 Geology

The Project site is located within the Peninsular Ranges, a prominent physiographic province forming much of southwestern California. This region is characterized by relatively steep, elongated northwest trending

mountain ranges and valleys. More specifically, the Project site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline bedrock. The Perris Block, approximately 20 miles by 50 miles in extent, is bounded by the San Jacinto Fault Zone to the northeast, the Elsinore Fault Zone to the southwest, the Cucamonga Fault Zone to the northwest, and the Temecula Basin to the southeast. The southeast boundary of the Perris block is poorly defined. The Perris Block has had a complex tectonic history, apparently experiencing relative vertical land movements of several thousand feet in response to movement along the Elsinore and San Jacinto Fault Zones. Sedimentary and volcanic deposits locally mantle the crystalline bedrock. Alluvial and colluvial deposits fill the valley areas. Geologic deposits underlying the Project site include Quaternary alluvium within the low-lying drainage areas of the site and Cretaceous-age granitic bedrock exposed on the hillsides and underlying the alluvium. (Leighton, 2023, p. 5)

The Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone or County of Riverside Fault Zone. The potential for future structures on site to be affected by liquefaction or dynamic settlement during an earthquake event are considered very low, and the near surface soils generally possess very low to low expansion potential. (Leighton, 2023, pp. 7-8)

2.5.7 Soils

Table 2-1, *Summary of On-Site Soils*, provides a summary of the soils present on the Project site, and identifies the attendant rate of runoff and erosion susceptibility. As shown, approximately 1.2% of the Project site has a "Low" rate of runoff and a "Moderate" susceptibility to erosion. Approximately 41.7% of the Project site has a "Medium" rate of runoff and a "Slight" susceptibility to erosion. Approximately 10.6% of the Project site has a "High" rate of runoff and a "Slight" susceptibility to erosion. Approximately 28.7% of the Project site has a "High" rate of runoff and a "Moderate" susceptibility to erosion. Approximately 7.8% of the Project site has a "Very High" rate of runoff and a "Moderate" susceptibility to erosion. Approximately 0.1% of the Project site has a "Medium" rate of runoff and a "moderate susceptibility to erosion (USDA, n.d.)

Table 2-1 Summary of On-Site Soils

Map Symbol	Map Unit Name	Rate of Runoff	Erosion Susceptibility	Acres in AOI[1, 2]	Percent of AOI[1, 2]
AoD	Arlington fine sandy loam, deep, 8 to 15 percent slopes	Medium	Moderate	0.1	0.1%
BxC2	Buren loam, deep, 2 to 8 percent slopes, eroded	High	Slight	11.8	10.6%
CaD2	Cajalco fine sandy loam, 8 to 15 percent slopes, eroded	Medium	Slight	46.5	41.7%
CaF2	Cajalco fine sandy loam, 15 to 35 percent slopes, eroded	High	Moderate	23.3	20.8%
CbF2	Cajalco rocky fine sandy loam, 15 to 50 percent slopes, eroded	High	Moderate	8.8	7.9%
LaD2	Las Posas loam, 8 to 15 percent slopes, eroded	Very High	Moderate	8.7	7.8%
TeG	Terrace escarpments	N/A	N/A	11.1	10.0%
VsF2	Vista Coarse sandy loam, 15 to 35 percent slopes, eroded	Low	Moderate	1.3	1.2%
Totals for Area of Interest:		--	--	**111.6**	**100.0%**

1. AOI = Area of Interest.
2. Values reflect rounding.
(USDA, n.d.)

2.5.8 HYDROLOGY

The Project site comprises an irregular shaped property consisting of rolling hills previously utilized for the cultivation of citrus fruit. Under existing conditions, the Project site is bisected by a ridgeline running from east to west close to the center of the property assemblage. The ridgeline can also be defined by an unpaved road seen within aerial imagery providing a means of maintenance access for an existing reservoir owned by Western Municipal Water District (WMWD) to the east of the Project site. From the ridge line the existing flows travel north and south into two natural drainage courses that bound the north and south edges of the Project site. The northerly tributary flows from east to west along the northerly project boundary, the southerly tributary flows from east to west along the westerly project boundary and then bisects a small portion of the project site flowing from the south to the northeast corner of the site. The existing drainage courses have been deeply incised and defined throughout time, and in many locations exhibit exposed bedrock limiting the potential for future erosion. Each of these two natural drainage courses ultimately convey flows northwesterly to a point of confluence at the most northwest corner of the project site before being conveyed northerly beyond the Project site through a development to the north of the Project site, known as Tramonte, and finally into the Harrison Dam facility. The Harrison Dam was constructed based on the development of the upstream tributaries to protect the downstream properties located in the City of Riverside. The Dam was designed to detain the watershed of the Project site, including the upstream properties, to a maximum discharge of 150 cubic feet per second (cfs). From the Harrison Dam facility existing storm flows are conveyed through the City of Riverside and ultimately into the Arizona Channel owned and maintained by RCFCWCD. The Arizona Channel is part of a drainage system funded by Area Drainage Plan fees known at the Southwest Area Drainage Plan. (Adkan, 2024a, p. 6)

2.5.9 NOISE

The most common and significant source of noise in Riverside County is mobile noise generated by transportation-related sources. Other sources of noise are the various land uses (i.e., residential, commercial, and institutional) that generate stationary-source noise. The background ambient noise levels in the Project area are dominated by the transportation-related noise associated with nearby surface streets. This includes the auto and heavy truck activities on nearby roadway segments, such as El Sobrante Road and McAllister Street. Within the Project area, and based on noise measurements conducted by Urban Crossroads, Inc., ambient noise levels range from approximately 45.9 dBA Leq to 60.3 dBA Leq during daytime hours, and between 39.0 and 48.8 dBA Leq during nighttime hours. (Urban Crossroads, 2024d, pp. 29-30 and Table 5-1)

2.5.10 TRANSPORTATION

Under existing conditions, the 111.6-acre Project site is located approximately 0.3-mile north of El Sobrante Road, approximately 0.1-mile east of McCallister Street, approximately 1.1 mile east of La Sierra Avenue, and approximately 0.05-mile west/southwest of Travertine Drive. The LMWAP and Riverside County General Plan Circulation Element classify La Sierra Avenue and El Sobrante Road as “Arterial” roadways, which are four-lane divided roadways (typically divided by a raised median or painted two-way turn-lane) with 128 feet of right-of-way (ROW) and 86 feet of travel lanes. McAllister Street is classified as a “Collector” roadway, which are two-lane roadways that typically have a 74-foot ROW and 40 feet of travel lanes. Travertine Drive

is not assigned a roadway classification by the General Plan Circulation Element or LMWAP. (Urban Crossroads, 2024f, p. 19)

The Project area currently is served by the Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions within Riverside County. There are limited transit routes in the vicinity of the Project site, with the closest being the existing RTA Route 27, which runs along Van Buren Boulevard, approximately 1.5 miles northeast of the Project site. There are existing bus stops on Van Buren Boulevard near Canyon Ridge Drive. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments, which may lead to either enhanced or reduced service where appropriate. (Urban Crossroads, 2024f, p. 24)

There is a planned Combination Trail (Regional Trail and Class I Bike Path proposed along La Sierra Avenue and El Sobrante Road. There is a proposed Regional Trail (Urban/Suburban) proposed along McAllister Street and a Community Trail proposed in the vicinity of the Project site. There are pedestrian facilities in place in the vicinity of the Project site along portions of McAllister Street and El Sobrante Road. (Urban Crossroads, 2024f, p. 24)

As stated by the Riverside County *Transportation Analysis Guidelines for Level of Service, Vehicle Miles Traveled* (herein, "County Guidelines"), dated December 2020, under existing conditions, the existing Countywide average Vehicle Miles Traveled (VMT) per capita is 15.2 VMT/capita (Urban Crossroads, 2024e, p. 3).

2.5.11 Public Facilities

Fire protection services for the Project site are provided by the Riverside County Fire Department (RCFD). The RCFD provides a full range of fire services within the County and contracting cities. The level of service provided is dependent on response times, travel distance, and staffing workload levels established in the Riverside County Fire Protection and Emergency Medical Aid Plan. The Fire Protection Master Plan contains four fire response categories that are used to determine the response times/travel distances for primary and secondary fire stations. The response categories are based on the amount of community build-out presumed in the Master Fire Plan. The Fire Department assumes in any given region that three or more fire engines respond to any reported fire.

The fire station that would serve the Project is Station 82 (Lake Hills), which is located approximately 1.2 miles west of the Project site. Two additional stations that could serve the Project site are Station 8 (Woodcrest), located approximately 3.2 miles northeast of the Project site, and Station 4 (Lake Matthews), located approximately 3.6 miles southeast of the Project site. (Google Earth, 2024) The fire stations that could serve the Project site have a minimum of two career firefighters (typically, a Captain and a firefighter) on duty at all times. Volunteer firefighters typically augment the career firefighters on the first-roll engine. Additional volunteer firefighters may respond on a rescue squad or second-roll fire engine, which is exclusively staffed by volunteer firefighters.

The Riverside County Sheriff's Department (RCSD) provides community policing for the Project area. The Sheriff Station serving the Project area is the Lake Matthews station, located at 9 Latitude Way in the City of Corona, approximately 5.2 miles southwest of the Project site (Google Earth, 2024). In addition to community policing, other services provided by the Sheriff's Department include, but are not limited to, operating of the emergency 911 system, operating correctional facilities, performing traffic control, and providing crime prevention education. Also, the Sheriff's Department coordinates with volunteer groups such as Neighborhood Watch Programs and the Community Oriented and Policing Problem Solving (COPPS) Program and the Community Oriented Policing (COP) Program. COPPS shifts the focus of police work from a solely reactive mode by supplementing traditional law enforcement methods with proactive problem-solving approaches that involve the community as well as the police.

The Project site is located within the Riverside Unified School District (RUSD). The public schools that service the Project area include Lake Matthews Elementary, located approximately 0.6-mile west of the Project site; Frank Augustus Miller Middle School, located approximately 4.4 miles northeast of the Project site; and Arlington High School, located approximately 2.8 miles north of the Project site. According to the RUSD's 2016 Long Range Facilities Master Plan, Lake Matthews Elementary School had an enrollment of 879 students with a total capacity of 880 students; Frank Augustus Miller Middle School had an enrollment of 1,072 students and a capacity of 1,200 students; and Arlington High School has a total enrollment of 1,902 students and a capacity of 2,500 students (RUSD, 2016, pp. 97, 173, and 189).

There are eight parks located within a two-mile radius of the Project site. Valencia Park, located approximately 0.2-mile north of the Project site, offers passive recreation with garden areas and walkways. Citrus Heights-Blossom Park, located approximately 0.2-mile northeast of the Project site, offers a playground, open space area, and paved walkways. Victoria Park, located approximately 0.4-mile northeast of the Project site, offers passive recreation with a gazebo and paved walkways. Splendor Park, located approximately 0.5-mile northeast of the Project site, offers a playground, open space area, and paved walkways. Victoria Grove Park, located approximately 0.5-mile west of the Project site, offers a basketball court, baseball field, playground, open space areas, and a paved walkway. Gage Park, located approximately 0.6-mile northeast of the Project site, offers a playground, open space area, and paved walkways. Lakepointe Park, located approximately 1.3 miles west of the Project site, offers a playground, open space area, and a paved walkway. California Citrus State Historic Park, located approximately 1.6 miles north of the Project site, features groves of citrus trees, historic buildings, interpretive exhibits, and guided tours. The park also offers educational programs, special events, and opportunities for recreation such as picnicking and hiking. (Google Earth, 2024)

The Project site is located within the Riverside County Public Library System (RCPLS) service area. The nearest library servicing the proposed Project site is the Woodcrest Library, located at 16625 Krameria Avenue, or approximately 3.2 miles northeast of the Project site (Google Earth, 2024).

2.5.12 Utilities and Service Systems

A. *Water Service*

The Project site is located in the service area of the Western Municipal Water District (WMWD). WMWD serves retail customers directly in Orangecrest, Mission Grove, El Sobrante, Eagle Valley, Temescal Canyon, Woodcrest, Lake Mathews, portions of Mead Valley and Perris, and March Air Reserve Base. The WMWD provides water supply, wastewater treatment and disposal, and water resource management to nearly one million people in a service area covering roughly 527 square miles within western Riverside County. WMWD serves approximately 25,000 retail and 14 wholesale customers with water from the Colorado River, State Water Project, recycled water, and local groundwater. (WMWD, 2022) Under existing conditions, there are no water lines or water-related improvements on the Project site, aside from two existing groundwater wells located within the western portion of the Project site. The nearest existing water line to the Project site is an existing 8-inch water line within Travertine Drive.

B. *Sewer Service*

WMWD provides sewer collection and treatment services within the Project area and operates two wastewater treatment facilities, the Western Riverside County Regional Wastewater Authority (WRCRWA) Treatment Plant and the Western Water Recycling Facility (WWRF). The WWMD treats wastewater generated in the Project area at the WWRF, which is located approximately 10.5 miles northwest of the Project site at 14634 River Road in the City of Eastvale. The WWRF, which was recently expanded, provides tertiary treatment for recycled water, and has a current capacity to treat up to 3 million gallons per day (MGD) of wastewater. Treated water from the facility is provided to the Riverside National Cemetery and General Archie Old Golf Course as well as parks, schools, groves, and nurseries, representing a set of customers converted from a non-potable water system to a recycled water infrastructure providing a more reliable product. (WMWD, n.d.; WMWD, 2020) Under existing conditions, the nearest existing WMWD sewer line is an existing 8-inch sewer line located within Travertine Drive to the north of the Project site.

C. *Solid Waste Services*

Solid waste collection and disposal is provided by the Riverside County Department of Waste Resources (RCDWR) through a franchise agreement with Waste Management of the Inland Empire (WMIE). The RCDWR operates five active landfills in addition to holding a contract agreement to dispose of waste at the private El Sobrante Landfill (Riverside County, 2015a, p. 4.17-36). Solid waste generated in the Project area is disposed of at either the El Sobrante Landfill, Lamb Canyon Landfill, or Badlands Landfill. The El Sobrante Landfill is currently permitted to receive 16,054 tons per day (tpd), while the average daily tonnage in May 2024 was 10,190.84 tpd (RCDWR, 2024a). The Lamb Canyon Landfill is permitted to receive 5,000 tpd, while data from April 2024 shows that the Lamb Canyon Landfill received a daily average of approximately 2,015.94 tpd (RCDWR, 2024b). The Badlands Landfill is permitted to receive 5,000 tpd, while in April 2024 the Badlands Landfill received an average of 3.279.36 tpd (RCDWR, 2024c).

D. Other Services

The Project site is also located in the service territories of the Southern California Gas Company (natural gas) and Southern California Edison (electricity) (CEC, 2020).

2.5.13 Rare and Unique Resources

As required by CEQA Guidelines § 15125(c), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans, and place special emphasis on resources that are rare or unique to that region and would be affected by the project. The principal discretionary actions required of Riverside County to implement the Project are described in detail in Section 3.0, *Project Description*, and are listed in Table 3-5, *Matrix of Project Approvals/Permits*. Based on the existing conditions of the Project site and surrounding area described above and discussed in more detail in Section 4.0, *Environmental Analysis*, the Project's Study Area contains 17 open and vegetated ephemeral and intermittent channels and one Freshwater Forested/Shrub Wetland, for a total length of 7,449 linear feet and covering an aggregate area of approximately 1.32 acres. Additionally, the Study Area supports 5.52 acres of riparian vegetation, of which 0.19-acre is wetland. Aside from these existing drainages, there are no rare or unique resources on the Project site.

3.0 PROJECT DESCRIPTION

This Section provides all of the information required for an EIR Project Description by State CEQA Guidelines § 15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's technical, economic, and environmental characteristics; and a description of the intended use of this EIR, including a list of the government agencies that are expected to use this EIR in their decision-making process; a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

3.1 REGIONAL SETTING

The 111.6-acre Project site is located within the western portion of unincorporated Riverside County, California. Figure 2-1 (previously presented) depicts the Project site's location within the regional vicinity. As shown, Riverside County abuts San Bernardino County to the north; Orange County to the west; and San Diego and Imperial Counties to the south. Riverside County is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square-mile region comprising western San Bernardino County, western Riverside County, and the eastern reaches of Los Angeles County.

3.2 PROJECT LOCATION AND SETTING

As previously depicted on Figure 2-2, the Project site is located within the Vitoria Grove community of the Lake Mathews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County. More specifically, the 111.6-acre Project site is located north of El Sobrante Road, east of McAllister Street, and west/southwest of Travertine Drive. Under existing conditions, the Project site is vacant and undeveloped. Under existing conditions, the Project site generally is surrounded by vacant land, agricultural uses, residential uses, and commercial uses. Refer to EIR Section 2.0 for a detailed description of the local setting and surrounding land uses.

3.3 PROPOSED PROJECT

The Project as evaluated herein consists of applications for a General Plan Amendment (GPA 240072), Change of Zone (CZ 2400026), Tentative Tract Map (TTM 38927), and an Agricultural Preserve Diminishment (APD 240006) for a 111.6-acre property (herein, "Project site") located east of McAllister Street and north of El Sobrante Road in the Victora Grove community of the Lake Mathews/Woodcrest Area Plan (LMWAP) portion of unincorporated Riverside County. Collectively, approval of these discretionary actions would allow for the development of the Project site with 206 single-family detached residential units on minimum 10,000 square-foot (s.f.) lots on approximately 57.8 acres; one park on approximately 1.9 acres; two detention/water quality basins on approximately 3.3 acres; slopes and open space on approximately 25.0 acres; and internal public roadways on approximately 23.6 acres. Access to the Project site would be accommodated via a proposed on-site roadway, Street A. Street A would connect to Travertine Road near the Project's northeastern boundary, would extend southerly through the western portions of the Project site, and would connect to a roadway proposed along the southern Project boundary as part of the adjacent Tentative Tract Map 38605 that would

provide a connection to El Sobrante Road to the south. This EIR analyzes the physical effects associated with all components of the proposed Project, including planning, construction, and ongoing operation. The governmental approvals requested from Riverside County to implement the Project consist of the following:

1. Adoption by resolution of a General Plan Amendment (GPA 240072);
2. Adoption by ordinance of a Change of Zone (CZ 2400026);
3. Adoption by resolution of Tentative Tract Map No. 38927 (TTM 38927);
4. Adoption by resolution of Agricultural Preserve Diminishment No. 240006 (APD 240006; El Sobrante 1); and
5. Certification of this EIR.

The Project's applications, as submitted to the County of Riverside by the Project Applicant, are herein incorporated by reference pursuant to State CEQA Guidelines § 15150 and are available for review at the Riverside County Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92501. All other discretionary and administrative approvals that would be required of the County of Riverside or other government agencies also are within the scope of the Project analyzed in this EIR.

3.4 Statement of Objectives

The underlying purpose of the proposed Project is to develop a low-density residential community that provides recreational and open space areas and minimizes impacts to the Victoria Grove community. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To efficiently develop an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages.

B. To develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration.

C. To increase the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities.

D. To assist Riverside County in meeting its Regional Housing Needs Assessment (RHNA) allocation for Above Moderate income units by developing a property with low density residential uses.

E. To provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.

3.5 PROJECT'S COMPONENT PARTS AND DISCRETIONARY APPROVALS

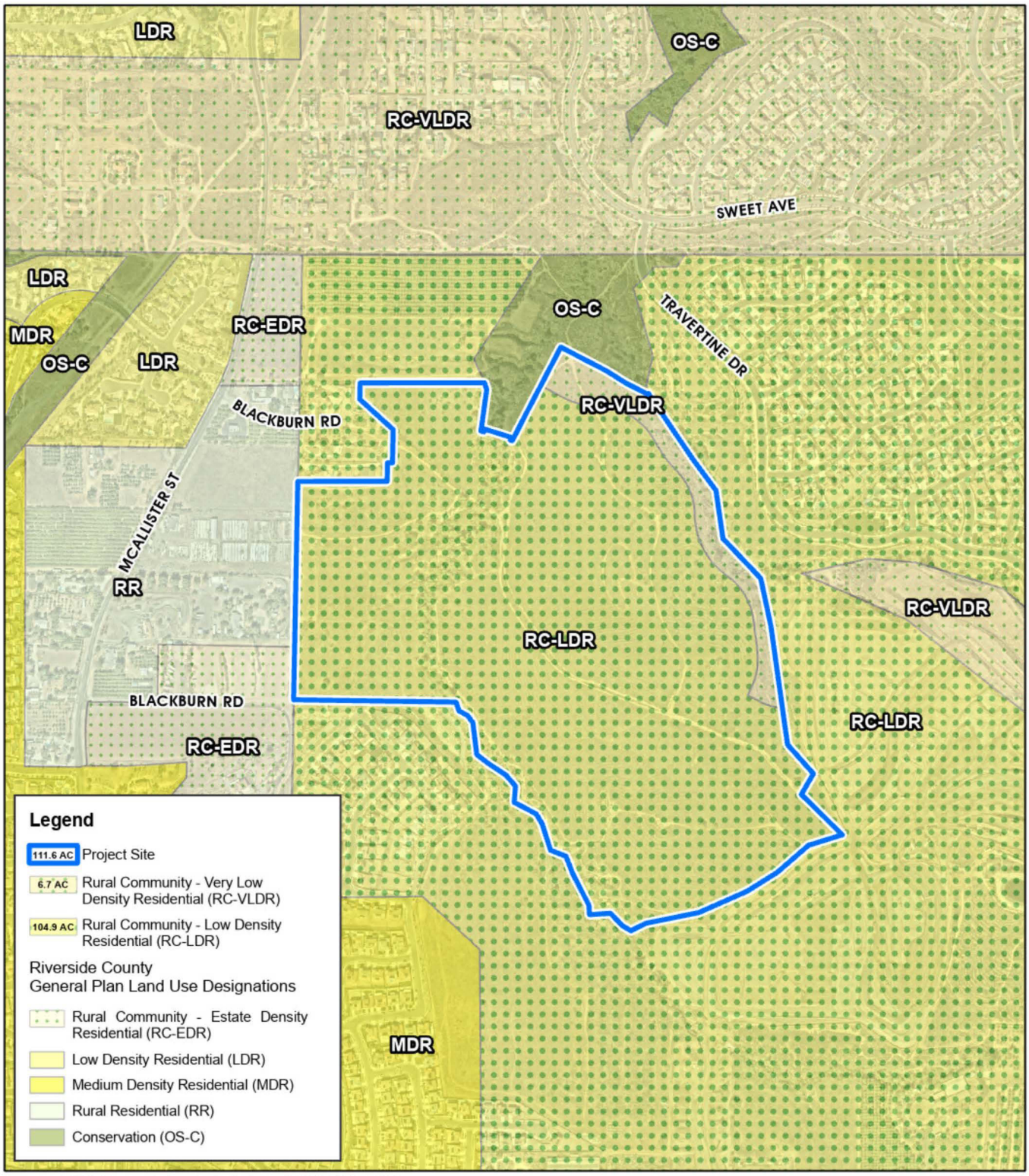
The proposed Project consists of applications for a General Plan Amendment (GPA 240072), Change of Zone (CZ 2400026), a Tentative Tract Map (TTM 38927), and Agricultural Preserve Diminishment No. 240006 (APD 240006; El Sobrante 1) to facilitate future development of the 111.6-acre property with 206 single-family detached residential units, two water quality basins, one park, and 25 lots for manufactured slopes, 8 lots for open space areas, and 17 lots for on-site public roadways. The principal discretionary actions required of the County of Riverside to implement the Project are described in detail on the following pages. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-6, *Matrix of Project Approvals/Permits*, at the end of this Section.

3.5.1 GENERAL PLAN AMENDMENT NO. 240072

The Riverside County General Plan assigns a land use designation to all properties within the County's jurisdiction. Development is required by law to comply with the provisions of the County's General Plan. The Project Applicant is seeking a General Plan Amendment (GPA 240072) to modify the General Plan and LMWAP land use designations for the 111.6-acre Project site to accommodate the residential lotting proposed as part of TTM 38927. Specifically, and as shown on Figure 3-1, *General Plan Amendment No. 240072*, under existing conditions the "Rural Community – Very Low Density Residential (RC-VLDR)" land use designation is clustered in the northeastern portions of the Project site, while the remaining portions of the site are designated for "Rural Community – Low Density Residential (RC-LDR)" land uses. With approval of GPA 240072, the RC-VLDR land use designation would be reconfigured to extend along the eastern boundary of the Project site. The total acreage of the RC-VLDR and RC-LDR land use designations on site would remain unchanged at 6.7 acres and 104.9 acres, respectively; thus, approval of GPA 240072 would not allow for an increase in residential density on site as beyond what already is allowed on site under existing conditions. The RC-VLDR land use designation is intended to accommodate single-family detached residences on large parcels of 1 to 2 acres, as well as limited agriculture, including equestrian and animal keeping uses. The RC-LDR land use designation is intended to accommodate single-family detached residences on large parcels of 0.5 to 1 acre, as well as limited agriculture, including equestrian and animal keeping uses. (Riverside County, 2021a, Table LU-4)

3.5.2 CHANGE OF ZONE NO. 2400026

The Riverside County Zoning Ordinance (Ordinance No. 348), which is part of the County's Code of Ordinances, assigns a zoning designation to all properties within unincorporated Riverside County. All development within the County is required, by law, to comply with the provisions of the Zoning Ordinance. Under existing conditions, the Project site is zoned "Light Agriculture, 10-Acre Minimum Lot Size (A-1-10)." As part of CZ 2400026, and as depicted on Figure 3-2, *Change of Zone No. 2400026*, the zoning classification for the 111.6-acre Project site would be changed to "One Family Dwellings, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)." Approval of CZ 2400026 would allow for residential development on site on minimum 10,000 s.f. lots along with limited agricultural uses, consistent with the site's adopted General Plan land use designations of RC-VLDR and RC-LDR. (Riverside County, 2023)

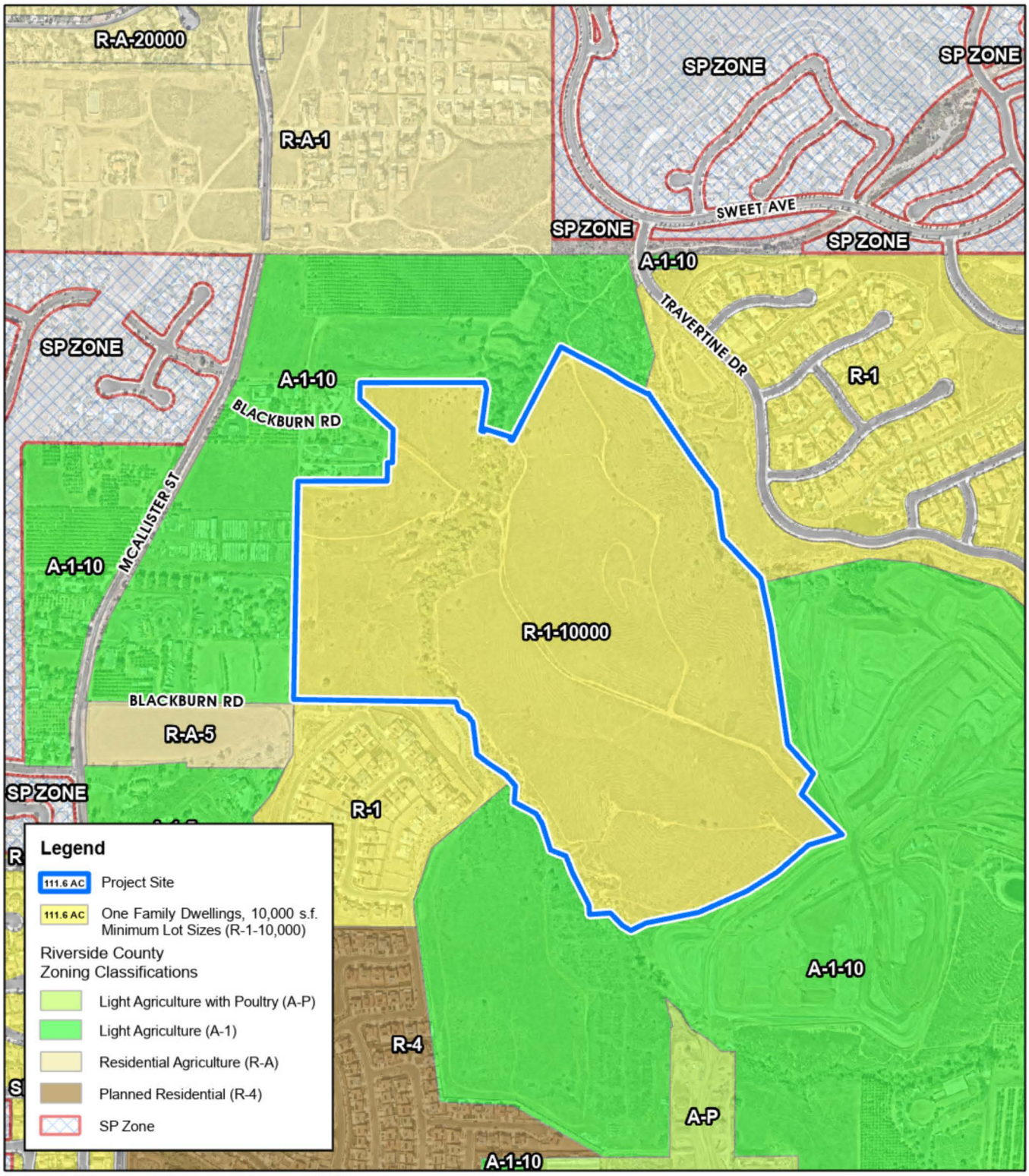


Source(s): ESRI, Nearmap Imagery (October 2025). RCIT (2024)

Figure 3-1

0 225 450 900 Feet

General Plan Amendment No. 240072



Source(s): ESRI, Nearmap Imagery (October 2025). RCIT (2024)

Figure 3-2

Change of Zone No. 2400026

3.5.3 Tentative Tract Map No. 38927

As shown on Figure 3-3, *Tentative Tract Map No. 38927*, and as summarized in Table 3-1, *Tentative Tract Map No. 38927 Land Use Summary*, Tentative Tract Map No. 38927 (TTM 38927) would subdivide the 111.6-acre Project site to accommodate 206 single-family detached residential units on approximately 57.8 acres; two detention/water quality basins on 3.3 acres; one lot for park uses on 1.9 acres; 25 lots for manufactured slopes on approximately 10.4 acres; 7 lots for undisturbed open space areas on approximately 14.7 acres; and 17 lots for on-site public roadways on 23.6 acres. Individual residential lot sizes would range in size from 10,007 s.f. to 25,765 s.f.

Table 3-1 Tentative Tract Map No. 38927 Land Use Summary

Lot Nos.	Land Use	Acreage
1-206	Single-Family Residential	57.8
222-223	Detention Basins	3.3
224	Park	1.9
207-221, 225-234, 242	Manufactured Slopes	10.5
235, 237-239	Undisturbed Open Space	11.4
236	Temporarily Disturbed Open Space	0.7
240-241	Non-Disturbed WMWD Easement	2.5
Streets A-I & Courts J-Q	Private Internal Roadways	23.6
	Totals:	**111.6**

Note: Totals reflect rounding.

A. Grading Plan

Development of the Project would involve re-contouring the pre-development terrain of the Project area to create building pads, roads, and detention/water quality basins. As shown on Figure 3-3, the grading of the Project site would consist of standard residential grading for the single-family residential lots and adjacent streets. The Project would require a total of 682,659 cubic yards (c.y.) of cut and 720,291 c.y. of fill, resulting in a required net import of 11,623 c.y. of soil. Grading activities would result in disturbances to approximately 100.25 acres of the 111.6-acre Project site, along with off-site impacts due to grading, roadways, and utility installation on approximately 2.61 acres. Manufactured slopes would be constructed at a maximum gradient of 2:1 (horizontal:vertical), and would extend to up to approximately 35 feet in height. A total of two detention/water quality basins are proposed, which would be located in the north-central and northeast portions of the Project site. Proposed grading has been designed to avoid, to the extent feasible, impacts to the existing on-site drainages, except where grading is necessary to accommodate access roadways on site.

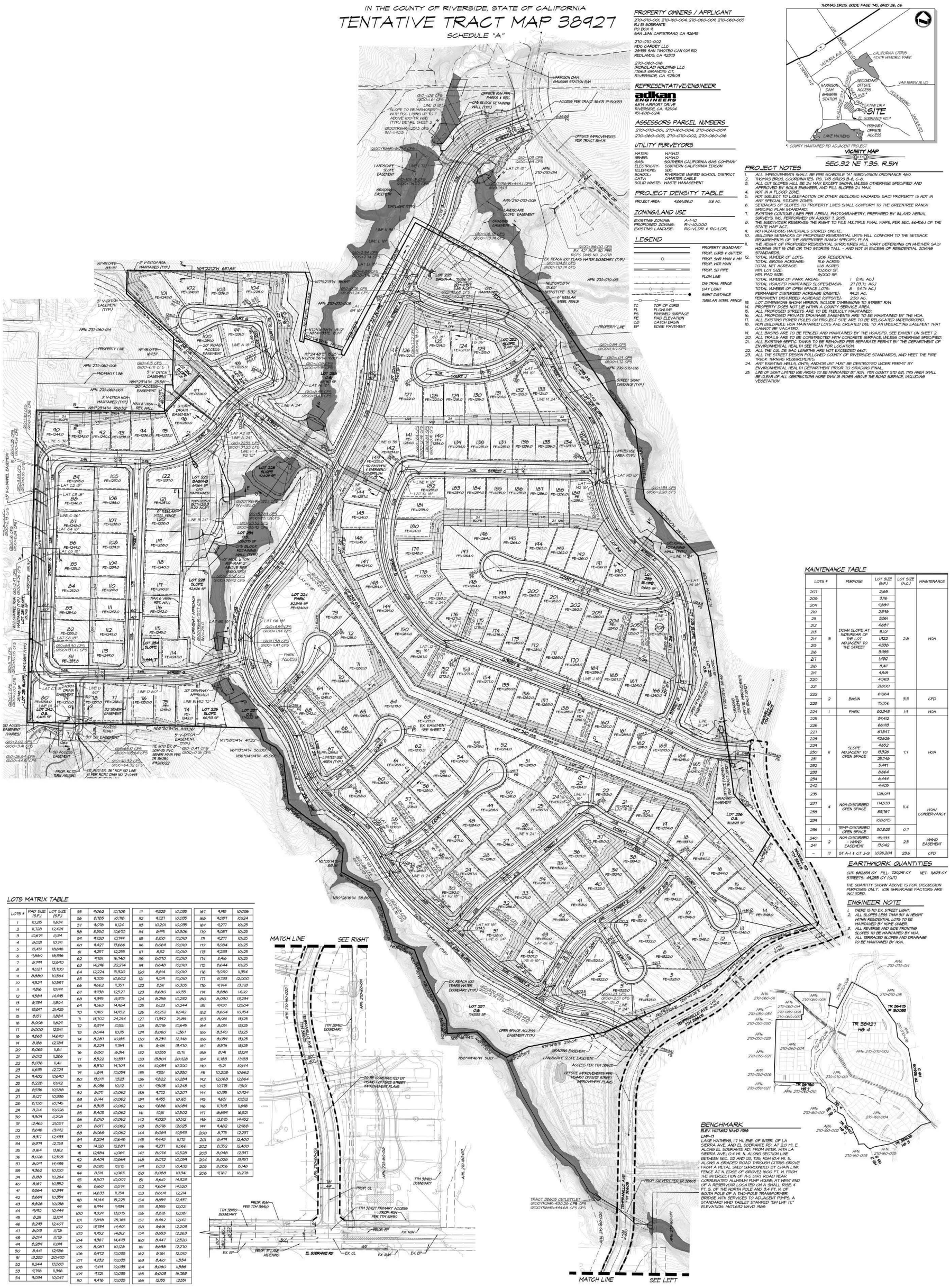
B. Circulation Improvements

Figure 3-4, *Roadway Cross-Sections*, depicts the roadway improvements proposed as part of TTM 38927, which are described below. All proposed roadways on site would consist of publicly-maintained roadways.

IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP 38927

SCHEDULE "A"



PROPERTY OWNERS / APPLICANT

210-070-001, 210-160-004, 210-060-009, 210-060-005
RJ EI SOBRANTE
PO BOX 9,
SAN JUAN CAPISTRANO, CA 92693

210-070-002
MDC CARDEY LLC
28455 SAN TIMOTEO CANYON RD,
REDLANDS, CA 92373

210-060-016
IRONCLAD HOLDING LLC
17843 GRANDIS CT,
RIVERSIDE, CA 92503

REPRESENTATIVE/ENGINEER

adkan ENGINEERS
6871 AIRPORT DRIVE
RIVERSIDE, CA. 92504
951-688-0241

ASSESSORS PARCEL NUMBERS

210-070-001, 210-160-004, 210-060-009
210-060-005, 210-070-002, 210-060-016

UTILITY PURVEYORS

WATER:	M.W.D.
SEWER:	M.W.D.
GAS:	SOUTHERN CALIFORNIA GAS COMPANY
ELECTRICITY:	SOUTHERN CALIFORNIA EDISON
TELEPHONE:	SBC
SCHOOL:	RIVERSIDE UNIFIED SCHOOL DISTRICT
CATV:	CHARTER CABLE
SOLID WASTE:	WASTE MANAGEMENT

PROJECT DENSITY TABLE

PROJECT AREA:	4,861,186.0	111.6 AC.

ZONING/LAND USE

EXISTING ZONING:	A-1-10
PROPOSED ZONING:	R-1-10,000
EXISTING LANDUSE:	RC-VLDR & RC-LDR,

LEGEND

PROPERTY BOUNDARY
PROP. CURB & GUTTER
PROP. SHR MAIN & MH
PROP. WTR MAIN
PROP. SD PIPE
FLOW LINE
DG TRAIL FENCE
DAY LIGHT
SIGHT DISTANCE
TUBULAR STEEL FENCE

TC TOP OF CURB
FL FLOWLINE
FS FINISHED SURFACE
PE PAD ELEVATION
CB CATCH BASIN
EP EDGE PAVEMENT

THOMAS BROS. GUIDE PAGE 745, GRID B6, C6

VICINITY MAP
(N.T.S.)

SEC.32 NE T.3S. R.5W

PROJECT NOTES

1. ALL IMPROVEMENTS SHALL BE PER SCHEDULE "A" SUBDIVISION ORDINANCE 460.
2. THOMAS BROS. COORDINATES, PG. 745 GRIDS B-6, C-6.
3. ALL CUT SLOPES WILL BE 2:1 MAX EXCEPT SHOWN, UNLESS OTHERWISE SPECIFIED AND APPROVED BY SOILS ENGINEER, AND FILL SLOPES 2:1 MAX.
4. NOT IN A FLOOD ZONE.
5. NOT SUBJECT TO LIQUEFACTION OR OTHER GEOLOGIC HAZARDS. SAID PROPERTY IS NOT IN ANY SPECIAL STUDIES ZONES.
6. SETBACKS OF SLOPES TO PROPERTY LINES SHALL CONFORM TO THE GREENTREE RANCH SPECIFIC PLAN STANDARD.
7. EXISTING CONTOUR LINES PER AERIAL PHOTOGRAMETRY, PREPARED BY INLAND AERIAL SURVEYS, INC., PERFORMED ON AUGUST 7, 2015.
8. THE SUBDIVIDER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS, PER SEC. 66456.1 OF THE STATE MAP ACT.
9. NO HAZARDOUS MATERIALS STORED ONSITE.
10. BUILDING SETBACKS OF PROPOSED RESIDENTIAL UNITS WILL CONFORM TO THE SETBACK REQUIREMENTS OF THE GREENTREE RANCH SPECIFIC PLAN.
11. THE HEIGHT OF PROPOSED RESIDENTIAL STRUCTURES WILL VARY DEPENDING ON WHETHER SAID HOUSING UNIT IS ONE OR TWO STORIES TALL - AND NOT IN EXCESS OF RESIDENTIAL ZONING STANDARDS.
12. TOTAL NUMBER OF LOTS: 206 RESIDENTIAL
TOTAL GROSS ACREAGE: 111.6 ACRES
TOTAL NET ACREAGE: 111.6 ACRES
MIN. LOT SIZE: 10,000 SF.
MIN. PAD SIZE: 8,000 SF.
TOTAL NUMBER OF PARK AREAS: 1 (1.9± AC.)
TOTAL HOA/CFD MAINTAINED SLOPES/BASIN: 27 (13.7± AC.)
TOTAL NUMBER OF OPEN SPACE LOTS: 8 (14.1± AC.)
PERMANENT DISTURBED ACREAGE (ONSITE): 99.23 AC.
PERMANENT DISTURBED ACREAGE (OFFSITE): 2.50 AC.
13. LOT DIMENSIONS SHOWN HEREON INCLUDE DIMENSIONS TO STREET R/W.
14. PROPERTY DOES NOT LIE WITHIN A COUNTY SERVICE AREA.
15. ALL PROPOSED STREETS ARE TO BE PUBLICLY MAINTAINED.
16. ALL PROPOSED PRIVATE DRAINAGE EASEMENTS ARE TO BE MAINTAINED BY THE HOA.
17. ALL EXISTING POWER POLES ON PROJECT SITE ARE TO BE RELOCATED UNDERGROUND.
18. NON BUILDABLE HOA MAINTAINED LOTS ARE CREATED DUE TO AN UNDERLYING EASEMENT THAT CANNOT BE VACATED.
19. ALL BASINS ARE TO BE FENCED AND MAINTAINED BY THE HOA/CFD. SEE EXHIBIT ON SHEET 2.
20. ALL TRAILS ARE TO BE CONSTRUCTED WITH CONCRETE SURFACE, UNLESS OTHERWISE SPECIFIED.
21. ALL EXISTING SEPTIC TANKS TO BE REMOVED PER SEPARATE PERMIT BY THE DEPARTMENT OF ENVIRONMENTAL HEALTH SEE PLAN FOR LOCATION.
22. ALL THE CUL DE SAC LENGTHS ARE NOT EXCEEDED 660'.
23. ALL THE STREET DESIGN FOLLOWED COUNTY OF RIVERSIDE STANDARDS, AND MEET THE FIRE TRUCK TURNING REQUIREMENTS.
24. ANY EXISTING WELLS, UNITS, AND/OR IST MUST BE DESTROYED UNDER PERMIT BY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO GRADING FINAL.
25. LINE OF SIGHT LIMITED USE AREAS TO BE MAINTAINED BY HOA, PER COUNTY STD 821, THIS AREA SHALL BE CLEAR OF ALL OBSTRUCTIONS MORE THAN 18 INCHES ABOVE THE ROAD SURFACE, INCLUDING VEGETATION

MAINTENANCE TABLE

LOTS #	PURPOSE	LOT SIZE (S.F.)	LOT SIZE (A.C.)	MAINTENANCE
207	DOWN SLOPE AT SIDE/REAR OF THE LOT ADJACENT TO THE STREET	2,165	2.8	HOA
208		3,116		
209		9,884		
210		2,948		
211		3,361		
212		4,681		
213		3,101		
214		1,422		
215		4,338		
216		3,985		
217		1,490		
218		8,411		
219		4,818		
220		47,413		
221		21,800		
222	BASIN	64,164	3.3	CFD
223		75,356		
224	PARK	82,348	1.9	HOA
225	SLOPE ADJACENT TO OPEN SPACE	39,412	7.7	HOA
226		66,813		
227		67,547		
228		92,826		
229		4,652		
230		13,526		
231		25,748		
232		5,491		
233		8,664		
234		6,444		
242		4,405		
235	NON-DISTURBED OPEN SPACE	128,019	11.4	HOA/ CONSERVANCY
237		174,533		
238		83,161		
239		108,075		
236	TEMP-DISTURBED OPEN SPACE	30,823	0.7	
240	NON-DISTURBED WMWD EASEMENT	85,933	2.5	WMWD EASEMENT
241		13,042		
–	ST A-1 & CT J-Q	1,026,209	23.6	CFD

EARTHWORK QUANTITIES

CUT: 682,894 CY FILL: 720,216 CY NET: 11,628 CY
STREETS: 49,255 CY (CUT)

THE QUANTITY SHOWN ABOVE IS FOR DISCUSSION PURPOSES ONLY. 10% SHRINKAGE FACTORS ARE INCLUDED.

ENGINEER NOTE

1. THERE IS NO EX. STREET LIGHT.
2. ALL SLOPES LESS THAN 30' IN HEIGHT WITHIN RESIDENTIAL LOTS TO BE MAINTAINED BY HOME OWNER.
3. ALL REVERSE AND SIDE FRONTING SLOPES TO BE MAINTAINED BY HOA.
4. ALL TERRACED SLOPES AND DRAINAGE TO BE MAINTAINED BY HOA.

LOTS MATRIX TABLE

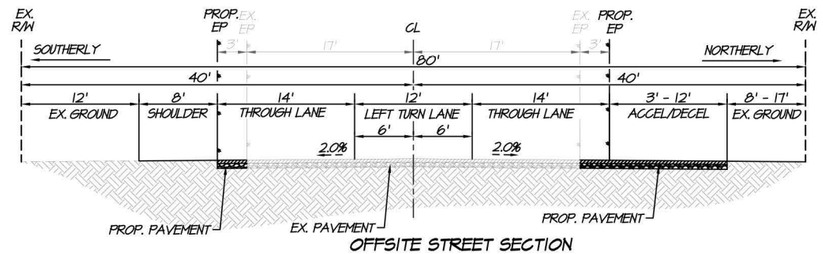
LOTS #	PAD SIZE (S.F.)	LOT SIZE (S.F.)
1	10,215	11,639
2	11,728	12,421
3	10,674	11,154
4	8,021	10,741
5	15,451	18,646
6	9,880	18,336
7	8,799	12,890
8	9,027	13,100
9	8,880	10,564
10	9,524	10,581
11	9,816	10,199
12	9,584	14,445
13	8,734	11,304
14	13,811	21,425
15	8,157	11,884
16	8,006	11,624
17	8,000	12,341
18	9,863	14,690
19	8,186	12,784
20	8,065	11,811
21	8,012	11,286
22	8,036	11,411
23	11,835	12,724
24	9,402	10,690
25	8,228	10,142
26	8,536	10,588
27	8,127	10,338
28	8,730	10,745
29	8,214	10,026
30	9,304	11,208
31	12,465	21,051
32	8,646	13,992
33	8,317	12,433
34	8,374	12,753
35	8,164	13,162
36	8,026	12,305
37	8,019	14,485
38	9,362	10,100
39	8,108	10,264
40	8,167	10,352
41	8,564	10,398
42	8,664	10,354
43	8,826	10,056
44	9,190	10,444
45	8,211	12,109
46	8,243	12,407
47	8,013	11,716
48	8,014	11,716
49	8,284	11,091
50	8,441	12,986
51	13,233	20,470
52	11,244	13,909
53	9,746	11,946
54	9,084	10,047
55	9,062	10,708
56	8,785	10,718
57	9,076	11,124
58	8,550	10,670
59	9,720	13,799
60	9,427	13,666
61	9,251	12,255
62	9,136	16,740
63	14,246	22,274
64	12,224	15,320
65	9,705	10,802
66	9,662	11,351
67	9,938	12,521
68	9,345	15,375
69	9,416	10,235
111	9,923	10,035
112	9,727	10,035
113	10,201	10,035
114	8,991	10,306
115	8,150	10,010
116	8,064	10,010
117	8,112	10,010
118	8,070	10,010
119	8,648	10,010
120	8,814	10,010
121	9,014	10,010
122	8,511	10,305
123	8,660	10,155
124	8,258	10,232
125	8,123	10,244
126	10,252	11,042
127	11,942	21,185
128	8,076	10,645
129	8,060	11,367
130	8,294	12,446
131	8,461	13,470
132	10,355	15,111
133	13,804	20,928
134	10,094	10,700
135	9,551	10,330
136	9,822	10,284
137	9,503	10,248
138	9,772	10,207
139	9,455	10,165
140	9,686	10,084
141	10,111	10,502
142	9,023	10,512
143	8,076	12,025
144	8,584	10,593
145	9,443	11,173
146	9,237	11,066
147	8,074	10,528
148	8,072	10,054
149	8,313	10,432
150	8,088	10,341
151	8,810	14,323
152	9,604	14,520
153	8,604	12,214
154	8,659	12,457
155	8,555	12,021
156	8,818	12,081
157	8,462	12,142
158	8,816	12,203
159	8,653	12,263
160	8,447	12,320
161	8,638	12,270
162	8,761	12,010
163	8,410	11,534
164	8,060	11,586
165	8,003	16,783
166	12,155	12,551
167	9,143	10,036
168	9,087	10,124
169	9,277	10,125
170	9,087	10,125
171	9,277	10,125
172	9,284	10,125
173	9,233	10,125
174	8,916	10,125
175	8,644	10,125
176	9,080	11,354
177	8,133	12,000
178	9,744	13,716
179	8,886	14,110
180	8,030	13,234
181	9,457	12,504
182	8,604	10,454
183	8,061	13,125
184	8,051	13,125
185	8,340	13,125
186	8,254	13,125
187	8,516	13,125
188	8,141	13,124
189	11,383	17,453
190	9,121	10,144
191	10,208	10,662
192	12,068	12,864
193	10,175	11,501
194	10,135	10,924
195	9,651	10,312
196	11,303	11,896
197	16,694	16,321
198	12,875	14,452
199	9,482	12,968
200	8,775	12,237
201	8,474	12,400
202	8,352	12,400
203	8,048	12,397
204	8,028	13,951
205	8,006	15,148
206	9,767	16,278

Source(s): Adkan Engineers (02-10-2026)

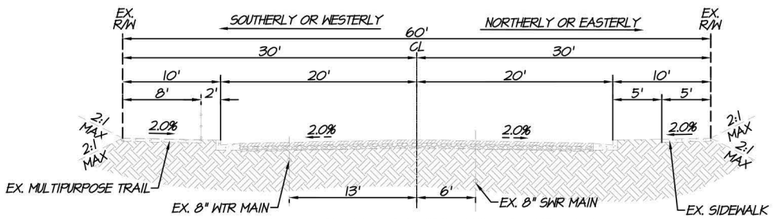
Figure 3-3

Not to Scale

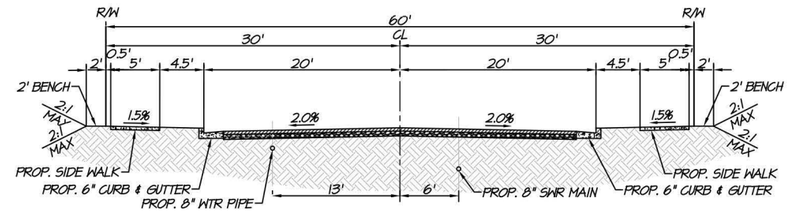
Tentative Tract Map No. 38927



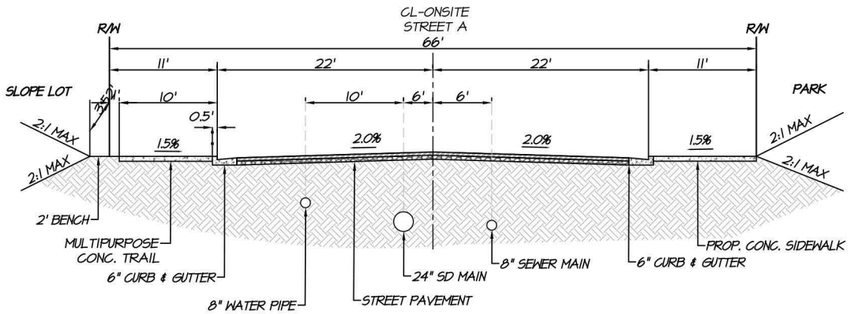
OFFSITE STREET SECTION
PROP. EL SOBRANTE RD. SECTION (PUBLIC)



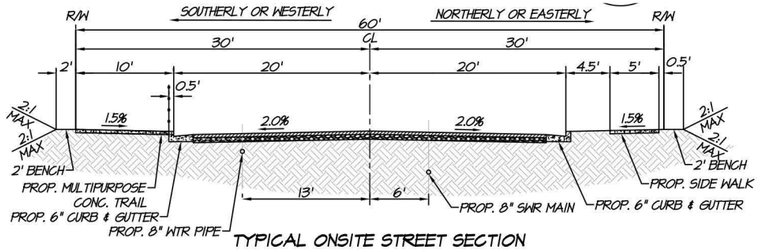
EX. TYPICAL TRAVERTINE DR. SECTION



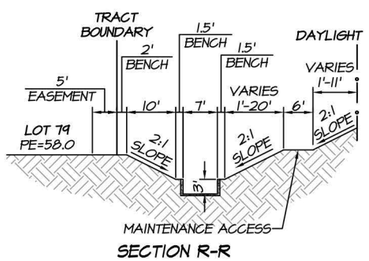
TYPICAL ONSITE STREET SECTION
STREET B - I, COURT J - Q



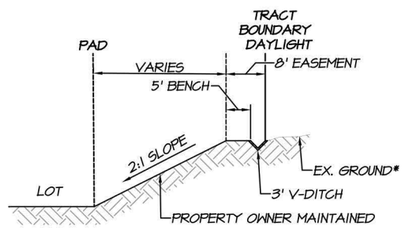
TYPICAL STREET ADJACENT TO THE PARK



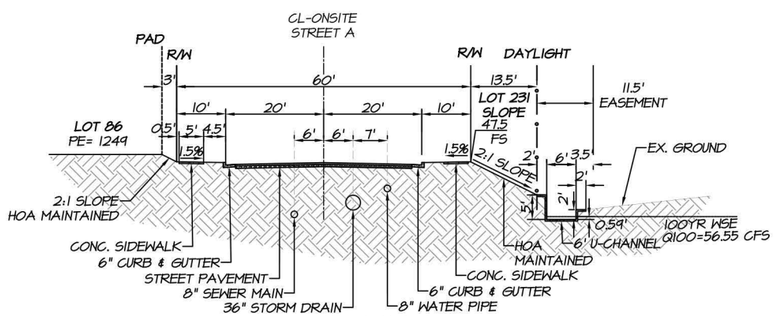
TYPICAL ONSITE STREET SECTION
STREET A



SECTION R-R



SECTION B-B (TYP.)



SECTION A-A

Source(s): Adkan Engineers (02-10-2026)

Figure 3-4

Not to Scale

Roadway Cross-Sections

- Street A. As previously shown on Figure 3-3, access to the Project site would be accommodated via a proposed on-site roadway, Street A. Street A would connect to Travertine Road near the Project's northeastern boundary, would extend southerly through the western portions of the Project site, and would connect to a roadway proposed along the southern Project boundary as part of the adjacent Tentative Tract Map 38605 that would provide a connection to El Sobrante Road to the south. As shown on Figure 3-4, Street A would be constructed with an overall right-of-way (ROW) of 60 feet, and would be improved to include 40 feet of travel lanes, a 10-foot-wide multipurpose concrete trail along one side of the roadway, and a 9.5-foot-wide parkway on the opposite side that would include a five-foot-wide curb-separated sidewalk. As also shown on Figure 3-4, where Street A abuts the proposed public park site in Lot 224 of TTM 38927, Street A would be improved with an overall ROW of 66 feet, and would be improved to include a total of 44 feet of travel lanes, an 11-foot-wide parkway along one side of the roadway that would feature a 10-foot-wide curb-adjacent sidewalk, and an 11-foot-wide parkway along the other side of the roadway that would include an 11-foot-wide sidewalk.

- Streets B through G and Courts H through P. With exception of Street A, all remaining roadways proposed on site would be constructed to the same standard. Specifically, Streets B through I and Courts J through Q are proposed to have a total ROW of 60 feet, with 40-feet of travel lanes and 9.5-foot-wide parkways along each side of the road that would include five-foot-wide curb-separated sidewalks.

C. Landscaping Plan

Figure 3-5, *Conceptual Landscape Plan*, depicts the Project's conceptual landscape plan. As shown, landscaping for the proposed Project would consist of a variety of trees, shrubs, and groundcover. Trees are proposed along proposed manufactured slopes, along portions of the internal roadway network, and surrounding the proposed extended detention basins. Tree species included as part of the conceptual landscape plan include 36-inch box strawberry tree (*Arbutus marina*), 36-inch box desert museum Palo Verde (*Cercidium* 'Desert Museum'), 36-inch box Tuscarora crape myrtle (*Lagerstroemia indica* x *fauriei* 'Tuscarora'), 36-inch box cajeput trees (*Melaleuca quinquinervia*), 36-inch box California sycamore (*Platanus racemosa*), 36-inch box fern pine (*Podocarpus gracilior*), 36-inch box coast live oak (*Quercus agrifolia*) and 36-inch box African sumac (*Rhus lancea*).

D. Fuel Management Plan

The Project site is located in a State Responsibility Area (SRA) for fire protection services. State law requires development in SRA within any fire hazard zone to comply with the Wildland Urban Interface (WUI) codes contained in the California Residential Code (Chapter 3, Section R337), California Building Code (Chapter 7A), and California Fire Code (Chapter 49). Based on current mapping available from Cal Fire, the northwestern portions of the Project site are considered to have a "very high" susceptibility to wildland fire hazards; the central portions of the Project site are considered to have a "high" susceptibility to wildland fire hazards; and the southeastern portions of the Project site are considered to have a "moderate" susceptibility to

PLANTING LEGEND					
TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY
	Arbutus marina	Strawberry Tree	36" BOX	M	291
	Cercidium 'Desert Museum'	Desert Museum Palo Verde	36" BOX	L	50
	Lagerstroemia Indica X Fauriei 'Tuscarora'	Tuscarora Crape Myrtle	36" BOX	M	75
	Melaleuca quinquinervia	Cajeput Tree	36" BOX	M	79
	Platanus racemosa	California Sycamore	36" BOX	M	92
	Podocarpus gracilior	Fern Pine	36" BOX	M	259
	Quercus agrifolia	Coast Live Oak	36" BOX	L	120
	Rhus lancea	African Sumac	36" BOX	L	116

ACCENT SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING
	Agave d. 'Variegata	Variegated Dwarf Agave	5 Gal	L	36" O.C.
	Callistemon 'Little John'	Little John	5 Gal	L	36" O.C.
	Hesperaloe parviflora 'Perpa'	Brakelights Red Yucca	5 Gal	L	36" O.C.
	Lantana 'New Gold'	New Gold Lantana	5 Gal	L	36" O.C.
	Dietes Vegeta	Fortnight Lily	1 Gal	M	36" O.C.
	Westringia fruticosa mundi	Mundi Coast Rosemary	5 Gal	L	48" O.C.
SCREENING SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	
	Lavandula angustifolia	English Lavender	5 Gal	L	48" O.C.
	Nandina domestica 'Compacta'	Compact Heavenly Bamboo	5 Gal	M	48" O.C.
	Olea europaea 'Monta'	Little Ollie Dwarf Olive	5 Gal	L	48" O.C.
	Pittosporum tobira 'Wheelers Dwarf'	Wheeler's Dwarf	5 Gal	M	48" O.C.
	Rhaphiolepis indica	Indian Hawthorn	5 Gal	M	60" O.C.
SPREADING GROUNDCOVERS	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING
	Convolvulus cneorum	Bush Morning Glory	1 Gal	L	36"O.C.
	Cistus x pulverulentus 'Sunset'	Magenta Rockrose	1 Gal	L	48"O.C.
	Galvezia speciosa	Island Snapdragon	1 Gal	L	48"O.C.
	Epilobium canum	California Fuchsia	1 Gal	L	48"O.C.
	Leppia nodiflora 'Kurapia'	Kurapia	1 Gal	L	24"O.C.
	Myoporum parvifolium 'White'	White Myoporum	1 Gal	L	48"O.C.
BASIN SLOPE	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	
	Westringia fruticosa mundi	Mundi Coast Rosemary	5 Gal	L	48" O.C.
	Galvezia speciosa	Island Snapdragon	1 Gal	L	48"O.C.

Privately maintained backyard slopes

Non-Disturbed Open Space/Conservancy

NOTE: SLOPE PLANTING MINIMUM STANDARDS FOR BUILDING AND SAFETY EROSION CONTROL STANDARDS (ORDINANCE 457, SECTION 3316.1).
- OVER 3' VERTICAL - GROUNDCOVER PLANT MATERIAL MAXIMUM 12" O.C.
- OVER 15' VERTICAL - SHRUB MAXIMUM 10' O.C., TREES 20' MAXIMUM O.C., OR A COMBINATION THEREOF.

PLANT MATERIAL WILL BE DESIGNED AND GROUPED ACCORDINGLY TO WATER USE FACTOR PER WUCOLS ZONES

Zone 2-Reduced wildland fuels/thinning zone.
Reference Fuel Mode Plan for further information.



LANDSCAPE NOTES:
1. PROVIDE 3" LAYER OF MULCH (MIN.) IN SHRUB BEDS AND UNPLANTED AREAS; 2" LAYER OF MULCH IN GROUNDCOVER AREAS; 3" LAYER OF SHREDDED, STABILIZING MULCH FOR SLOPES WITHIN THE PROPERTY LIMITS. SLOPES WITHIN THE CONSERVATION EASEMENT AND TEMPORARY SLOPES ON THE ACCESS ROAD SHALL RECEIVE A NON-IRRIGATED HYDROSEED MIX WITH A SLOPE STABILIZATION BINDER.
2. TREES SHALL BE STAKED WITH 2-3 STAKES AND 6 TREE TIES PER COUNTY STANDARD DETAILS. USE TRIPLE STAKING WITH 3" DIAMETER STAKES IN HIGH WIND AREAS.
3. ROOT BARRIERS SHALL BE INSTALLED FOR TREES WITHIN 6' (MIN.) OF HARDSCAPE PER COUNTY STANDARD DETAILS. ROOT BARRIER SHALL NOT ENCIRCLE THE TREE ROOT BALL BUT SHALL BE LOCATED AT EDGE OF HARDSCAPE AND EXTEND BEYOND CENTER OF TREE A MINIMUM OF 5' IN EACH DIRECTION.
4. TREES SHALL HAVE BREATHER TUBES PER COUNTY STANDARD DETAILS.
5. SLOPE PLANTING TO BE COMPLIANT WITH MINIMUM STANDARDS FOR BUILDING AND SAFETY EROSION CONTROL STANDARDS (ORDINANCE 457, SECTION 3316.1).

PRIOR TO PROJECT CONSTRUCTION, I AGREE TO SUBMIT A COMPLETE LANDSCAPE CONSTRUCTION DOCUMENT PACKAGE THAT COMPLIES WITH THE REQUIREMENTS OF APPLICABLE ORDINANCES, INCLUDING BUT NOT NECESSARILY LIMITED TO ORDINANCE NO. 859.3, ORDINANCE 348, ORDINANCE 461; PROJECT CONDITIONS OF APPROVAL; AND IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED LANDSCAPE CONCEPT PLAN. SHOULD THE ORDINANCES BE REVISED, THESE PLANS MAY BE SUBJECT TO CHANGE.

APPLICANT'S SIGNATURE — DATE 8/22/25

IRRIGATION SYSTEM DESIGN STATEMENT
A PERMANENT AUTOMATIC IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED TO IRRIGATE ALL PLANTING AREAS. THE DESIGN OF THE IRRIGATION SYSTEM SHALL EMPHASIZE WATER CONSERVATION AND PROVIDE EFFICIENT AND UNIFORM DISTRIBUTION OF IRRIGATION WATER. THE SYSTEM SHALL BE DESIGNED TO UTILIZE RECYCLED WATER WHEN IT BECOMES AVAILABLE, IN ACCORDANCE WITH STATE OF CALIFORNIA AND LOCAL WATER DISTRICT RULES AND REGULATIONS.

IRRIGATION NOTES:
THE FOLLOWING ITEMS WILL BE INCORPORATED INTO THE FINAL IRRIGATION DESIGN PLANS AND SPECIFICATIONS:
1. SMART CONTROLLER WITH AN ET GAGE WITH ACCESS TO REAL-TIME ET (MINIMUM CONTROLLER RATING SHALL BE LIGHT COMMERCIAL)
2. MASTER VALVE AND FLOW SENSOR
3. RAIN SENSING DEVICE
4. ANTI-DRAIN CHECK VALVES
5. PRESSURE REGULATOR
6. HYDROZONES WILL BE PROPERLY DESIGNATED
7. NO OVERHEAD IRRIGATION WITHIN 24" OF NON-PERMEABLE SURFACES. (NO RESTRICTIONS TO METHOD IF ADJACENT TO PERMEABLE SURFACE WITH NO RUNOFF/OVERSPRAY)
8. SUBSURFACE OR LOW-VOLUME IRRIGATION WILL BE USED FOR IRREGULARLY SHAPED AREAS, OR AREAS LESS THAN 10 FEET IN WIDTH

NOTE:
PROPOSED MAINTENANCE ENTITY (OR ENTITIES) FOR ON-SITE AND OFF-SITE (ROW) AREAS INDICATED AND NOTED.

GENERAL NOTES:
1. LEGAL DESCRIPTION : TRACT 1 PARCEL ONE OF SECTION 32 & PARCEL TWO. TRACT 2 PARCEL NO. 4962 & PARCEL TWO. TRACT 3 PARCEL ONE OF SECTION 32 AND 33 & PARCEL TWO PARCEL.
2. TOTAL GROSS ACREAGE : 112.34 ACRES
3. TOTAL NET ACREAGE : 112.34 ACRES
4. NUMBER OF LOTS :
   206 RESIDENTIAL
   1 PARK AREA
   25 HOA/CFD MAINTAINED SLOPES/BASIN
   13 OPEN SPACE LOTS
5. MINIMUM LOT SIZE : 10,000 SF
6. EXISTING ZONING : A-1-10
7. PROPOSED ZONING : R-1-10,000
8. EXISTING LAND USE : RC-VLDR & RC-LDR
9. PROPOSED LAND USE : RESIDENTIAL, WATER QUALITY BASIN AND PUBLIC PARK
10. SCHOOL DISTRICT :
    RIVERSIDE UNIFIED SCHOOL DISTRICT
11. 2006 THOMAS BROS. GUIDE : PAGE 745-GRIDS B6, C6
12. TENTATIVE MAP PREPARED : 3/24
13. ALL PROPOSED DRAINAGE FACILITIES SHALL BE DESIGNATED TO ACCOMMODATE 100 YEAR STORM FLOWS. ALL STORM FLOWS ARE APPROX.
14. TENTATIVE MAP SHOWS ENTIRE CONTIGUOUS OWNERSHIP.
15. THIS PROJECT IS NOT WITHIN A SPECIFIC PLAN.
16. ALL SLOPES ARE 2:1 UNLESS NOTED.
17. THIS PROPERTY IN NOT WITHIN A SPECIAL STUDIES ZONE AND IS NOT SUBJECT TO LIQUEFACTION OR OTHER GEOLOGICAL HAZARD.
18. OPEN SPACES/PARK TO BE MAINTAINED BY HOA AND BASIN TO BE MAINTAINED BY CFD.
19. NOT IN A FLOOD ZONE.

LANDSCAPE CONCEPT:
TO CREATE A SPACE THAT HARMONIZES WITH THE LOCAL LANDSCAPE. THIS LANDSCAPE WILL CONSIST OF CALIFORNIA-FRIENDLY, LOW AND MEDIUM WATER USE PLANT MATERIAL. ALL PLANTS HAVE BEEN CHOSEN FROM THE LOW OR MEDIUM WATER USE CATEGORY ACCORDING TO WUCOLS. PLANTS HAVE BEEN CHOSEN TO CREATE A UNIFORM THEME ACROSS THE SITE CONSISTING OF MEDITERRANEAN AND CALIFORNIA FRIENDLY PLANT MATERIAL. MAINTENANCE AND LONGEVITY OF PLANT MATERIAL HAS BEEN TAKEN INTO CONSIDERATION. ROOT PANELS AND BARRIERS WILL BE UTILIZED ON ALL TREES NECESSARY, CONSISTENT WITH ALL STANDARDS AND SPECIFICATIONS. A LAYER OF BARK MULCH WILL BE USED IN ALL LANDSCAPE AREAS CONSISTENT WITH COUNTY STANDARDS. ALL LANDSCAPE AREAS WILL CONFORM TO THE CURRENT COUNTY OF RIVERSIDE LANDSCAPE GUIDELINES.

GENERAL PLANTING AND EROSION NOTES:
- WUCOLS ZONE FOR THIS PROJECT IS ZONE 4.
- SLOPE PLANTING CONCEPT IS COMPLIANT WITH MINIMUM STANDARDS FOR BUILDING AND SAFETY EROSION CONTROL STANDARDS (ORDINANCE 457, SECTION 3316.1).
- OVER 3 FEET VERTICAL - GROUNDCOVER PLANT MATERIAL MAXIMUM 12 INCH ON CENTER.
- PLANT MATERIAL WILL BE CONSISTENT WITH MENIFEE NORTH-SPECIFIC PLAN NO. 260
- THIS PROJECT IS NOT WITHIN ANY MSHCP BOUNDARIES.
- THIS PROJECT IS IN A MODERATE AND VERY HIGH FIRE HAZARD ZONE PURSUANT TO CALIFORNINA PUBLIC RESOURCES CODE SECTION 4290 AND COUNTY ORD. NO. 695.

SHEET INDEX

SHEET LP-1: TITLE SHEET
SHEET LP-2: OVERALL LANDSCAPE PLAN
SHEET LP-3: OVERALL LANDSCAPE PLAN
SHEET LP-4: ENLARGEMENT PLANS
SHEET LP-5: MAINTENANCE EXHIBIT
SHEET LP-6: CONCEPTUAL WALL/FENCE PLAN
SHEET LP-7: CONCEPTUAL WALL/FENCE PLAN

OWNER/DEVELOPER
RJ EL SOBRANTE, MDC CARDEY LLC, IRONCLAD HOLDING LLC
17863 GRANDIS CT.
RIVERSIDE, CA 92503
(951)202-2267
CONTACT: STEVE WADDELL STEVE@IRONCLADCIVILSERVICES.COM

ENGINEER
ADKAN ENGINEERS
6879 AIRPORT DRIVE
RIVERSIDE, CA 92504
(951) 688-0241
CONTACT: BRYAN INGERSOLL-BLNGERSOLL@ADKAN.COM

LANDSCAPE
BMLA, INC
LANDSCAPE ARCHITECTS
310 NORTH JOY STREET
CORONA, CA 92879
(951) 737-1124
CONTACT: JEFF TROJANOWSKI-JEFFT@BMLA.NET

ASSESSOR'S PARCEL NUMBERS
NO. 270-070-001,270-070-002, 270-060-005, 270-060-009, 270-060-016 & 270-160-004

PUBLIC UTILITIES/SERVICES
SEWER & WATER:
WESTERN MUNICIPAL WATER DISTRICT

TELEPHONE:
SBC

GAS:
SOUTHERN CALIFORNIA GAS COMPANY

ELECTRIC:
SOUTHERN CALIFORNIA EDISON CO.

FIRE PROTECTION:
RIVERSIDE COUNTY FIRE DEPARTMENT

EARTHWORK QUANTITIES :
CUT = 605,038 CY
FILL = 605,038 CY
NET = 0 CY



VICINITY MAP
NOT TO SCALE

Source(s): BMLA (08-22-2025)

Figure 3-5

Not to Scale

Conceptual Landscape Plan

wildland fire hazards. In order to address the Project's potential exposure to wildfire hazards, a Fuel Modification Plan has been included as part of TTM 38927, which is depicted on Figure 3-6, *Conceptual Fuel Modification Plan*, and is described below.

2. Typical Fuel Management Zones

In order to address the potential for wildfire hazards, the Project would be conditioned to require that each of the Project's proposed residential lots must incorporate Fuel Modification Zones (FMZs). For most of the Project's proposed residential lots, the FMZ would consist of a minimum of 100 feet in width. The FMZ would include three zones, Zone 0, Zone 1, and Zone 2. A description of these zones is provided below.

- **Fuel Modification Zone 0**. Fuel Modification Zone 0 comprises the first five feet from the structure, which shall be designed to prevent embers from igniting materials that can spread the fire to the structure. Within this zone, the following requirements would apply:
    - Hardscape materials such as gravel, pavers, or concrete shall be provided, with no combustible bark or mulch.
    - All dead and dying plants, weeds, and debris (leaves, needles, etc.) shall be removed from the roof, gutter, deck, porch, stairways, and under any areas of future residential structures.
    - All branches within 10 feet of any chimney or stovepipe outlet shall be removed.
    - Combustible items (like outdoor furniture and planters) on top of decks shall be limited.
    - No firewood may be stored within Zone 0.
    - Noncombustible fencing, gates, and arbors that are attached to or within five feet of the structure shall be used.
    - Garbage and recycling containers shall be stored outside of Zone 0.
    - Boats, RVs, vehicles, and other combustible items shall be stored outside of Zone 0.

- **Fuel Modification Zone 1**. Fuel Modification Zone 1 comprises the first thirty feet from the structure and shall be designed to prevent fire from spreading from the native vegetation to the structure through the use of clearing, cleaning, changing the types of vegetation, and keeping the area irrigated/free of readily combustible materials. Within this zone, the following requirements shall apply:
    - Dead or dry vegetation shall be regularly cleared from Zone 1 to create space between trees, particularly during times of drought.
    - Dead plants shall be removed from Zone 1 to create space between trees and shrubs in order to reduce potential fuel for fire.
    - All dead and dying plants, grass, and weeds shall be removed from Zone 1.
    - All dead or dry leaves and pine needles shall be removed from Zone 1.
    - Trees shall be regularly trimmed to keep branches a minimum of 10 feet from other trees.
    - A separation between trees, shrubs, and items that could catch fire, such as patio furniture, wood piles, swing sets, etc., shall be provided.



ZONE NOTES

ZONE 0 - EMBER ZONE

THE FIRST FIVE FEET FROM THE STRUCTURE IS DESIGNED TO PREVENT EMBERS FROM IGNITING MATERIALS THAT CAN SPREAD THE FIRE TO THE STRUCTURE. NOT CURRENTLY REQUIRED BUT WILL BE RETROACTIVE IN THE FUTURE.

- USE HARDSCAPE LIKE GRAVEL, PAVERS, OR CONCRETE. NO COMBUSTIBLE BARK OR MULCH.
- REMOVE ALL DEAD AND DYING PLANTS, WEEDS, AND DEBRIS (LEAVES, NEEDLES, ETC.) FROM THE ROOF, GUTTER, DECK, PORCH, STAIRWAYS, AND UNDER ANY AREAS OF YOUR HOME.
- REMOVE ALL BRANCHES WITHIN 10 FEET OF ANY CHIMNEY OR STOVEPIPE OUTLET.
- LIMIT COMBUSTIBLE ITEMS (LIKE OUTDOOR FURNITURE AND PLANTERS) ON TOP OF DECKS.
- RELOCATE FIREWOOD AND LUMBER TO ZONE 2.
- USE NONCOMBUSTIBLE FENCING, GATES, AND ARBORS THAT ARE ATTACHED TO OR WITHIN FIVE FEET OF THE STRUCTURE.
- CONSIDER RELOCATING GARBAGE AND RECYCLING CONTAINERS OUTSIDE THIS ZONE.
- CONSIDER RELOCATING BOATS, RVS, VEHICLES, AND OTHER COMBUSTIBLE ITEMS OUTSIDE THIS ZONE.

ZONE 1 - LEAN, CLEAN AND GREEN ZONE

THE FIRST THIRTY FEET FROM THE STRUCTURE IS DESIGNED TO PREVENT FIRE FROM SPREADING FROM THE NATIVE VEGETATION TO THE STRUCTURE THROUGH THE USE OF CLEARING, CLEANING, CHANGING THE TYPES OF VEGETATION AND KEEPING THE AREA IRRIGATED/FREE OF READILY COMBUSTIBLE MATERIALS.

- REGULARLY CLEAR DEAD OR DRY VEGETATION AND CREATE SPACE BETWEEN TREES.
- DURING TIMES OF DROUGHT WHEN WATERING IS LIMITED, PAY SPECIAL ATTENTION TO CLEARING DEAD OR DYING MATERIAL.
- REMOVE DEAD PLANTS AND CREATING SPACE BETWEEN TREES AND SHRUBS CREATES A BUFFER FOR PROPERTY AND REDUCE POTENTIAL FUEL FOR FIRE.
- REMOVE ALL DEAD AND DYING PLANTS, GRASS, AND WEEDS.
- REMOVE DEAD OR DRY LEAVES AND PINE NEEDLES.
- TRIM TREES REGULARLY TO KEEP BRANCHES A MINIMUM OF 10 FEET FROM OTHER TREES.
- CREATE A SEPARATION BETWEEN TREES, SHRUBS, AND ITEMS THAT COULD CATCH FIRE, SUCH AS PATIO FURNITURE, WOOD PILES, SWING SETS, ETC.

ZONE 2 - REDUCED WILDLAND FUELS/THINNING ZONE

GOING OUTWARD FROM THE ZONE 1, REDUCE POTENTIAL FUEL WITHIN 100 FEET OR THE PROPERTY LINE. 100 FEET OF DEFENSIBLE SPACE IS REQUIRED BY LAW. PUBLIC RESOURCES CODE (PRC) 4291. THIS AREA IS DESIGNED TO REDUCE THE VOLUME OF FIRE THAT MAY IMPACT THE STRUCTURE THROUGH THE ELIMINATION OF SPECIFIC HIGH RISK VEGETATION AND THE SELECTIVE RETENTION OF FIRE RESISTIVE VEGEATION.

- CUT OR MOW ANNUAL GRASS DOWN TO A MAXIMUM HEIGHT OF FOUR INCHES.
- CREATE HORIZONTAL SPACE BETWEEN SHRUBS AND TREES.
  - SPACE BETWEEN SHRUBS:
    - FLAT OR MILD SLOPE (LESS THAN 20%): TWO TIMES THE HEIGHT OF THE SHRUB.
    - MILD TO MODERATE SLOPE (20 - 40%): FOUR TIMES THE HEIGHT OF THE SHRUB
- CREATE VERTICAL SPACE BETWEEN GRASS, SHRUBS AND TREES.
  - MAINTAIN SPACE BETWEEN THE LOWEST TREE BRANCHES AND THE GROUND OR SHRUBS.
  - REMOVE ALL TREE BRANCHES AT LEAST SIX FEET FROM THE GROUND.
  - ALLOW EXTRA VERTICAL SPACE BETWEEN SHRUBS AND TREES. LACK OF VERTICAL SPACE CAN ALLOW A FIRE TO MOVE FROM THE GROUND TO THE BRUSH TO THE TREETOPS LIKE A LADDER. THIS LEADS TO MORE INTENSE FIRE CLOSER TO YOUR HOME.
  - KEEP AT LEAST THREE TIMES THE HEIGHT OF ANY SHRUBS BETWEEN THE SHRUBS AND THE LOWEST BRANCHES OF TREES.
- REMOVE FALLEN LEAVES, NEEDLES, TWIGS, BARK, CONES, AND SMALL BRANCHES. (DUFF, MAY BE PERMITTED TO A DEPTH OF THREE INCHES).
- KEEP 10 FEET OF CLEARANCE AROUND EXPOSED WOOD PILES, DOWN TO BARE MINERAL SOIL, IN ALL DIRECTIONS.
- CLEAR AREAS AROUND OUTBUILDINGS AND PROPANE TANKS. KEEP 10 FEET OF CLEARANCE TO BARE MINERAL SOIL AND NO FLAMMABLE VEGETATION FOR AN ADDITIONAL 10 FEET AROUND THEIR EXTERIOR.

LEGEND

- FUEL MODIFICATION ZONE
- RIPARIAN AREAS
- USABLE BUILDING AREAS
- INTERIOR MANUFACTURER SLOPE
- STREET AREAS (CURB, GUTTER, SIDEWALK, ASPHALT, AND PARKWAY)
- PARK AREAS
- BUILDING SETBACK
  LOTS 102, 103, 104, 105: 40' FROM THE NORTH PROJECT BOUNDARY
  LOTS 3-5 & 12-14: 100' FROM PAD LIMITS
- RADIANT HEAT WALL

Source(s): Adkan Engineers (08-19-2025)

Figure 3-6

Not to Scale

Conceptual Fuel Modification Plan

- **Fuel Modification Zone 2**. Fuel Modification Zone 2 comprises areas within 30 feet and 100 feet of the structure in which measures shall be undertaken to reduce the volume of fire that may impact the structure. Within this zone, high risk vegetation shall be removed and fire resistive vegetation shall be selectively retained. Within this zone, the following requirements shall apply:
    - Annual grass shall be mowed or cut down to a maximum height of four inches.
    - Horizontal spaces shall be created between shrubs and trees, as follows:
        - Space between shrubs:
            - Flat or mild slope (less than 20%): Two times the height of the shrub.
            - Mild to moderate slope (20-40%): Four times the height of the shrub
            - Moderate to steep slope (greater than 40%): Six times the height of the shrub
        - Space between trees:
            - Flat or mild slope (less than 20%): 10 feet.
            - Mild to moderate slope (20-40%): 20 feet.
            - Moderate to steep slope (greater than 40%): 30 feet.
    - Vertical spaces shall be created between grass, shrubs and trees, as follows:
        - Maintain space between the lowest tree branches and the ground or shrubs.
        - Remove all tree branches at least six feet from the ground.
        - Allow extra vertical space between shrubs and trees. Lack of vertical space can allow a fire to move from the ground to the brush to the treetops like a ladder. This leads to more intense fire closer to your home.
        - Keep at least three times the height of any shrubs between the shrubs and the lowest branches of trees.
    - Fallen leaves, needles, twigs, bark, cones, and small branches shall be removed on a regular basis, and duff (decaying vegetative matter) may be permitted only to a maximum depth of three inches.
    - A minimum of 10 feet of clearance around exposed wood piles shall be maintained at all times, down to bare mineral soil, in all directions.
    - A minimum of 10 feet of clearance shall be maintained around any outbuildings and propane tanks. The 10-foot clearance area shall consist of bare mineral soil and no flammable vegetation shall be allowed for an additional 10 feet around their exterior.

3. Alternative Fuel Management

Several of the lots proposed as part of TTM 38927 would not be able to achieve the required minimum required 100-foot-wide FMZs, either because these lots are located in close proximity to proposed open space areas, or because there is insufficient width between these lots and the Project boundary. This condition occurs with proposed Lots 1, 30-31, 45, 58-59, 68, 74-98, 100-104, 133-134, 163-166, and 189 of proposed TTM 38927. For these lots, Fuel Modification Zones 0 through 2 shall be implemented to the extent feasible. In order to allow for reduced FMZs for these lots, radiant heat walls would be constructed at the edge of on-site open space areas and at the perimeter of the Project site, as conceptually depicted on Figure 3-6. The radiant heat walls would consist of either masonry block walls or tempered glass over masonry block walls, and would be constructed at a minimum height of six (6) feet.

E. Walls and Fences

A conceptual wall and fencing plan is included as part of TTM 38927, and is depicted on Figure 3-7, *Conceptual Wall and Fence Plan*. As shown, a retaining wall measuring up to five feet in height is proposed along the western boundary of the Project site (i.e., to the west of proposed Street G). In addition, geogrid walls measuring up to 15 feet in height are proposed at the headwalls where roadways are proposed to cross the existing drainages and where the Project's drainage would be discharged into the existing streams. In addition, six-foot-tall split-face block walls are proposed along the edges of certain residential lots where they abut proposed Streets A, D, E, and L, and along the site boundary in the northwestern and southwest portions of the Project site. Three-rail vinyl fencing is proposed along the west side of Street A to provide a separation between vehicular traffic and the proposed 10-foot-wide multi-purpose trail proposed along Street A. Six-foot-tall tubular steel fencing is proposed around the two proposed Extended Detention Basins (EDBs), along residential lots where they abut the existing drainages or existing off-site uses, along the western site boundary where residential uses are proposed, and at the back of lots abutting the proposed open space area in Lot 240. In addition, six-foot-tall vinyl fencing is proposed for each residential lot where other types of fencing is not proposed.

F. Utility Plan

Figure 3-8, *Conceptual Utility Plan*, depicts the Project's proposed water, sewer, and drainage improvements, which are described below.

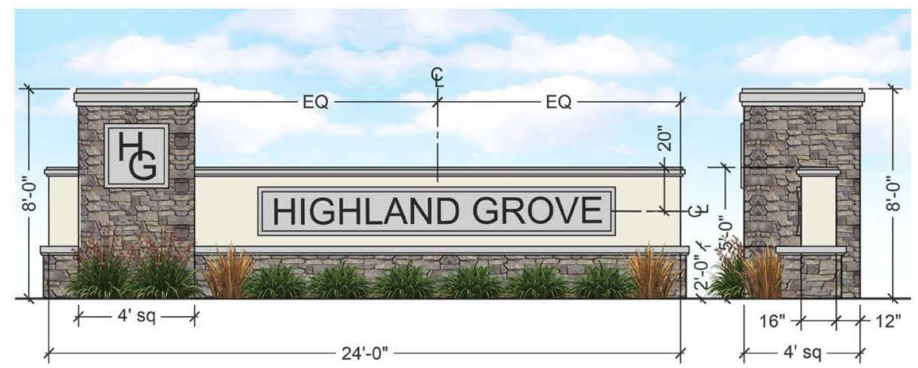
1. Water Plan

Water service to the proposed Project would be provided by the Western Municipal Water District (WMWD). As shown on Figure 3-8, under existing conditions there is an existing 8-inch water line within Travertine Drive to the north of the Project site. As part of the Project, an 8-inch water line would be constructed within Street A on and off site that would connect to the existing 8-inch water line within Travertine Drive. This 8-inch water line would connect to a proposed 18-inch water line that would provide a future connection to adjacent developments at the Project's southern boundary. A series of 8-inch water lines would be constructed within the remaining streets on site to provide water service to individual lots. It is anticipated that WMWD would construct a connection between the proposed on-site 18-inch water line and McAllister Street in the future, and that the WMWD ultimately would connect the proposed on-site 18-inch water line to the existing reservoir located to the east of the Project site; however, the proposed Project does not rely upon or require these additional water line improvements, and as such impacts associated with the construction of these off-site connections are not considered to be part of the Project evaluated within this EIR.

2. Sewer Plan

Sewer service to the proposed Project also would be provided by WMWD. As shown on Figure 3-8, under existing conditions there is an existing 8-inch sewer line within Travertine Drive to the north of the Project site. As part of the Project, a series of 8-inch sewer lines are proposed to be constructed within all of the

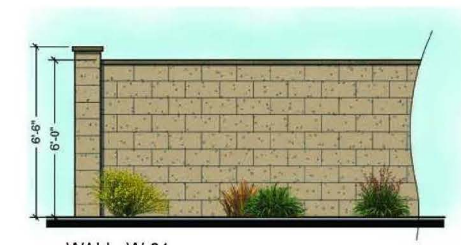




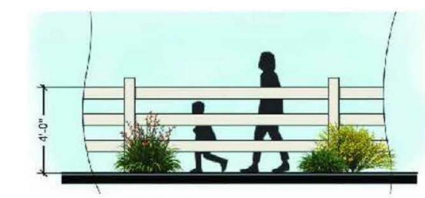
MONUMENT: W-10
8'-0" TALL NEIGHBORHOOD ENTRY MONUMENT
PRECAST SIGN W/ INSET LETTERS & STONE VENEER
POURED IN PLACE CONCRETE CAPS

WALL AND FENCE LEGEND	
CODE/SYMBOL	DESCRIPTION
W-01	6'-0" TALL SPLIT-FACE BLOCK WALL W/ PRECISION BLOCK CAP, COLOR TAN
W-02	6'-6" TALL SPLIT-FACE BLOCK PILASTER W/ PRECISION BLOCK CAP
W-03	3 RAIL VINYL FENCE, COLOR TAN
W-04	6-0" TALL INTERIOR VINYL FENCE, COLOR TAN
W-05	3-0" WIDE VINYL GATE, COLOR TAN
W-06	6'-0" TALL TUBULAR STEEL FENCE
W-07	6'-0" TALL TUBULAR STEEL MAINTENANCE GATE
W-08	6" CONCRETE MOW CURB
W-09	FOLDABLE BOLLARDS
W-10	NEIGHBORHOOD ENTRY MONUMENT

WALL AND FENCE ELEVATIONS



WALL: W-01
PILASTER: W-02,
6'-0" TALL SPLIT-FACE BLOCK WALL W/ PRECISION BLOCK CAP



FENCE: W-03
4' TALL 3 RAIL VINYL FENCE, COLOR TAN



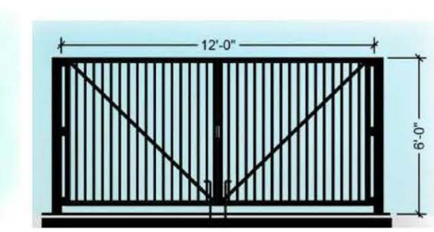
FENCE: W-04
6-0" TALL INTERIOR VINYL FENCE, COLOR TAN



GATE: W-05
3-0" WIDE VINYL GATE, COLOR TAN



FENCE: W-06
6'-0" TALL TUBULAR STEEL VIEW FENCE



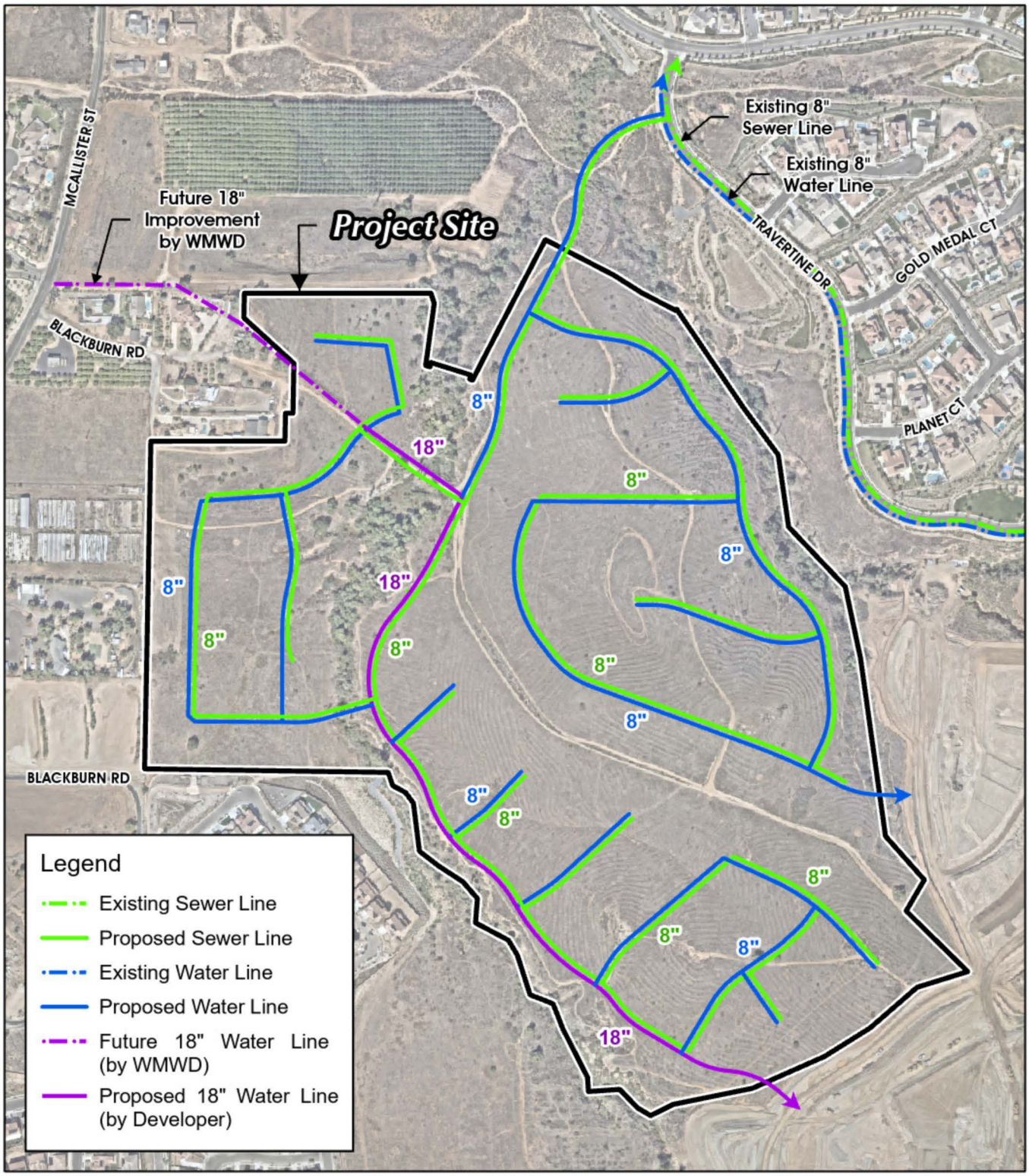
GATE: W-07
6'-0" TALL TUBULAR STEEL MAINTENANCE GATE

Source(s): BMLA (08-22-2025)

Not to Scale

Figure 3-7

Conceptual Wall and Fence Plan



Source(s): ESRI, Nearmap Imagery (October 2025), Adkan Engineers (March 2024)

Figure 3-8

0 150 300 600 Feet

Conceptual Utility Plan

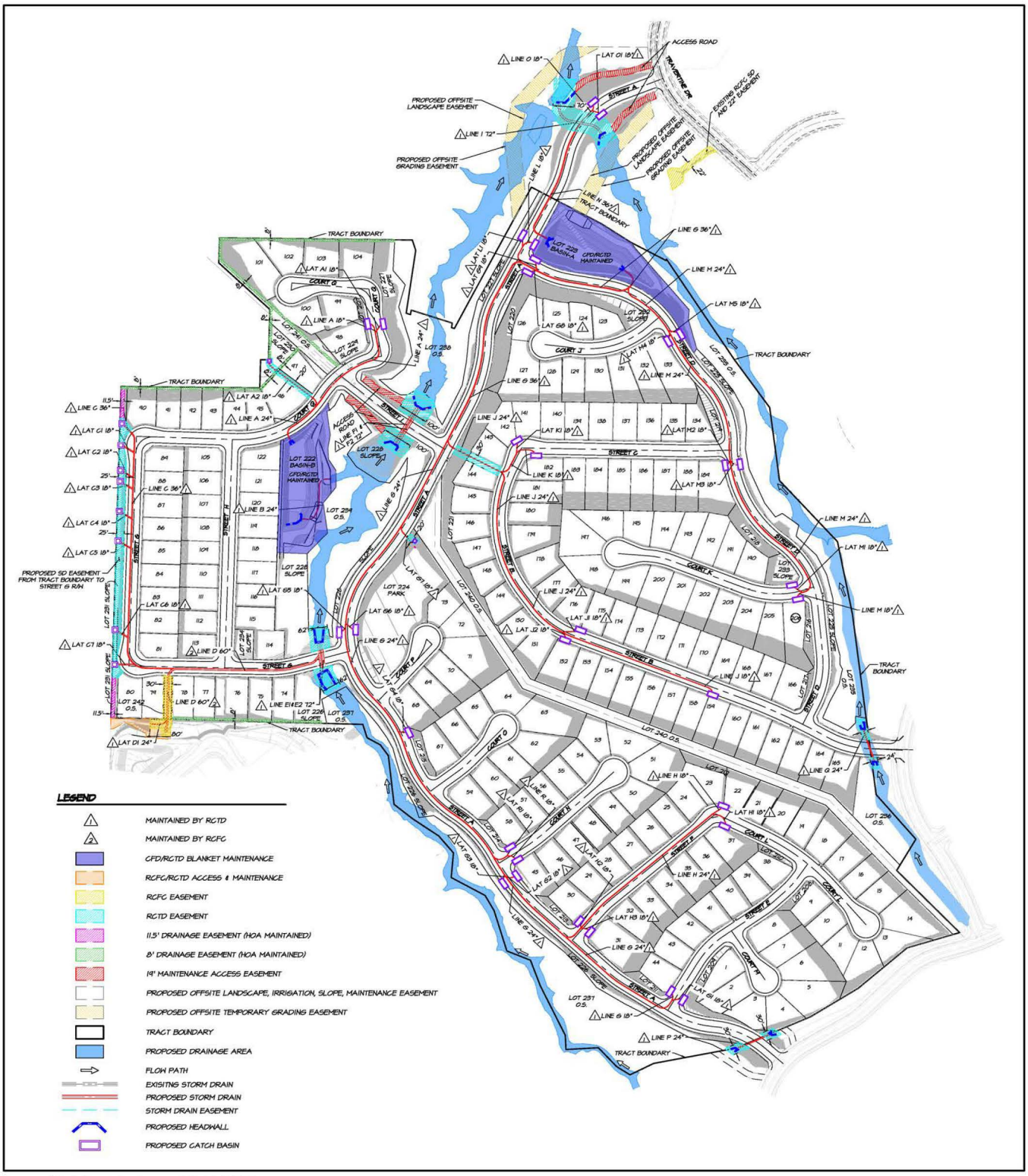
proposed roadways on site, and an 8-inch sewer line would be installed within Street A to connect to the existing sewer line within Travertine Drive. Sewer flows generated by the Project ultimately would be treated by the Riverside Water Quality Control Plant, located in the northwest portion of the City of Riverside, approximately 6.4 miles northwest of the Project site.

3. Drainage Plan

As shown on Figure 3-9, *Proposed Drainage Facilities and Maintenance Entities*, the Project generally would maintain the existing drainage patterns on the Project site, with the site continuing to drain in a generally northern direction. As proposed, a series of catch basins are proposed throughout the proposed on-site roadways. The Project's proposed storm drain system has been designed to route first flush runoff to one of two extended detention basins proposed in the western and northeastern portions of the Project site. The Project has been designed to mimic the pre-development hydrograph with the post-development hydrograph. The Project site is divided into two distinct drainage tributaries separated into a westerly and easterly drainage area. The portion of the Project site lying westerly of the existing tributary bisecting the Project site from the south to the north would be conveyed into one extended detention basin on the west side of the Project site which then would be conveyed northerly to a point of confluence at the northwest corner of the project boundary. The portion of the Project site lying easterly of the same bisecting tributary would conveyed into another extended detention basin located at near the northeast corner of the Project site which then would be conveyed northerly to a point of confluence at the same northeast corner of the Project site. This northwest location is the Project's single point of flows leaving from the Project site. (Adkan, 2025a, p. 9)

The Project site exhibits dense soil conditions and contains large areas of granitic bedrock, which inhibits the Project site's feasibility for infiltration. As such, excess volume generated by the additional impervious area that would result from the Project would be released downstream, as these flows cannot be contained onsite. Prior to the release of the excess volume, the expected storm flows would be detained within the proposed Extended Detention Basins (EDBs) and would be released at a rate that does not exceed the pre-development condition. Concerns were raised by Riverside County Flood Control and Water Conservation Department (RCFCWCD) of the downstream facilities require the mitigation of the 2-, 5-,10-, and 100-year storm events for the 1-,3-,6- and 24-year hour durations. The post-development flow rates were mitigated to not exceed the 100-year pre-development flow rate. (Adkan, 2025b, pp. 12, 17)

It should be noted that biotreatment is being utilized in lieu of bioretention because of the overall acreage of the Project site. Bioretention typically would be utilized in areas where infiltration is not feasible, such as the Project site; however, bioretention Drainage Management Areas (DMAs) are limited to 10 acres for their effectivity. Additionally, the Project's Hydrologic Conditions of Concern (HCOCs) require mitigation of the 100 year storm events (1, 3, 6, and 24 hour) as required by the RCFCWCD to eliminate any potential impacts to the downstream Harrison Dam. Utilizing a bioretention system as a detention facility for a project with a large tributary drainage acreage requires ponding in excess of 6" and results in increased maintenance and concerns of damage to the bioretention facilities given the large storm volumes and flow rates expected. Accordingly, EDBs utilizing biotreatment are being proposed for this Project as the most effective Best



Source(s): Adkan Engineers (12-11-2025)

Figure 3-9

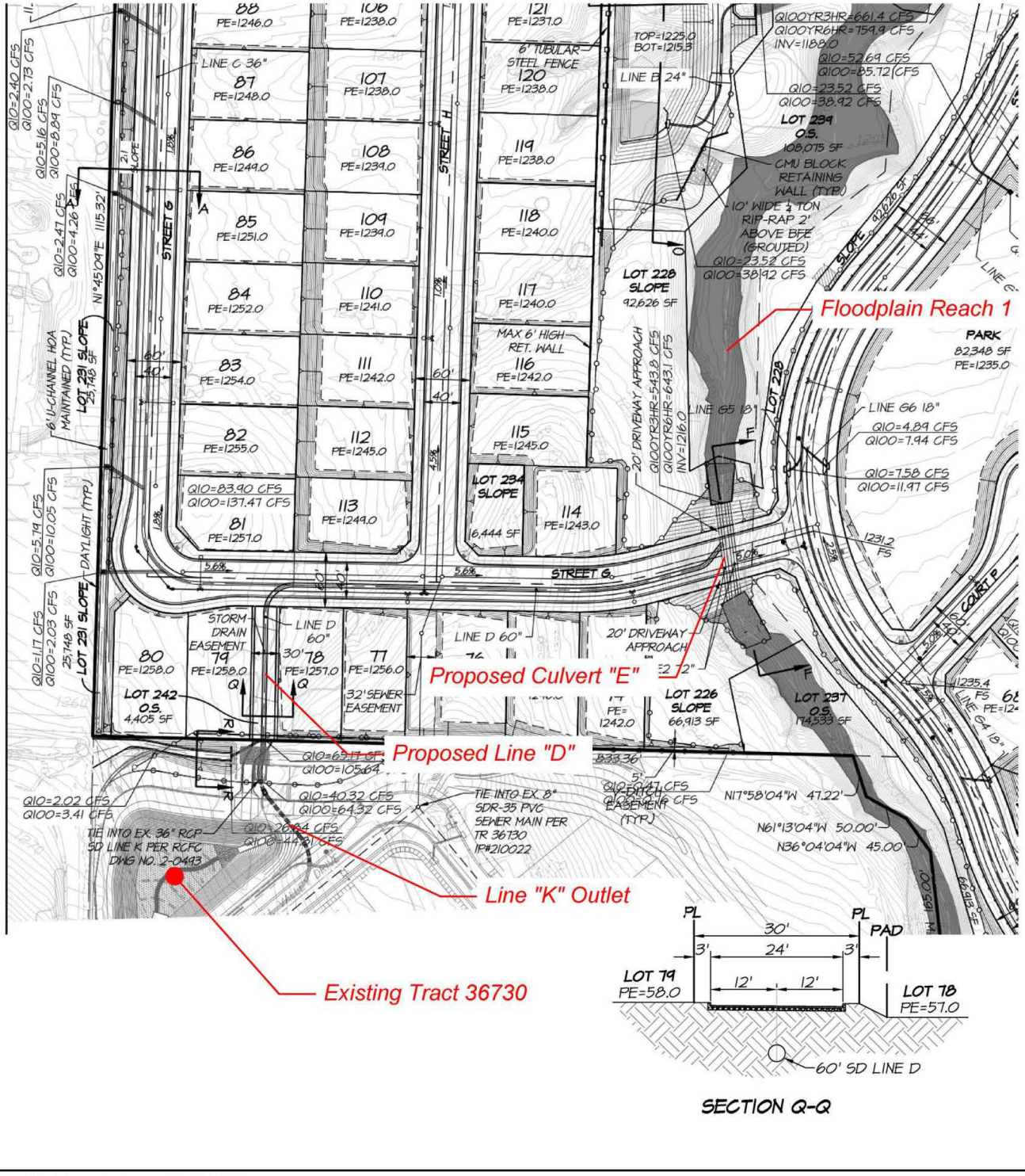
Not to Scale

Proposed Drainage Facilities and Maintenance Entities

Management Practice (BMP) available for treatment given the inability to infiltrate, having DMA's in excess of 10 acres, being able to utilize the BMP to mitigate the HCOC's, and to reduce the overall number of BMP's in turn reducing overall maintenance and repair costs burdened by Community Facilities District (CFD) for the perpetuity of the Project. The proposed drainage improvements and biotreatment have been designed to detain runoff and provide water quality treatment, and would reduce pollutants of concern in runoff leaving the Project site, such as bacterial indicators, metals, nutrients, pesticides, toxic organic compounds, sediments, trash/debris, and oil/grease (Adkan, 2025b, p. 12 and Table E.1)

As part of the Project grading for Extended Detention Basin "B," a retaining wall is proposed to be constructed at the southeast corner of the embankment. Figure 3-10, *Tract 36730 Line "K" Connection to Proposed Line "D"*, depicts the location of the retaining wall. At this location the existing flows from Line "K" (Tract 36730) confluence with the on-site flows. Line "K" is a run-on location where existing flows are conveyed into the Project site as a result existing storm drain constructed as part of Tract 36730. As part of the flood plain analysis, there were backwater effects observed from the existing location of the run-on tributary which resulted in the retaining wall being within the flood plain limits. The existing flows from Line "K" would be collected by the proposed Project and diverted into Culvert No. 1, and there would no longer be flows tributary to the Project site at this location; however, backwater effects still would occur. Therefore, the retaining wall was placed as far as possible from the effective flow area established for Flood Plain Reach No. 1 and a ten-foot-wide grouted quarter ton rip-rap berm has also been proposed at the base of the retaining wall to further protect the retaining wall from experiencing any erosive velocities during storm events. The extra width on the rip rap berm will also allow the rip-rap to launch should there be any additional scour experienced at this location. It was noted by the soils engineer that granitic bedrock was observed in a majority of the watercourses and was not susceptible to further erosion. The retaining wall would be maintained by a community facilities district through an access road and turn around per Riverside County Transportation Department Standards provided as part of the project.

There are three culvert crossings being proposed on site as part of the Project, as depicted on Figure 3-9. One of these culvert crossings would be located in the northerly existing drainage course and two of the culvert crossings would be located where the southerly existing drainage bisects the westerly portion of the Project site from south to north. The northerly water course crossing is proposed as a single 72" (Culvert 3) reinforced concrete pipe (RCP) culvert. The two other culvert crossing are proposed as dual 72" reinforced concrete pipe culverts (Culvert 1 and 2). These culvert crossing would allow the Project to provide access and utilities over the existing drainage courses. The culverts have been designed in accordance with the California Department of Fish and Wildlife (CDFW) requirements to have a minimum size of 72" for the purposes of providing a downstream and upstream connection for habitat and wildlife within the drainage corridor. This results in culverts larger than necessary to convey the actual flow experience by a 100-year storm event. The culverts also would contain the necessary headwalls, cutoff walls, and rip-rap energy dissipaters to reduce the storm flow velocities to a non-erosive level protecting the downstream drainage courses.



Source(s): Adkan Engineers (09-05-2025)

Figure 3-10

Not to Scale

Tract 36730 Line "K" Connection to Proposed Line "D"

Project-related drainage improvements would be maintained by either the Riverside County Transportation Department (RCTD), RCFCWCD, and/or a Community Facilities District (CFD). Table 3-2, *Maintenance Entities for Project-Related Drainage Improvements*, provides a summary of the maintenance entities anticipated for Project-related drainage improvements, which also are depicted on Figure 3-9.

3.5.4 Agricultural Preserve Diminishment No. 240006 (APD 240006)

The Project site comprises a portion of the El Sobrante Agricultural Preserve No. 1 and previously was under an active Williamson Act contract. A Notice of Nonrenewal previously was filed in 1982 to remove the Project site from the Williamson Act Contract, and as of 1992 the property no longer is subject to a Williamson Act Contract. Under existing conditions, the Project site continues to be located within El Sobrante Agricultural Preserve No. 1. Agricultural Preserve Diminishment No. 240006 (APD 240006) is proposed to authorize the diminishment of El Sobrante Agricultural Preserve No. 1, Map No. 18 to remove the 111.6-acre property from El Sobrante Agricultural Preserve No. 1. Because a Notice of Non-Renewal previously was filed for the property and because the property is no longer subject to a Williamson Act Contract, APD 240006 only would remove the property from Agricultural Preserve No. 1, Map No. 18.

3.6 Project Construction and Operational Characteristics

3.6.1 Construction Details

A. Proposed Physical Disturbance

As depicted on Figure 3-11, *Proposed Limits of Physical Disturbance*, areas that would be subject to physical disturbance as part of the Project include approximately 100.25 acres of the 111.6-acre Project site, with approximately 11.35 acres preserved as open space. Off-site impacts associated with the Project would encompass approximately 2.61 acres, including the proposed extension of Street A to Travertine Drive and the off-site portions of Street A along the southern boundary of the Project site.

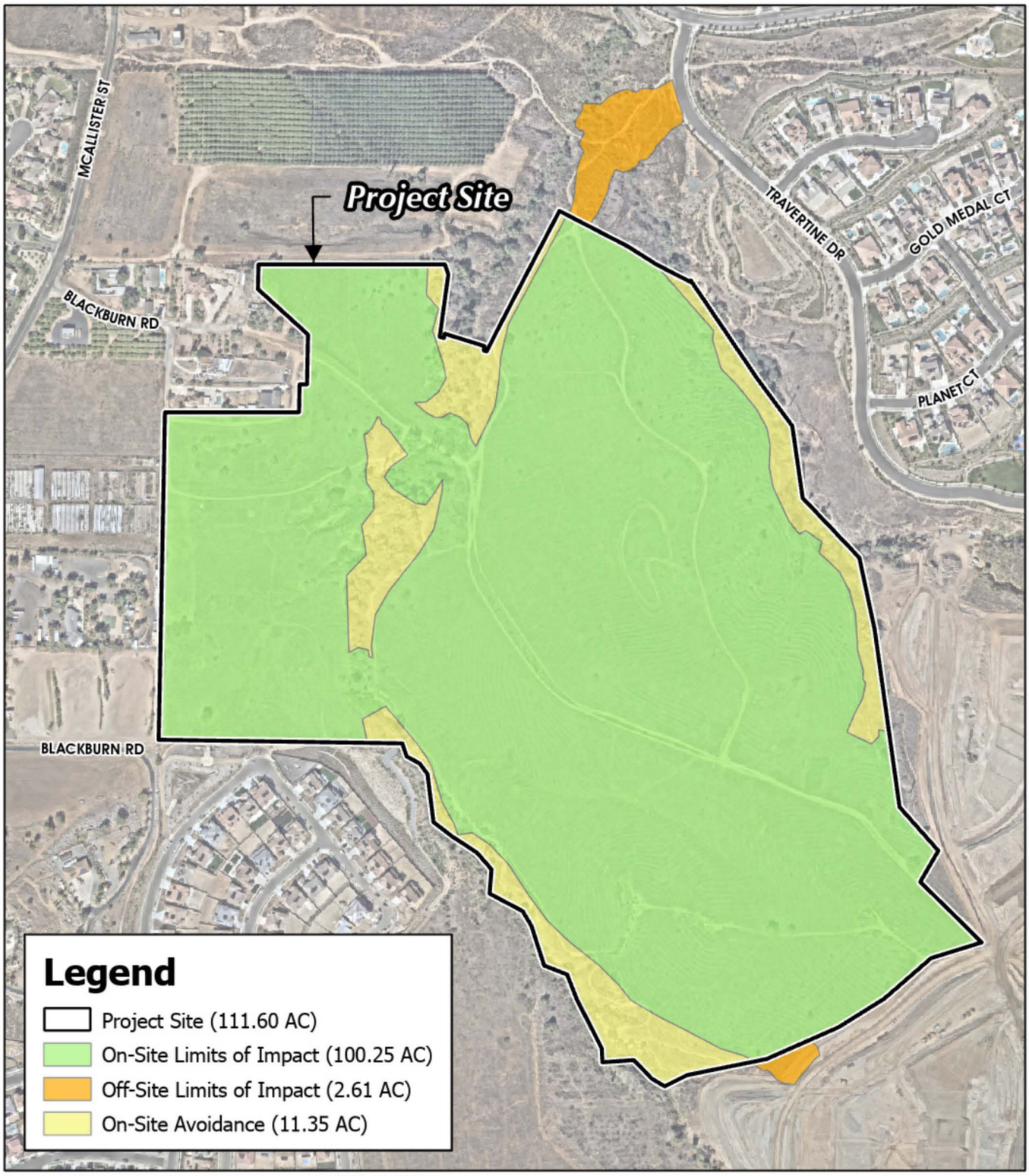
B. Construction Schedule and Equipment

Table 3-3, *Estimated Construction Schedule*, provides a summary of each phase of the anticipated construction activities. As shown, construction activities associated with the Project are anticipated to commence in September 2025, and full buildout of the Project is anticipated to be complete by October 2026. While it is possible that construction activities could occur later than anticipated, the construction schedule evaluated throughout this EIR represents a "worst case" assessment of potential construction-related impacts since air quality emission factors for construction decreases as time passes and the analysis year increases due to emission regulations becoming more stringent and the phasing out of older, more polluting equipment[1]. Table 3-4, *Anticipated Construction Equipment*, provides a summary of the construction equipment anticipated to be used during construction of the proposed Project. Consistent with industry standards and typical construction

[1] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Table 3-2 Maintenance Entities for Project-Related Drainage Improvements

Storm Drain Facility	Maintenance Entity	Facility Size
Storm Drain Line "A"	Riverside County Transportation Dept.	24”
Storm Drain Line "A1"	Riverside County Transportation Dept.	18”
Storm Drain Line "A2"	Riverside County Transportation Dept.	18”
Storm Drain Line "B"	Riverside County Transportation Dept.	24”
Storm Drain Line "C"	Riverside County Transportation Dept.	36”
Storm Drain Line "D"	Riverside County Flood Control	60”
Storm Culvert Line "E1"	Riverside County Transportation Dept.	72”
Storm Culvert Line "E2"	Riverside County Transportation Dept.	72”
Storm Culvert Line "F1"	Riverside County Transportation Dept.	72”
Storm Culvert Line "F2"	Riverside County Transportation Dept.	72”
Storm Drain Line "G"	Riverside County Transportation Dept.	36”
Storm Drain Line "G2"	Riverside County Transportation Dept.	18”
Storm Drain Line "G3"	Riverside County Transportation Dept.	18”
Storm Drain Line "G4"	Riverside County Transportation Dept.	18”
Storm Drain Line "G5"	Riverside County Transportation Dept.	18”
Storm Drain Line "G6"	Riverside County Transportation Dept.	18”
Storm Drain Line "G7"	Riverside County Transportation Dept.	18”
Storm Drain Line "G8"	Riverside County Transportation Dept.	18”
Storm Drain Line "G9"	Riverside County Transportation Dept.	18”
Storm Drain Line "H"	Riverside County Transportation Dept.	24”
Storm Drain Line "H1"	Riverside County Transportation Dept.	18”
Storm Drain Line "H2"	Riverside County Transportation Dept.	18”
Storm Drain Line "H3"	Riverside County Transportation Dept.	18”
Storm Culvert Line "I"	Riverside County Transportation Dept.	72”
Storm Drain Line "J"	Riverside County Transportation Dept.	24”
Storm Drain Line "J1"	Riverside County Transportation Dept.	18”
Storm Drain Line "J2"	Riverside County Transportation Dept.	18”
Storm Drain Line "K"	Riverside County Transportation Dept.	18”
Storm Drain Line "K1"	Riverside County Transportation Dept.	18”
Storm Drain Line "L"	Riverside County Transportation Dept.	18”
Storm Drain Line "L1"	Riverside County Transportation Dept.	18”
Storm Drain Line "M"	Riverside County Transportation Dept.	24”
Storm Drain Line "M1"	Riverside County Transportation Dept.	18”
Storm Drain Line "M2"	Riverside County Transportation Dept.	18”
Storm Drain Line "M3"	Riverside County Transportation Dept.	18”
Storm Drain Line "M4"	Riverside County Transportation Dept.	18”
Storm Drain Line "M5"	Riverside County Transportation Dept.	18”
Storm Drain Line "N”	Riverside County Transportation Dept.	36”
Storm Drain Line "O"	Riverside County Transportation Dept.	18”
Storm Drain Line "O1"	Riverside County Transportation Dept.	18”
Storm Drain Line "P"	Riverside County Transportation Dept.	24”
Storm Drain Line "Q"	Riverside County Transportation Dept.	24”
Storm Drain Line "R"	Riverside County Transportation Dept.	18”
Storm Drain Line "R1"	Riverside County Transportation Dept.	18”
Storm Basin "A"	Community Facilities District	N/A
Storm Basin "B"	Community Facilities District	N/A
Retaining Wall Basin “B”	Community Facilities District	N/A



Source(s): ESRI, Nearmap Imagery (October 2025), FCS (April 2025)

Figure 3-11

Proposed Limits of Physical Disturbance

Table 3-3 Estimated Construction Schedule

Construction Activity		Start Date	End Date	Working Days
Project	Site Preparation	9/1/2025	10/1/2025	23
	Grading	10/1/2025	4/1/2026	130
	Building Construction	4/1/2026	6/30/2028	587
	Paving	4/1/2026	6/30/2028	587
	Architectural Coating	6/1/2027	6/30/2028	284
Off-Site Improvements	Linear, Grubbing & Land Clearing	4/1/2026	4/14/2026	10
	Linear, Grading & Excavation	4/17/2026	6/18/2026	45
	Linear, Drainage, Utilities, & Sub-Grade	6/19/2026	7/30/2026	30
	Linear, Paving	7/31/2026	9/10/2026	15
	Linear, Trenching	9/11/2026	10/1/2026	10

(Urban Crossroads, 2025, Table 3-3)

Table 3-4 Anticipated Construction Equipment

Construction Activity		Equipment[1]	Amount	Hours Per Day
Project	Site Preparation	Rubber Tired Dozers	8	8
		Crawler Tractors	10	8
	Grading	Graders	2	8
		Excavators	1	8
		Scrapers	8	8
		Rubber Tired Dozers	1	8
		Crawler Tractors	3	8
	Building Construction	Forklifts	3	8
		Generator Sets	2	8
		Cranes	1	8
		Welders	2	8
		Tractor/Loader/Backhoes	5	8
	Paving	Pavers	2	8
		Paving Equipment	2	8
		Rollers	2	8
	Architectural Coating	Air Compressors	1	8
Off-Site Improvements	Linear, Grubbing & Land Clearing	Excavators	1	8
		Tractors/Loaders/Backhoes	1	8
		Other Construction Equipment	1	8
	Linear, Grading & Excavation	Excavators	1	8
		Tractors/Loaders/Backhoes	1	8
		Other Construction Equipment	1	8

Construction Activity		Equipment[1]	Amount	Hours Per Day
	Linear, Drainage, Utilities, & Sub-Grade	Excavators	1	8
		Tractors/Loaders/Backhoes	1	8
		Other Construction Equipment	1	8
	Linear, Paving	Excavators	1	8
		Tractors/Loaders/Backhoes	1	8
		Other Construction Equipment	1	8
	Linear, Trenching	Excavators	1	8
		Tractors/Loaders/Backhoes	1	8
		Other Construction Equipment	1	8

(Urban Crossroads, 2025, Table 3-4)

practices, each piece of equipment listed in Table 3-4 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the construction-related timing restrictions established by Section 2 of Riverside County Ordinance No. 847 (Regulating Noise).

C. *Construction-Related Blasting*

Portions of the Project site are underlain by non-rippable bedrock materials that are not conducive to standard grading techniques. In these areas, it is anticipated that blasting would be required during grading in order to break up the existing bedrock. A blasting contractor would be required to complete all blasting-related activities in compliance with applicable regulations of the Riverside County Sheriff's Department, the U.S. Bureau of Mines, the California Division of Occupational Safety and Health (Cal-OHSA), the Department of Homeland Security, and the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). As required by law a licensed blasting contractor would be responsible for performing and supervising all blasting activities, including the following:

- Drill pattern design;
- Pre-blast inspection;
- Loading of explosives;
- Pre-blast notifications and warning signaling;
- Blasting safety procedures;
- Blasting site security;
- Post-blast inspections and re-entry procedures; and
- Blast log and history.

Explosives used for blasting usually consist of a primer, secondary explosive, and an initiator. The blasting contractor would most likely use a high explosive Ammonia Gelatin as a primer for each shot and ammonium nitrate mixed with fuel oil (ANFO) as the primary blasting agent. Nonelectric blasting caps are typically used to initiate the blasting agent. The charges are time delayed by at least 8-milliseconds. Delays between charges are used to decouple changes and reduce vibration.

Pattern blasting is a common technique used in blasting for construction. This method is used when rock materials occur over a wide area. Pattern blasting involves drilling holes in a pre-designed pattern. The depth and spacing of holes is controlled to provide the maximum fracture with the minimum amount of ground shaking.

Blasting patterns typically consist of drill holes between two and five inches in diameter. Depth of the drill holes would be determined by the blasting contractor and is specific to each application. Blasting patterns on construction sites typically range from three feet by three feet to 12 feet by 12 feet.

The Blasting Engineer would control blasting-induced vibration and noise. General control measures include:

- Stemming shall be of uniform size in order to ensure consistency between individual shots;
- The weight of explosives used per delay shall be determined by adherence to the Scaled Distance Equation;
- Independent delays shall be used for each blast hole to control vibration; and
- Blasting shall not take place when wind velocity equals or exceeds 15 miles per hour. A licensed blasting contractor will determine wind speed through the use of a recording anemometer located a minimum of ten feet above ground level.

In addition, ground vibrations and air overpressure shall be monitored during each blast for compliance with the limits by the U.S. Bureau of Mines. Following each blast, seismographs shall be checked to ensure that the blasting has not exceeded relevant standards. The relevant standards are as follows:

- Pursuant to 30 CFR Ch. VII, § 816.67(b)(1)(i) of U.S. Bureau of Mines publication RI8485, airblasts shall not exceed 133 dB at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area.
- Pursuant to 30 CFR Ch. VII, § 816.67(d)(2)(i) of U.S. Bureau of Mines publication RI8508, the maximum ground vibration shall not exceed the limits in said section at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area.

No rock crushing activities are anticipated for the proposed Project. Refer to EIR Subsection 4.13, *Noise*, for additional discussion and an evaluation of potential noise impacts related to blasting activities during construction.

3.6.2 Operational Characteristics

The proposed Project would be operated as a rural residential community. As such, typical operational characteristics include residents and visitors traveling to and from the site, leisure and maintenance activities occurring on individual residential lots, and general maintenance of common areas. Low levels of noise and low levels of artificial exterior lighting typical of a rural residential community are expected. Lighting associated with the Project would be subject to compliance with County of Riverside Ordinance Nos. 655 and

915. Ordinance No. 655 would require the use of low-pressure sodium lamps and the shielding of all nonexempt outdoor lighting fixtures. Ordinance No. 915 requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the Project boundaries or onto the public right-of-way.

A. Future Population

Implementation of the Project would result in a total of 206 single-family homes. According to Appendix E to the Riverside County General Plan, the average household size in the LMWAP area for residential development is 3.34 persons per household (pph). Accordingly, the Project is anticipated to result in a future population on site of approximately 688 persons (206 households x 3.34 persons/household = 688.04 persons). (Riverside County, 2021a, Appendix E, Table E-2)

B. Future Traffic

1. Project Trip Generation

A Project-specific Traffic Analysis (herein, "TA), which is included with this EIR as *Technical Appendix K2,* was prepared for the proposed Project by Urban Crossroads, Inc. As discussed in the Project's TA, in order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the Single Family Detached Residential (ITE Land Use Code 210) were utilized. The trip generation summary for the Project is shown in Table 3-5, *Trip Generation Summary*. As shown, the Project is anticipated to generate 1,944 two-way trip-ends per day with 144 AM peak hour trips and 194 PM peak hour trips. (Urban Crossroads, 2024f, p. 35)

Table 3-5 Trip Generation Summary

			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Highland Grove Vistas 4 (TTM No. 38927)	206	DU	37	107	144	122	72	194	1,944

[1] DU = Dwelling Units

(Urban Crossroads, 2024f, Table 4-1)

2. Project Trip Distribution and Assignment

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. Based on the identified Project traffic generation and trip distribution patterns, the Project's traffic distribution and peak hour intersection turning movement volumes are shown on the following exhibits of the Project's TA (*Technical Appendix K2*):

- Exhibit 4-1: Project Trip Distribution; and

- Exhibit 4-2: Project Only Traffic Volumes

C. *Water Demand*

According to water demand estimates used in Riverside County EIR No. 521 (SCH No. 2009041065), which was prepared in conjunction with the County's 2015 update to the General Plan, residential uses within the County are anticipated to result in a demand for approximately 1.01 acre-feet per year (AFY) per dwelling unit, or approximately 902 gallons per day (gpd). The water demand rates identified by EIR No. 521 reflect the County's standard estimate for water demand by use type within the County. Thus, the Project is expected to result in a demand for approximately 208.1 AFY (206 dwelling units x 1.01 AFY/dwelling unit = 208.06 AFY), or approximately 185,780 gpd. (Riverside County, 2015a, Table 4.19-BI)

D. *Wastewater Generation*

According to wastewater generation estimates used in Riverside County EIR No. 521, residential uses within the County are anticipated to result in the generation of approximately 230 gallons per day (gpd) of wastewater per dwelling unit. The wastewater demand rates identified by EIR No. 521 reflect the County's standard estimate for wastewater generation by use type within the County. Thus, the Project is expected to result in the generation of approximately 47,380 gpd of wastewater requiring treatment (206 dwelling units x 230 gpd/dwelling unit = 47,380 gpd). (Riverside County, 2015a, Table 4.19-BJ)

3.7 SUMMARY OF REQUESTED ACTIONS

Riverside County has primary approval responsibility for the proposed Project. As such, Riverside County serves as the Lead Agency for this EIR pursuant to CEQA Guidelines § 15050. The role of the Lead Agency was previously described in detail in Section 1.0 of this EIR. As part of the approval process for the proposed Project, the County's Planning Commission will hold a public hearing to consider this EIR and the Project's applications for General Plan Amendment No. 240072(GPA 240072), Change of Zone No. 2400026 (CZ 2400026), Tentative Tract Map No. 38927 (TTM 38927), and Agricultural Preserve Diminishment No. 240006 (APD 240006). The Planning Commission will make advisory recommendations to the Board of Supervisors on whether to approve, approve with changes, or deny GPA 240072, CZ 2400026, TTM 38927, and APD 240006, and whether to certify this EIR. A public hearing will then be held before the Board of Supervisors, which will consider the information contained in the Project's EIR and the EIR's Administrative Record in its decision-making processes, will certify or decline to certify this EIR, and will tentatively approve, tentatively approve with changes, or deny approval of proposed GPA 240072, CZ 2400026, and TTM 38927, and will approve, approve with changes, or deny approval of APD 240006. Following tentative approval of GPA 240072, CZ 2400026, and TTM 38927, the Board of Supervisors will then hold a hearing for the second reading of the Project's rezone ordinance. Additionally, the Project's GPA 240072 subsequently will be considered by the Riverside County Board of Supervisors as part of their quarterly General Plan "batch" hearing, which is required for final approval of GPA 240072, CZ 2400026, and TTM 38927.

3.8 Related Environmental Review and Consultation

Following approval of the Project, ministerial actions also would be necessary to implement the proposed Project. These include, but are not limited to, grading permits, building permits, encroachment permits/road improvements, drainage infrastructure improvements, stormwater permits (NPDES), and State resource agency permits. Table 3-6, *Matrix of Project Approvals/Permits*, lists the agencies that are expected to use this EIR and provides a summary of the subsequent actions associated with the Project. This EIR covers all federal, State, and local government approvals which may be needed to construct or implement the Project, whether explicitly noted in Table 3-6 or not (State CEQA Guidelines §15124(d))

Table 3-6 Matrix of Project Approvals/Permits

Public Agency	Approvals and Decisions
County of Riverside Discretionary Approvals	
Riverside County Planning Commission	• Provide recommendations to the Riverside County Board of Supervisors regarding certification of this Project EIR. • Provide recommendations to the Riverside County Board of Supervisors whether to approve, conditionally approve, or deny General Plan Amendment No. 240072, Change of Zone No. 2400026, and Tentative Tract Map No. 38927.
Riverside County Board of Supervisors	• Tentatively Approve, tentatively approve with conditions, or deny approval of proposed Tentative Tract Map No. 38927. • Tentatively approve by ordinance or deny Change of Zone No. 2400026. • Tentatively approve by resolution or deny General Plan Amendment No. 240072. • Reject or certify this EIR along with appropriate CEQA findings. • Adopt a Statement of Overriding Considerations. • Approve by resolution General Plan Amendment No. 240072 as part of a General Plan Amendment "batch" hearing.
Subsequent Riverside County Approvals	
Riverside County Subsequent Implementing Approvals: Planning Department and/or Building & Safety	• Record Final Map(s). • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits.
Other Agencies – Subsequent Approvals and Permits	
Santa Ana Regional Water Quality Control Board (RWQCB)	• Issuance of a Construction Activity General Construction Permit. • Compliance with National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements. • Issuance of a Waste Discharge Requirements (WDR) pursuant to Section 401 of the Clean Water Act (CWA).
California Department of Fish and Wildlife (CDFW)	• Issuance of a Streambed Alteration Agreement (SAA) pursuant to Section 1602 of the California Fish and Game Code.
Riverside County Flood Control and Water Conservation District (RCFCWCD)	• Approval of proposed drainage infrastructure
Western Municipal Water District (WMWD)	• Approval of proposed water and sewer connections and improvements
Southern California Edison (SCE)	• Approval of electrical system connections.
Western Riverside County Regional Conservation Authority (RCA)	• Approval of the Project's Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

4.0 Environmental Analysis

4.0.1 Summary of EIR Scope

In accordance with California Environmental Quality Act (CEQA) Guidelines Sections 15126-15126.4, this EIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively-considerable impacts that could occur from planning, constructing, and operating the proposed Project.

In compliance with the procedural requirements of CEQA, a Notice of Preparation (NOP) was prepared and distributed for a 30-day public review period on May 20, 2024, in accordance with State CEQA Guidelines Section 15082. An Initial Study was not prepared for the Project, and as such the NOP indicated that the required EIR will evaluate all of the topics listed in Appendix G to the State CEQA Guidelines, as implemented by Riverside County and the County's standard Environmental Assessment (EA) Form. Public comment on the scope consisted of written comments received by the Riverside County in response to the NOP issued for this EIR. A publicly-noticed Scoping Session also was held as part of a Riverside County Planning Director's Hearing on June 3, 2024 at the Riverside County Administrative Building (4080 Lemon Street, Riverside, CA 92501), although no comments resulting in an expansion of the scope of the EIR were provided as part of the Scoping Session. Pursuant to Appendix G to the State CEQA Guidelines and the County's standard EA form, this EIR evaluates 21 primary environmental subject areas, as listed below. Each Subsection evaluates several specific subject matters related to the general topic of the Subsection. The title of each Subsection is not limiting; therefore, refer to each Subsection for a full account of the subject matters addressed therein.

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forest Resources	4.13	Noise
4.3	Air Quality	4.14	Paleontological Resources
4.4	Biological Resources	4.15	Population and Housing
4.5	Cultural Resources	4.16	Public Services
4.6	Energy	4.17	Recreation
4.7	Geology and Soils	4.18	Transportation
4.8	Greenhouse Gas Emissions	4.19	Tribal Cultural Resources
4.9	Hazards and Hazardous Materials	4.20	Utilities and Service Systems
4.10	Hydrology and Water Quality	4.21	Wildfire
4.11	Land Use and Planning		

4.0.2 Scope of Cumulative Effects Analysis

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in State CEQA Guidelines § 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "[A] cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (State CEQA Guidelines §15130(a)(1)). As defined in State CEQA Guidelines § 15355:

'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

State CEQA Guidelines § 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: 1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency ('the list of projects approach'), or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact ('the summary of projections approach').

The summary of projections approach is used in this EIR, except for the evaluation of near-term vehicular traffic-related noise impacts, which relies instead on the list of projects approach. This methodology was determined to be appropriate by Riverside County because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effects for all subject areas, with exception of vehicular-related noise effects, which require a greater level of detailed study.

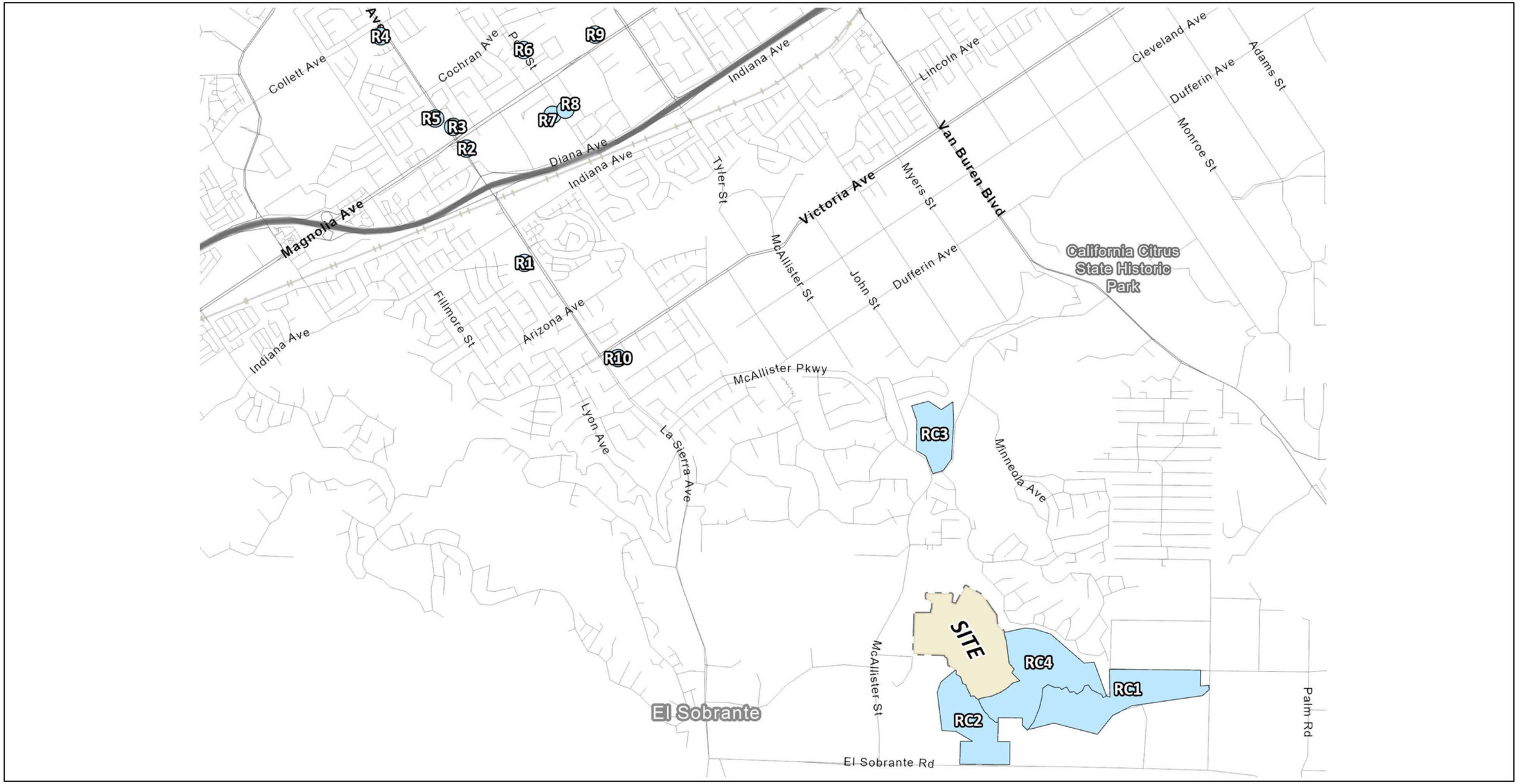
Under this approach, the cumulative analysis under most sections considers impacts to each issue area based on the presumed buildout of the Riverside County General Plan as well as the general plans of any nearby jurisdictions that occur within the cumulative study area for each subject area. For most issue areas, this would encompass nearby areas within unincorporated Riverside County and nearby portions of the City of Riverside, although the cumulative study area may be smaller or larger depending on the issue area under evaluation. For example, for the issue area of aesthetics, the cumulative study area is defined by the Project's viewshed (i.e., off-site areas with views of the Project site), which encompasses lands within the immediate Project vicinity (i.e., within approximately two miles of the Project site). For the issue of hydrology and water quality, by contrast, the cumulative study area is defined as the Santa Ana River Watershed, which encompasses portions of San Bernardino, Riverside, Orange, and Los Angeles Counties. For the issue of biology, the cumulative study area corresponds to the boundaries of the Western Riverside County Multiple Habitat Species Conservation Plan (MSHCP), as the MSHCP provides for the conservation of a wide variety of special status plant and animal species and encompasses a broad region that generally represents biological conditions associated with the Project area; thus, the cumulative study area for biological resources includes all future land uses within western Riverside County as called for by the general plans of the County and the various cities that are included in the MSHCP region. Refer to the individual Subsections within EIR Section 4.0 for a description of the specific cumulative study area used for each subject area evaluated in this EIR.

As noted, for most issue areas, nearby portions of unincorporated Riverside County and nearby portions of the City of Riverside are used as the Project's cumulative study area. This cumulative study area encompasses a large area surrounding the Project site that has similar environmental characteristics as the Project area. This area generally contains a variety of residential, light industrial, and commercial land uses, with portions of the area comprising undeveloped lands and open space. This study area exhibits similar characteristics in terms of climate, geology, and hydrology. This study area also encompasses the service areas of the Project site's primary public service and utility providers. Areas outside of this study area either exhibit topographic, climatological, or other environmental circumstances that differ from those of the Project area, or are simply too far from the proposed Project site to produce environmental effects that could be cumulatively considerable.

The analysis of cumulatively-considerable traffic-related impacts to noise uses a combined approach, utilizing the list of projects approach for the near-term analysis of cumulatively-considerable impacts, and the summary of projections approach for the evaluation of long-term cumulatively-considerable impacts. With the combined approach, the cumulative impact analysis for the analysis of traffic-related impacts to noise overstates the Project's (and Project-related components') potential cumulatively-considerable impacts as compared to an analysis that would rely solely on the list of projects approach or solely on the summary of projections approach; therefore, the combined approach provides a conservative, "worst-case" analysis for cumulative traffic-related noise impacts.

For near-term conditions, the analysis of cumulatively-considerable vehicular-related noise impacts is based on existing traffic conditions plus ambient growth and the manual addition of traffic from past, present, and reasonably foreseeable projects, and includes approved and pending development projects in proximity to the Project site that would contribute traffic to the same transportation facilities as the Project, as well as large, traffic-intensive projects farther from the Project site that have the potential to affect regional transportation facilities. This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or State highway system facilities as the proposed Project and have the potential to be made fully operational in the foreseeable future. As shown on Table 4.0-1, *Cumulative Projects List*, and as depicted on Figure 4.0-1, *Cumulative Development Location Map*, the near-term cumulative impact analysis of traffic-related noise impacts includes 14 other past, present, and reasonably foreseeable projects within this study area in addition to the summary of projections (Urban Crossroads, 2024f, Table 4-2). The analysis of long-term cumulatively-considerable traffic impacts considers full buildout of nearby portions of unincorporated Riverside County and the City of Riverside, based on the general plan land use plans for these jurisdictions.

For the issue of air quality, the cumulative study area comprises the South Coast Air Basin (SCAB), while the cumulative impact analysis relies on guidance from the South Coast Air Quality Management District (SCAQMD). The SCAQMD published a report giving direction on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD, 2003). In this report the AQMD states on page D-3:



Source(s): Urban Crossroads (08-15-2024)

Not to Scale

Figure 4.0-1

Cumulative Development Location Map

Table 4.0-1 Cumulative Projects List

ID#	Project/Location	Land Use	Quantity	Units[1]
County of Riverside:				
RC1	PM37227	Single Family Residential	9	DU
RC2	Highland Grove II (TTM No. 38910)	Single Family Residential	128	DU
RC3	TTM38520	Single Family Residential	45	DU
RC4	Greentree (TTM No. 38605)	Single Family Residential	163	DU
City of Riverside:				
R1	P13-0165, P13-0166, P13-0167, P13-0168	Gas Station w/ Car Wash	16.0	AC
R2	P18-0600	Retail/Restaurant w/ Drive Thru	4.494	TSF
R3	PR-2021-001151	Apartment Units & Dental Office	8.139	TSF
R4	P19-0410, P19-0411, P19-0412	Single Family Residential	34	DU
R4	PR-2023-001476	Coffee Shop w/ Drive Thru (Starbucks)	2,300	TSF
R6	P18-0396, P18-0370	Multi-Family Residential	57	DU
R7	PR-2021-000713	Hospital Tower Expansion	318.433	TSF
R8	PR-2022-001468	Multi-Family Residential	38	DU
R9	PR19-0863	Multi-Family Residential Commercial Retail	450 9,000	DU TSF
R10	P14-0176	Single Family Residential	14	DU

1. AC = Acres, TSF = Thousand Square Feet; DU = Dwelling Unit.

> *"...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

The cumulative analysis provided in EIR Subsection 4.3 assumes that individual projects that do not generate emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the South Coast Air Basin (SCAB) is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related emissions that exceed SCAQMD thresholds for Project-specific impacts would be considered cumulatively considerable.

Compliance with the SCAQMD guidelines for evaluating direct and cumulatively-considerable impacts due to air quality emissions has been shown to result in a demonstrable reduction in air quality pollutants within

the SCAB. Regulations promulgated by the SCAQMD have led to a dramatic reduction in the level of air quality pollutants within the SCAB, including levels of ozone, particulate matter (PM_{10} and $PM_{2.5}$), carbon monoxide (CO), and oxides of nitrogen (NO_X). As noted in the SCAQMD 2016 AQMP, "the remarkable historical improvement in air quality since the 1970s is the direct result of Southern California's comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs" (SCAQMD, 2017). Improvements also have been seen in ozone levels. Part of the control processes of the SCAQMD's duty to greatly improve the air quality in the SCAB is the uniform CEQA review procedures required by SCAQMD's CEQA Handbook (SCAQMD, 2023). The single threshold of significance used to assess Project direct and cumulative impacts has in fact been successful, as evidenced by the track record of the air quality in the SCAB dramatically improving over the course of the past decades.

Environmental impacts associated with buildout of the cumulative study area were evaluated in CEQA compliance documents prepared for the respective general plans of each of the above-named jurisdictions. The location where each of these CEQA compliance documents is available for review is provided below. All of the CEQA compliance documents listed below are herein incorporated by reference pursuant to State CEQA Guidelines § 15150.

- Riverside County General Plan Program EIR No. 521 (SCH No. 2009041065), available for review at the Riverside County Planning Department, located at 4080 Lemon Street, 12th Floor, Riverside, California 92501.

- City of Riverside General Plan 2025 Final Program Environmental Impact Report (SCH No. 2004021108), available for public review at the City of Riverside Planning Division, Community Development Department, 3900 Main Street, Riverside, CA 92522.

4.0.3 Identification of Impacts

Subsections 4.1 through 4.21 of this EIR evaluate the 21 environmental subjects warranting analysis pursuant to CEQA. The format of discussion is standardized as much as possible in each Subsection for ease of review. The environmental setting is discussed first, followed by a discussion of the Project's potential environmental impacts based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant.

The thresholds of significance used in this EIR are based on the thresholds presented in State CEQA Guidelines Appendix G and as applied by Riverside County to create the County's standard Environmental Assessment Form. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this EIR, Riverside County is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. While Riverside County has generally elected to use the thresholds presented in State CEQA Guidelines Appendix G, it should be noted that CEQA affords the County discretion to formulate standards of significance, and recognizes that the significance of a particular impact may vary with the setting (14 Cal. Code Regs.,

§ 15064(b).) The standards of significance used in this EIR are based on the independent judgment of Riverside County, taking into consideration the current State CEQA Guidelines Appendix G, Riverside County's Municipal Code, and adopted County policies and ordinances; the judgment of the technical experts that prepared this EIR's Technical Appendices; performance standards adopted, implemented, and monitored by regulatory agencies; significance standards recommended by regulatory agencies; and the standards in CEQA that trigger the preparation of an EIR. As required by State CEQA Guidelines § 15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project. A summarized "impact statement" is provided in each Subsection following the analysis.

The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.

- Less-than-Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this EIR.

- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

Each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less-than-Significant Impact with Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less-than-significant level through the application of feasible mitigation measure(s).

- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, Riverside County would be required to adopt a statement of overriding considerations pursuant to State CEQA Guidelines § 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would

list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.1 AESTHETICS

This Subsection describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity and evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on-site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based, in part, on field observations and site photographs collected by T&B Planning, Inc. on July 10, 2024, analysis of aerial photography (Google Earth, 2024), and Project application materials submitted to Riverside County and described in Section 3.0, *Project Description*, of this EIR. This Subsection also is based in part on information and policies contained in the Riverside County General Plan (Riverside County, 2021a), Riverside County GIS database (RCIT, n.d.), Riverside County Ordinance No. 348 (Riverside County, 2023), and Riverside County Ordinance No. 655 (Riverside County, 1988).

4.1.1 EXISTING CONDITIONS

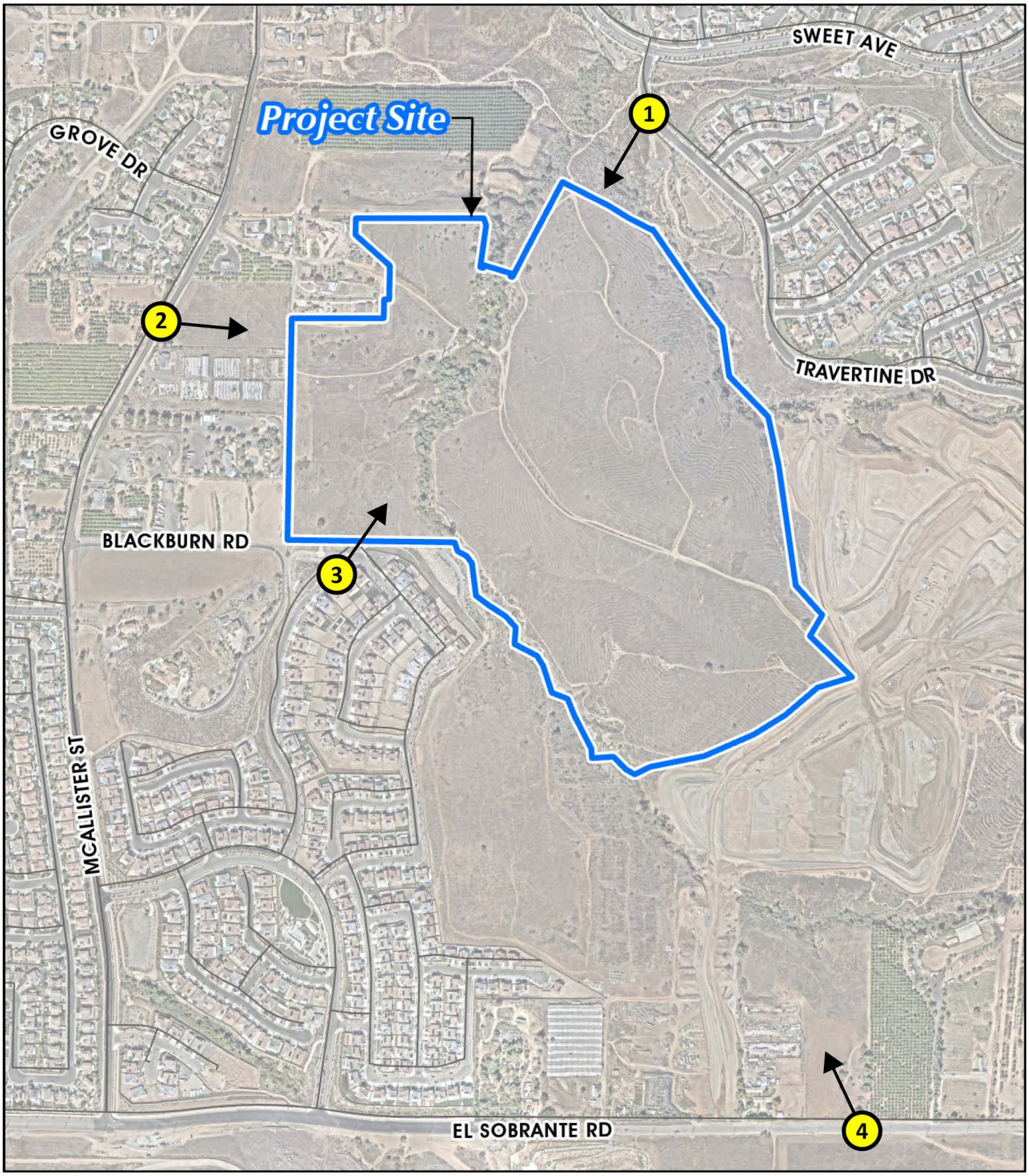
A. Existing Aesthetic Conditions

The Project site comprises 111.6 acres of land located north of El Sobrante Road, east of McAllister Street, and west/southwest of Travertine Drive within the Victoria Grove community of the Lake Matthews/Woodcrest Area Plan (LMWAP) portion of unincorporated Riverside County. Under existing conditions, the Project site is vacant and undeveloped. Several dirt trails cross through the Project site. Two streams are located on the Project site, one along the eastern boundary of the site and one along the southwestern boundary and north central portion of the site. Vegetation on the Project site consists of grasses and shrubs, with shrubs and trees concentrated near the two streams. The Project site consists of rolling hills with elevations ranging from approximately 1,180 feet above meal sea level (amsl) near the north central portion of the Project site to 1,348 feet amsl near the southeast corner of the Project site.

To illustrate the existing visual conditions of the Project site in more detail, a photographic inventory was prepared. Figure 4.1-1, *Site Photograph Key Map*, depicts the location of the four vantage photographs, each of which are described below. These photographs, shown on Figure 4.1-2 and Figure 4.1-3, were taken in July 2024 and proved a representative visual inventory of the site's visual characteristics as seen from surrounding public viewing areas.

- Site Photograph 1: Site Photograph 1 was taken at the northeast corner of the Project site from Travertine Drive, looking south. As shown in this photograph, the Project site appears as a vacant property with primarily grasses and shrubs. A higher concentration of trees and shrubs is visible on the right side of the photograph, corresponding to the location of one of the streams that run through the Project site. As shown, the Project site consists of gently rolling hills, with higher elevations shown on both the right and left sides of the photograph. The Santa Ana Mountains are hazy but visible in the distance along the horizon.

- Site Photograph 2: Site Photograph 2 was taken on the northwest side of the Project site from McAllister Road, looking east. As shown on the photograph, the undeveloped parcel of land located to the west of the Project site consists of grasses and has a chain-link fence around its perimeter. Rows



Source(s): ESRI, NearMap Imagery (May 2024)

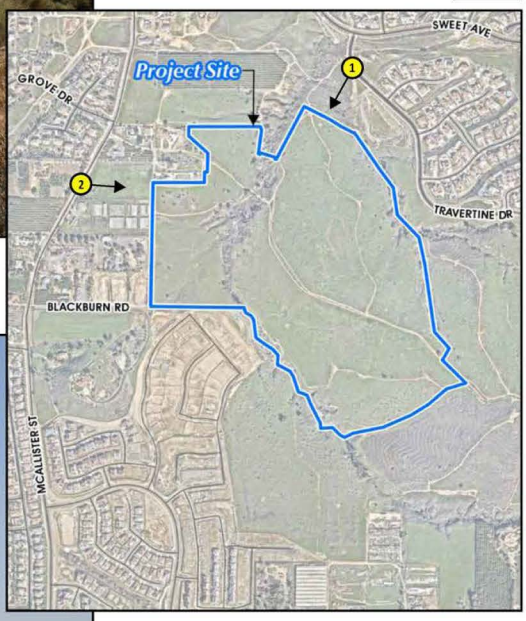
Figure 4.1-1

Not to Scale

Site Photograph Key Map



Site Photo 1: North of the Project Site along Travertine Dr looking south.



Source(s): ESRI, NearMap Imagery (May 2024)



Site Photo 2: West of the Project Site along McAllister St looking east.

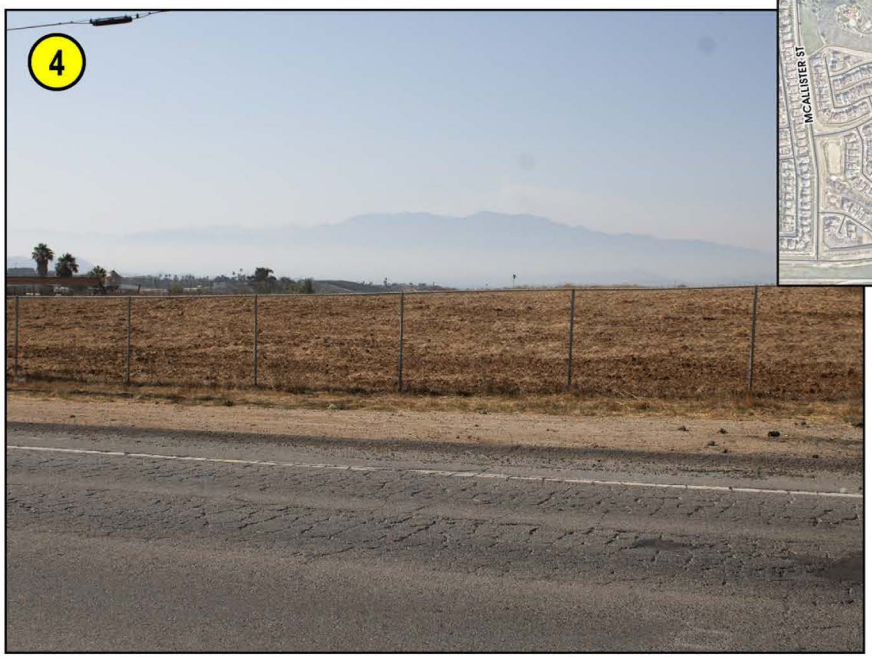
Figure 4.1-2

Not to Scale

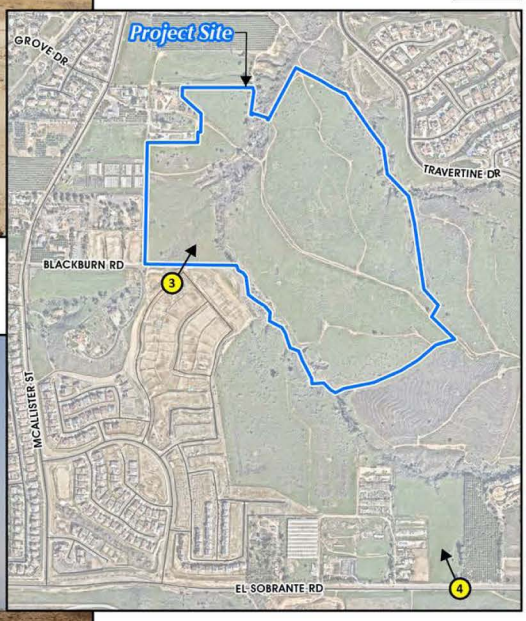
Site Photos 1 and 2



Site Photo 3: South of the Project Site looking northeast.



Site Photo 4: South of the Project Site along El Sobrante Rd looking northwest.



Source(s): ESRI, NearMap Imagery (May 2024)

Figure 4.1-3

Not to Scale

Site Photos 3 and 4

of covered agricultural crops, located to the west of the Project site, are visible on the right side of the photograph. Telephone poles are located along the dirt road which runs between the vacant parcel and the Project site. Construction equipment is visible off site on the right side of the photograph, located near Sonoma Valley Drive. The rolling hills of the Project site are visible in the background of the photograph. The San Jacinto Mountains are visible in the distance along the horizon on the right side of the photograph.

- Site Photograph 3: Site Photograph 3 was taken on the western side of the Project site along Sonoma Valley Drive, looking northeast. As shown in the photograph, the Project site consists primarily of grasses and shrubs, with a concentration of shrubs and trees visible in the central and left side of the photograph, indicating the location of one of the streams running through the Project site. Further in the distance, the residential homes located east of Travertine Drive and Lily Lane are visible. In the background of the photograph, along the horizon, distant, very hazy, views of the San Jacinto Mountains are visible.

- Site Photograph 4: Site Photograph 4 was taken to the south of the Project site, along El Sobrante Road, looking north. As shown in the photograph, a chain-link fence is located along this segment of El Sobrante Road. The parcel of land in the foreground, located adjacent to El Sobrante Road, is south of the Project site and slopes upward from El Sobrante Road, and is covered with primarily grasses, with some scattered trees to the left and right. Off-site buildings associated with Gone Straw Farms, a poultry farm, are visible on the left side of the photograph. Hills associated with the rolling topography of the Project site are visible in the central portion of the photograph. Hazy views of the San Gabriel Mountains are visible in the background along the horizon.

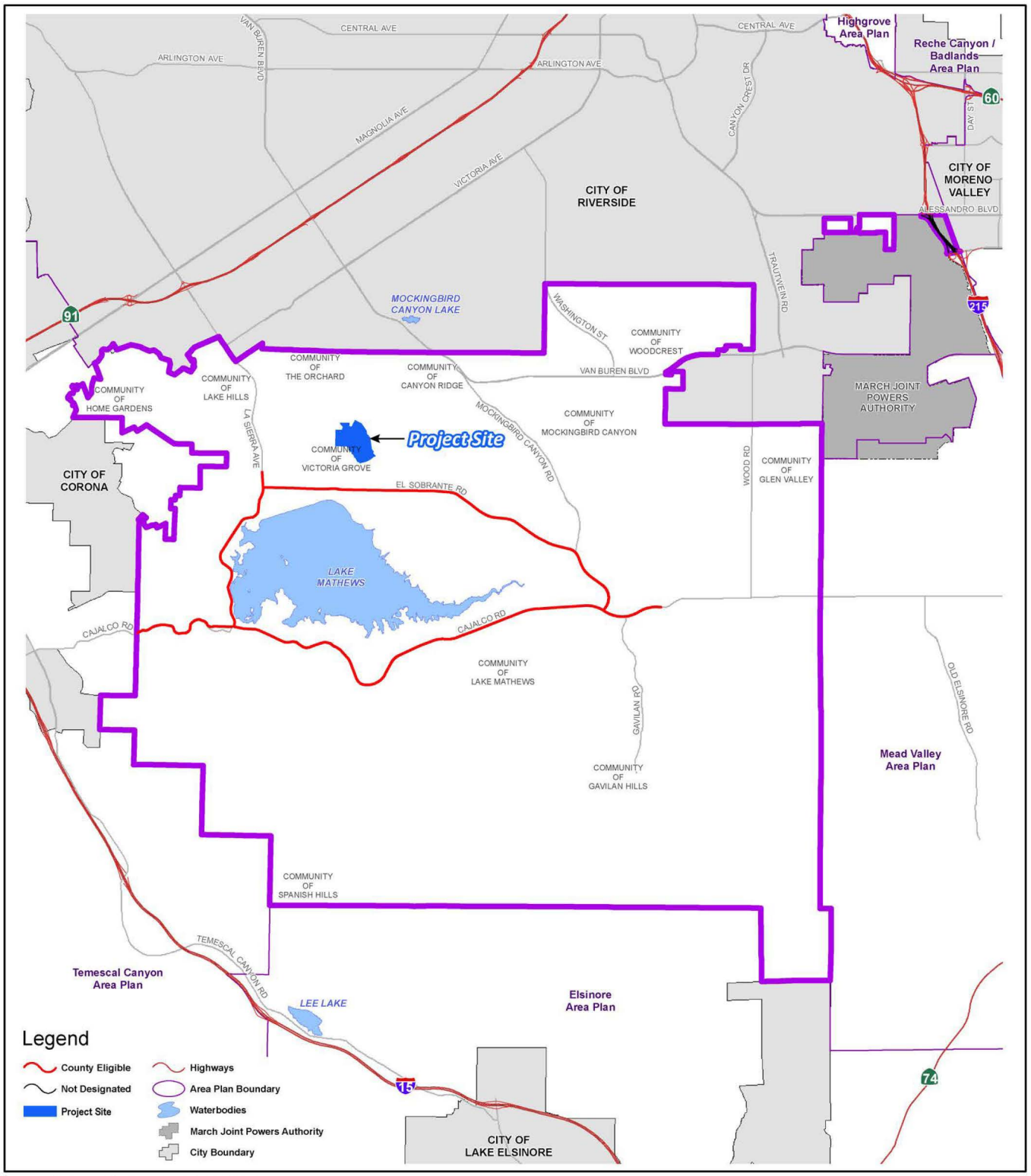
B. Scenic Highways

According to Figure 9 (*Scenic Highways*) of the LMWAP, and as shown on Figure 4.1-4, *LMWAP Scenic Highways Map*, there are no officially designated scenic highway corridors within the Project site's vicinity. The closest officially-designated State scenic highway is a segment of California State Route (SR) 91, which is located approximately 19.0 miles west of the Project site. The closest State-eligible scenic highway is Interstate (I) 15, which is located approximately 5.8 miles west of the Project site. The closest County eligible scenic highway is El Sobrante Road, which is located approximately 0.3-mile south of the Project site. (Riverside County, 2021b; Google Earth, 2024)

4.1.2 Applicable Regulatory Requirements

A. Riverside County General Plan

The Riverside County General Plan does not have any specific sections related to aesthetics and visual resources. However, the Land Use Element of the Riverside County General Plan includes policies related to Land Use Compatibility, Community Design, and Scenic Corridors, which have applicability to the topic of aesthetics. The Land Use Element provides direction related to how future development is intended to build out, such as the intensity/density and character of new development. The Land Use Element also addresses the



Source(s): Riverside County (06-28-2021)

Figure 4.1-4

Not to Scale

LMWAP Scenic Highways Map

relationship between development, community enhancement, and natural resource management. (Riverside County, 2021a)

The Multipurpose Open Space Element of the Riverside County General Plan also addresses open space and scenic resources in Riverside County. According to the Multipurpose Open Space Element, scenic resources include: "…areas that are visible to the general public and considered visually attractive" and "…natural landmarks and prominent or unusual features of the landscape." Hillsides and ridges that rise above urban or rural areas or highways can also be considered scenic backdrops. Additionally, the Multipurpose Open Space Element defines scenic vistas as "…points, accessible to the general public, that provide a view of the countryside." Riverside County General Plan Policy OS 21.1 intends to "[i]dentify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County." (Riverside County, 2015b, pp. OS-52 to OS 53)

The Circulation Element, Land Use Element, and Multipurpose Open Space Element of the Riverside County General Plan also identify scenic corridors, which are roadways (including State and County eligible and designated scenic highways) that traverse scenic resources, and identify policies that are intended to protect and maintain the scenic resources within these corridors. Scenic highways in the Project vicinity were previously depicted on Figure 4.1-4. As noted in the LMWAP, Policy LMWAP 19.1 seeks to "Protect the scenic highways from change that would diminish the aesthetic value of adjacent properties in accordance with policies in the Scenic Corridors sections of the Land Use, Multipurpose Open Space, and Circulation Elements." (Riverside County, 2021b, p. 34; Riverside County, 2015b, p. OS-52)

B. Riverside County Ordinance No. 348, Land Use Ordinance

Riverside County's Land Use Ordinance No. 348 establishes allowable uses of land and sets standards for what and how land may be developed. The ordinance protects the people and property of Riverside County from development of unsuitable land uses and aims to ensure that built areas are developed safely and with minimal conflict with surrounding lands. Ordinance No. 348 also identifies requirements for landscaping associated with development proposals. The landscaping of development projects should enhance the visual character and aesthetic quality of a site and its surroundings. (Riverside County, 2023)

C. Riverside County Ordinance No. 655, Regulating Light Pollution

Riverside County has adopted an ordinance regulating light pollution (Ordinance No. 655). Ordinance No. 655 is intended to restrict the permitted use of certain light fixtures emitting light into the night sky which could have a detrimental effect on astronomical observation and research. Ordinance No. 655 sets forth requirements for lamp source and shielding of light emissions for outdoor fixtures to reduce "skyglow" or light pollution that affects day or nighttime views from the Mt. Palomar Observatory, which is located approximately 22.9 miles southeast of the Project site. As shown on Figure 6 of the LMWAP. The Project site is located just north of the Mt. Palomar Night Time Lighting Policy Area. As such, the Project site is not subject to the outdoor lighting policies and requirements specified by Riverside County Ordinance No. 655, which includes specific standards for lighting fixtures installed along public roadways and in other common areas and applies to all new development. Ordinance No. 655 encourages the use of low-pressure sodium lamps where possible, requires the shielding of all nonexempt outdoor lighting fixtures, specifies the hours of operation for non-

exempt outdoor lighting fixtures, and regulates lighting fixtures used to illuminate an outdoor advertising display. (Riverside County, 1988)

D. Riverside County Ordinance No. 915, Regulating Outdoor Lighting

Riverside County has adopted an ordinance regulating outdoor lighting (Ordinance No. 915). Ordinance No. 915 is intended to provide minimum requirements for outdoor lighting in order to reduce light trespass. Ordinance No. 915 provides regulations on adequate lighting shielding, glare, and light trespass in order to ensure that all development in Riverside County installs lighting in a way that does not jeopardize the health, safety, or general welfare of Riverside County residents and does not degrade their quality of life. (Riverside County, 2012)

4.1.3 Basis for Determining Significance

Section I of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to aesthetics and includes the following threshold questions to evaluate a project's impacts to aesthetic resources (OPR, 2018a):

- Would the project have a substantial adverse effect on a scenic vista?
- Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?
- Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality?
- Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Additionally, the following thresholds are derived from Riverside County's Environmental Assessment Checklist, as revised to reflect the December 2018 updates to the State CEQA Guidelines. As such, the following thresholds are used to evaluate the significance of the proposed Project's impacts on aesthetics. The proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

a. *Have a substantial effect upon a scenic highway corridor within which it is located;*

b. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view;*

c. *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;*

d. *Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655;*

e. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or*

f. *Expose residential property to unacceptable light levels.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, which are based on Appendix G to the CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on aesthetics.

4.1.4 Impact Analysis

Threshold a.: ***Would the Project have a substantial effect upon a scenic highway corridor within which it is located?***

As previously indicated in subsection 4.1.1.B, and as previously shown on Figure 4.1-4, there are no officially designated scenic highway corridors within the Project site's vicinity. The closest officially-designated State scenic highway is a segment of California SR-91, which is located approximately 19.0 miles west of the Project site. The closest State-eligible scenic highway is I-15, which is located approximately 5.8 miles west of the Project site. The closest County eligible scenic highway is El Sobrante Road, which is located approximately 0.3-mile south of the Project site. The Project site is not visible from any portion of SR-91or I-15 due to distance an intervening development. Thus, the Project would not have a substantial adverse effect on portions of SR-91 or I-15. (Riverside County, 2021b; Google Earth, 2024)

The proposed Project would be visible from nearby segments of El Sobrante Road. Specifically, the Project would convert the Project site from vacant land to residential homes, with associated water quality basins, a park, open space lots, and roadways. Although the Project site is separated from El Sobrante Road by developed property, vegetation, and changes in topography, the proposed Project's residential structures would be visible from portions of El Sobrante Road. Development of the property with residential and park uses would represent a change to the distance views of the property from segments of El Sobrante Road; however, the construction of homes on site would appear as a continuation of on-going development in the surrounding area. Moreover, the dwelling units proposed as part of the Project would consist of low density homes, and would be visually compatible with existing residential developments in the surrounding area. Therefore, development of the Project site as proposed would not have a substantial adverse effect on any officially-designated or eligible State scenic highways and would result in less-than-significant impacts to nearby county eligible scenic highways, including El Sobrante Road.

Threshold b.: ***Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?***

Threshold c.: ***Would the Project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

Under existing conditions, the majority of the Project site comprises undeveloped land that is covered with a mixture of grasses and shrubs, with trees primarily clustered along the two existing drainages that occur on or immediately adjacent to the Project site. There are no prominent rock outcroppings or unique landmark features on the Project site under existing conditions. In addition, the majority of the existing trees on site would be preserved within proposed open space lots, with the removal of trees being limited to the proposed roadway crossings over the existing drainages that occur along the eastern site boundary and in the western and southwestern portions of the Project site. However, the removal of these trees at the crossing locations would not be prominently visible from off-site locations, and proposed roadways also would be planted with street trees. Accordingly, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features, and impacts would be less than significant.

As depicted on the existing site photos presented on Figure 4.1-2 and Figure 4.1-3, the Project site does not contribute to any prominent scenic vistas visible to the public, as it primarily consists of grasses and shrubs. The closest scenic vistas to the Project site are the Santa Ana Mountains, located approximately 7.5 miles southwest of the Project site; the San Gabriel Mountains, located approximately 21 miles north of the Project site; and the San Jacinto Mountains, located approximately 23 miles east of the Project site. Partial views of these mountains are visible from the Project site on clear days; however, these distant landforms are not prominently visible from the Project site on days with high levels of atmospheric haze (which is common throughout the year). While implementation of the Project as proposed would obstruct some views of the surrounding area, public views of these visual resources within the Project's viewshed still would be available from areas surrounding the Project site. As such, the Project would not obstruct any prominent scenic vista or view open to the public, and impacts would be less than significant.

According to mapping information available from the United States Census Bureau (USCB), the Project site is not located within an urbanized area (SCAG, 2023). The Project Applicant proposes to develop the property with 206 residential dwelling units, one park, detention basins, and open space. The proposed residential uses would not comprise an aesthetically offensive use, as they would consist of typical residential construction with each residential lot being landscaped with groundcover, shrubs, and trees. Although the Project would result in a change to the existing visual character or quality of public views of the site and its surroundings, the land uses proposed as part of the Project would be visually compatible with other existing rural residential uses in the local area. Accordingly, the Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and impacts would be less than significant.

Threshold d.: ***Would the Project interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?***

As shown on Figure 6, *Mt Palomar Night Time Lighting Policy Area*, of the LMWAP, the Project site is located approximately 2.9 miles northwest of the limits of Zone B of the Mt. Palomar Lighting Policy Area, which reflects the fact that the Project site is located more than 45 miles from the Palomar Observatory. Therefore, the Project is not subject to the provisions of Ordinance No. 655, as Ordinance No. 655 applies only to lands located within 45 miles of the Palomar Observatory. As such, the Project has no potential to interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655. No impact would occur.

Threshold e.: ***Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

Threshold f.: ***Would the Project expose residential property to unacceptable light levels?***

Future development on the Project site would be subject to Riverside County Ordinance No. 915. Ordinance No. 915 requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Compliance with Ordinance No. 915 would be assured through future review of building permit applications by Riverside County, and would ensure that the Project does not expose residential properties to unacceptable light levels. Impacts would be less than significant.

None of the Project's proposed building materials would consist of reflective materials, except for the proposed windows, which would not be mirrored and would have similar low-potential glare characteristics as other glass windows on buildings in the Project vicinity. Windows on individual homes largely would be obstructed from public views by the Project's proposed landscaping, which includes trees along all roadways within the proposed development. Windows on site would further be obstructed by the Project site's undulating topography. The proposed Project does not include any components that would generate substantial amounts of reflective surfaces that would be visible from off-site locations. Accordingly, impacts associated with glare would be less than significant.

Based on the foregoing analysis, and because the Project would be required to comply with the lighting provisions of Riverside County Ordinance No. 915, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and would not expose residential property to unacceptable light levels; therefore, impacts would be less than significant.

4.1.5 Cumulative Impact Analysis

For purposes of analysis, the Project's cumulative study area includes all areas within the Projects viewshed, as the Project does not have the potential to result in cumulatively-considerable impacts to visual quality outside of areas in which the Project site is visible.

As discussed under the analysis of Threshold a., there are no officially-designated or eligible State scenic highway corridors within the Project's viewshed; however, the County eligible scenic highway, El Sobrante Road, is located 0.3-mile south of the Project site. Although the proposed development would be visible from nearby segments of El Sobrante Road, the Project site occurs in an area that is designated for development with residential uses. The proposed development would appear as a continuation of existing residential development patterns in the local vicinity. Furthermore, under existing conditions, the Project site contains primarily grasses and shrubs, with shrubs and trees near the on-site streams. As part of the Project, the site would be landscaped with a mix of trees, shrubs, and groundcovers along the roadways and open space areas, and the majority of the existing trees on site would be preserved in open space areas. As such, the Project would not have a substantial effect on a scenic highway corridor, and impacts would be less-than-cumulatively considerable.

As analyzed in Thresholds b. and c., the Project would not damage scenic resources visible from off-site locations, including, but not limited to rock outcroppings, or unique or landmark features. The limited number of trees existing on the Project site do not form a prominent component of the viewshed, and trees only would be removed where roadways are proposed to cross the existing drainages; thus, impacts to scenic resources would be less than significant on a cumulatively-considerable basis. Partial views of the Santa Ana Mountains, the San Gabriel Mountains, and the San Jacinto Mountains are visible from the Project site on clear days; however, these distant landforms are not prominently visible from the Project site on days with high levels of atmospheric haze (which is common throughout the year). While implementation of the Project as proposed would obstruct some views of the surrounding area, public views of these visual resources within the Project's viewshed still would be available from areas surrounding the Project site. The Project also would be subject to compliance with the applicable zoning provisions of Ordinance No. 348, and would be required to comply with all applicable County ordinances governing scenic quality, thereby ensuring the Project does not result in the creation of an aesthetically offensive site open to public view. Furthermore, the Project's proposed residential uses would appear as a continuation of the area's existing residential development pattern. Therefore, the proposed Project would not result in less-than-significant cumulatively-considerable impacts associated with scenic resources, scenic vistas, aesthetically-offensive sites, or due to a conflict with applicable zoning and other regulations governing scenic quality.

As noted in Threshold d., the Project site is approximately 2.9 miles outside of the limits of Zone B of the Mt. Palomar Lighting Policy Area. Cumulative developments in the immediate vicinity of the Project site also are located outside of the Mt. Palomar Lighting Palomar Lighting Policy Area. As such, the Project has no potential to interfere with the nighttime use of the Mt. Palomar Observatory or conflict with Riverside County Ordinance No. 655; therefore, cumulatively-considerable impacts would be less than significant.

As discussed under the Thresholds of e. and f., development of the Project and future development in the Project vicinity would be subject to Riverside County Ordinance No. 915. Ordinance No. 915 requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Compliance with Ordinance No. 915 would be assured through future review of building permit applications by Riverside County, and would ensure that the Project does not expose residential properties to unacceptable light levels. Except for the proposed windows, which would not be mirrored, none of the proposed Project materials would consist of reflective materials. Windows

on individual homes largely would be obstructed from public views by the Project's proposed landscaping, which includes trees along all roadways within the proposed development. Windows on site would further be obstructed by the Project site's undulating topography. As with the Project, future developments in the Project vicinity similarly would be required to comply with Ordinance Nos. 915 and 348 in order to prevent substantial light and glare affecting daytime or nighttime views in the area. Therefore, cumulatively-considerable impacts due to light and glare would be less than significant.

4.1.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. There are no officially-designated or eligible State scenic highway corridors within the Project's viewshed; however, El Sobrante Road is a County eligible scenic highway. Although El Sobrante Road is identified as a County eligible scenic highway, the Project site does not comprise a visual resource visible from this eligible scenic highway. Development of the property with residential and park uses would represent a change to the distance views of the property from segments of El Sobrante Road; however, the construction of homes on site would appear as a continuation of on-going development in the surrounding area. Furthermore, the Project would be developed in a manner that is not visually offensive, and would be visually compatible with existing and planned developments in the surrounding area. Therefore, the Project would not have a substantial effect upon a scenic highway corridor, and impacts would be less than significant.

Threshold b. and c.: Less-Than-Significant Impact. Under existing conditions, the Project site is largely composed of vacant lands covered by grasses and shrubs, with shrubs and trees near the on-site streams. There are no prominent rock outcroppings or unique landmark features on the Project site under existing conditions. In addition, the majority of the existing trees on site would be preserved within proposed open space lots, with the removal of trees being limited to the proposed roadway crossings over the existing drainages that occur along the eastern site boundary and in the western and southwestern portions of the Project site. Accordingly, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features, and impacts would be less than significant. While implementation of the Project as proposed would obstruct some views of the surrounding area, public views of these visual resources within the Project's viewshed still would be available from areas surrounding the Project site. As such, the Project would not obstruct any prominent scenic vista or view open to the public, and impacts would be less than significant. In addition, the Project's proposed residential uses would not comprise an aesthetically offensive use, as they would consist of typical residential construction with each residential lot being landscaped with groundcover, shrubs, and trees. Although the Project would result in a change to the existing visual character or quality of public views of the site and its surroundings, the land uses proposed as part of the Project would be visually compatible with other existing rural residential uses in the local area. Accordingly, the Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and impacts would be less than significant.

Threshold d.: No Impact. The Project site is located approximately 2.9 miles northwest of the limits of Zone B of the Mt. Palomar Lighting Policy area. Therefore, the Project is not subject to the provisions of Ordinance No. 655. As such, the Project has no potential to impact the nighttime use of Mt. Palomar Observatory as protected through Riverside County Ordinance No. 655, and no impact would occur.

Thresholds e. and f.: Less-Than-Significant Impact. Development on the Project site would be subject to Riverside County Ordinance No. 915, which requires that all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Furthermore, none of the Project's proposed building materials would consist of reflective materials, except for the proposed windows, which would not be mirrored and would have similar low-potential glare characteristics as do other glass windows on residential buildings in the Project vicinity. Impacts would be due to light and glare less-than-significant.

4.1.7 County Regulations, Design Requirements, and Mitigation

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with Riverside County Ordinance No. 915, which is intended to provide minimum requirements for outdoor lighting in order to reduce light trespass. Ordinance No. 915 provides regulations on adequate lighting shielding, glare, and light trespass in order to ensure all development in Riverside County installs lighting in a way that does not jeopardize the health, safety, or general welfare of Riverside County residents or degrade their quality of life.

Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.2 AGRICULTURE AND FOREST RESOURCES

The information and analysis in this Subsection 4.2 are based in part on information obtained from the California Department of Conservation (CDC) Farmland Mapping & Monitoring Program (FMMP) (CDC, n.d.), Riverside County GIS (RCIT, n.d.), and the Riverside County General Plan Amendment 960 Final EIR (Riverside County, 2015a). Refer to Section 7.0, *References*, for a complete list of these and other reference sources.

4.2.1 EXISTING CONDITIONS

A. *Forestry Resources*

The Project site is located in the Victoria Grove community of the Lake Matthews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County, a rapidly urbanizing region that generally contains dry, sparsely-vegetated terrain in the natural condition. As shown in Figure 4.5.2 of the Riverside County General Plan Update Draft EIR No. 521, aside from sparsely scattered lowland forests/woodlands, there are no forestry resources in the Project's vicinity under existing conditions. The nearest forest land to the Project site occurs within the Cleveland National Forest, located approximately 7.6 miles southwest of the Project site. (Riverside County, 2015a, Figure 4.5.2)

B. *Agricultural Resources*

1. *Regional Agricultural Setting*

According to information available from the Riverside County Agricultural Commissioner's Office, the top three categories of agricultural resources cultivated in Riverside County (by value) are nursery stock, milk, and alfalfa. In 2022 (the most recent year for which data is available), the total gross value of agricultural production in Riverside County was approximately $1.49 billion, which represents a 6.0% increase from 2021 when total values were $1.42 billion. (Agricultural Commissioner, 2024)

The CDC reports that agricultural lands face continuing pressure from urbanization and rising production costs. The CDC's "2016-2018 California Farmland Conversion Report" summarizes land use conversion between 2016 and 2018 (the most recent years for which information has been reported by the CDC), and states that Riverside County as a whole experienced a net loss of 5,980 acres of Important Farmland between 2016 and 2018, representing a decline of 1.43% (CDC, n.d., Table A-25). Important Farmlands, as defined by Riverside County, include Prime Farmland, Statewide Important Farmland, and Unique Farmland.

2. *Historic and Existing Site Conditions*

Based on a review of aerial photographs, it was determined that from the late 1960's through the mid 1990's the Project site was utilized for agricultural uses and was fully developed with orchards. By 2006, the orchards had been cleared from the Project site and from 2006 to present, the Project site has consisted of undeveloped land that no longer is in agricultural use. (McAlister GeoScience, 2024, p. 7) Under existing conditions, the Project site remains vacant and undeveloped. Several dirt trails cross through the Project site. Two streams are located on the Project site, one along the eastern boundary of the site and one along the southwestern boundary

and that traverses the north central portion of the site. Vegetation on the Project site consists of grasses and shrubs, with shrubs and trees concentrated in the two streams.

3. Zoning

As described in EIR subsection 2.4, under existing conditions the Project site is zoned "Light Agriculture, 10-Acre Minimum Lot Size (A-1-10)." The A-1-10 zoning classification allows for single-family dwellings, and also allows for a range of agricultural and equestrian uses. According to Riverside County Ordinance No. 625, the A-1 zoning classification is considered "land zoned for primarily agricultural purposes." (Riverside County, 2023; Riverside County, 1994; RCIT, n.d.)

4. Agricultural Land Classifications

The goal of the CDC's FMMP is to provide consistent, timely, and accurate data to decision makers for use in planning for the present and future of California's agricultural land resources. To meet this goal, the FMMP's objective is to provide maps and statistical data to the public, academia, and local, State, and federal governments to assist them in making informed decisions for the best utilization of California's farmland. The FMMP was established in 1982 in response to what was by then a critical need for data on the nature, location, and extent of farmland, grazing land, and urban built-up areas in the State. California Government Code § 65570 mandates the FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local governments and the public. The FMMP also was directed to prepare and maintain an automated map and database system to record and report changes in the use of agricultural lands. It was the intent of the Legislature and a broad coalition of building, business, government, and conservation interests that the FMMP be non-regulatory, and provide a consistent and impartial analysis of agricultural land use and change in California. With this in mind, the FMMP provides basic data from which observations and analyses can be made in the land use planning process. (CDC, n.d., p. 5)

Pursuant to the FMMP, all lands within California are classified into one of seven map categories. The minimum mapping unit is generally 10 acres, except as otherwise noted (CDC, n.d., p. 6). Provided below is a description of the various map categories established by the FMMP:

- **Prime Farmland (P)**: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. (CDC, n.d., p. 6)

- **Farmland of Statewide Importance (S)**: Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. (CDC, n.d., p. 6)

- **Unique Farmland (U)**: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards

as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date. (CDC, n.d., p. 6)

- **Farmland of Local Importance (L)**: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. (CDC, n.d., p. 6)

- **Grazing Land (G)**: Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres. (CDC, n.d., p. 6)

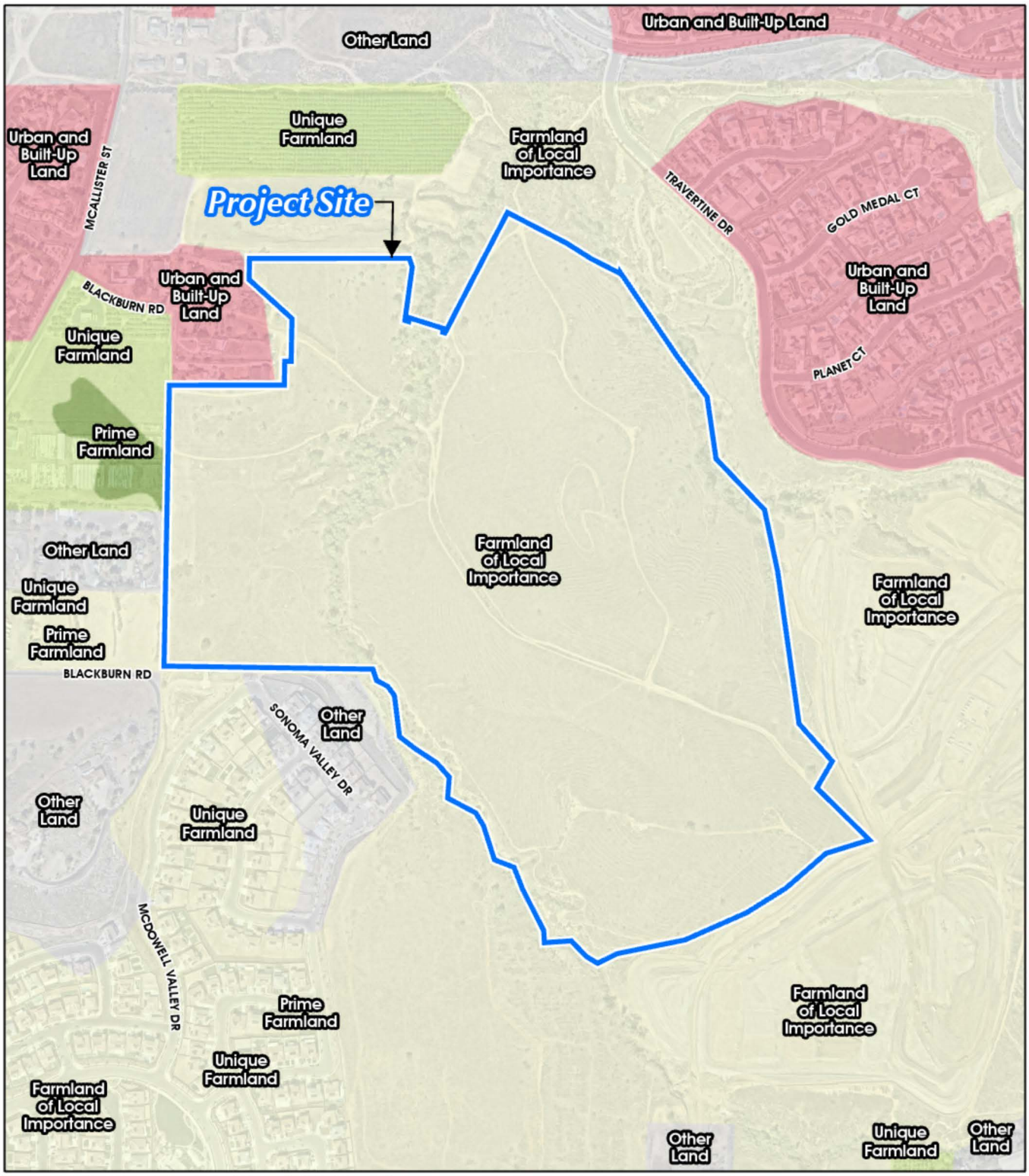
- **Urban and Built-Up Land (D)**: Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. (CDC, n.d., p. 7)

- **Other Land (X)**: Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. (CDC, n.d., p. 7)

As shown on Figure 4.2-1, *FMMP Farmland Map*, the entire Project site is classified by the FMMP as containing "Farmland of Local Importance. "Farmland" is defined in Section II (a) of Appendix G of the California Environmental Quality Act (CEQA) Guidelines and by Riverside County to mean "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland." Thus, under existing conditions the Project site does not contain any areas of "Farmland" as mapped by the FMMP. (CDC, 2021)

5. Williamson Act Land Preserves and Agricultural Preserves

Agricultural preserves are the result of Riverside County's participation in the California Land Conservation Act (CLCA) of 1965, also known as the Williamson Act, CA Gov. Code § 51200, et seq. This program allows owners of agricultural land to have their properties assessed for tax purposes on the basis of agricultural production rather than current market value. The main purpose of the Act is to encourage property owners to continue to farm their land, and to prevent the premature conversion of farmland to urban uses. The Project site comprises a portion of the El Sobrante Agricultural Preserve No. 1 and previously was under an active Williamson Act contract. A Notice of Nonrenewal previously was filed in 1982 to remove the Project site from the Williamson Act Contract, and as of 1992 the property no longer is subject to a Williamson Act Contract. Under existing conditions, the Project site continues to be located within El Sobrante Agricultural Preserve No. 1.



Source(s): ESRI, Nearmap Imagery (October 2025), CDC (2024)

Figure 4.2-1

0 175 350 700 Feet

FMMP Farmland Map

4.2.2 Applicable Environmental Regulations

The following is a brief description of the state and local environmental laws and related regulations governing the protection of agricultural and forest resources.

A. State Regulations

1. California Land Conservation Act (CLCA)

The California Land Conservation Act (CLCA) of 1965, also known as the Williamson Act (CA Gov. Code § 51200, et seq.), enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Pursuant to Government Code § 51230, counties and cities may establish Agricultural Preserves, which define boundaries of those areas within which the city or county will be willing to enter into contracts pursuant to the CLCA; Contracts pursuant to the CLCA only are allowed for areas within established Agricultural Preserves. Agricultural Preserves generally must be at least 100 acres in size; however, a city or county may allow for lesser acreage if a finding is made that the characteristics of the agricultural enterprises in the area are unique and that the establishment of preserves of less than 100 acres is consistent with the general plan of the county or city. Once established, land uses within an Agricultural Preserve must be agricultural in nature, or other such uses that are not incompatible with agricultural uses. For lands within Agricultural Preserves, individual land owners may enter into a Contract with a county or city, which would provide for the exclusion of uses other than agricultural, and other than those compatible with agricultural uses, for the duration of the Contract, even if the land is sold to a new owner. In return for entering into a Contract, the landowner is granted preferential taxes that are based upon agricultural and related land uses rather than fair market value. Contracts may be exited at the option of the landowner or local government by initiating the process of term nonrenewal. Under this process, the remaining contract term (nine years in the case of an original term of ten years) is allowed to lapse, with the contract null and void at the end of the term. During the nonrenewal process, the annual tax assessment continually increases each year until it is equivalent to current tax rates at the end of the nonrenewal period. Under a set of specifically defined circumstances, a Contract may be cancelled without completing the process of term nonrenewal. Contract cancellation, however, involves a comprehensive review and approval process, and the payment of a fee by the landowner equal to 12.5 percent of the full market value of the property in question. (CDC, n.d.; CA Legislative Info, n.d.)

2. Farmland Mapping and Monitoring Program (FMMP)

The goal of the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) is to provide consistent, timely, and accurate data to decision makers for use in planning for the present and future of California's agricultural land resources. To meet this goal, FMMP's objective is to provide maps and statistical data to the public, academia, and local, state, and federal governments to assist them in making informed decisions for the best utilization of California's farmland. The FMMP was established in 1982 in response to what was by then a critical need for data on the nature, location, and extent of farmland, grazing land, and urban built-up areas in the State. Government Code § 65570 mandates FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local

government and the public. The FMMP was also directed to prepare and maintain an automated map and database system to record and report changes in the use of agricultural lands. It was the intent of the Legislature and a broad coalition of building, business, government, and conservation interests that FMMP be non-regulatory, and provide a consistent and impartial analysis of agricultural land use and change in California. With this in mind, FMMP provides basic data from which observations and analyses can be made in the land use planning process. Pursuant to the FMMP, all lands within California are classified into one of seven map categories, as previously summarized in subsection 4.2.1. (CDC, 2004, p. 3)

3. California Forest Practice Act

The California Department of Forestry and Fire Protection (CAL FIRE) enforces the laws that regulate logging on privately-owned lands in California. The Forest Practice Act was enacted in 1973 to ensure that logging is done in a manner that will preserve and protect fish, wildlife, forests and streams. The State Board of Forestry and Fire Protection enacts and enforces additional rules to protect these resources. (CAL FIRE, n.d.)

CAL FIRE ensures that private landowners abide by these laws when harvesting trees. Although there are specific exemptions in some cases, compliance with the Forest Practice Act and Board rules apply to all commercial harvesting operations for landowners of small parcels, to ranchers owning hundreds of acres, and large timber companies with thousands of acres. (CAL FIRE, n.d.)

The Timber Harvesting Plan (THP) is the environmental review documents submitted by landowners to CAL FIRE outlining what timber he or she wants to harvest, how it will be harvested, and the steps that will be taken to prevent damage to the environment. THPs are prepared by Registered Professional Foresters (RPFs) who are licensed to prepare these comprehensive, detailed plans. THPs can range from about 100 pages to more than 500 pages. (CAL FIRE, n.d.)

CAL FIRE does not have the authority to deny a THP that is in compliance with state and federal rules and laws, simply because the logging plan is unpopular with the public. The Department reviews and approves between 500 to 1,400 THPs each year. A THP that does not comply with all forestry and environmental regulations is returned to the RPF. It is only approved after the RPF and landowner agree to make the changes necessary to ensure compliance with all laws. CAL FIRE follows-up on approved THPs with site inspections and can shut down operations, cite or fine RPFs, Licensed Timber Operators (LTOs), and landowners if illegal operations are found. (CAL FIRE, n.d.)

B. Local Regulations

The following ordinances address farmland and agricultural preserves within unincorporated Riverside County.

- Riverside County Ordinance No. 509: This ordinance establishes uniform rules which apply to Agricultural Preserves. This ordinance determines which uses are agricultural or compatible uses within an Agricultural Preserve and prohibits all other uses within an Agricultural Preserve.

- Riverside County Ordinance No. 625: This "Right-to-Farm" Ordinance requires that development of residential uses adjacent to properties zoned primarily for agricultural purposes be regulated. Specifically, Ordinance No. 625 states that if any agricultural operation that has been in place for at least three years and is not considered a nuisance operation at the time the operation began, no change in surrounding land uses shall cause said operation to become a nuisance. A note is to be added to the Environmental Constraints Sheet for any tentative land division that states:

  > *"...that no agricultural activity, operation, or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after the same has been in operation for more than three (3) years if it was not a nuisance at the time it began."*

  If any parcel within 300 feet of the site is zoned primarily for agricultural uses at the time of occupancy permit issuance, the Project shall comply with the "Right-to-Farm" Ordinance. County Ordinance No. 625 defines land zoned for "primarily agricultural purposes" as any land lying within any one of the following zone classifications established by the Riverside County Land Use Ordinance No. 348: A-1 (Light Agriculture); A-P (Light Agriculture with Poultry); A-2 (Heavy Agriculture); A-D (Agriculture-Dairy); or C/V (Citrus/Vineyard).

4.2.3 Basis for Determining Significance

A. Agricultural resources

Section II of Appendix G to the CEQA Guidelines addresses typical adverse effects to forestry and agricultural resources, and includes the following threshold questions to evaluate a project's impacts on agricultural and forestry resources (OPR, 2018a):

- Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

- Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

- Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code *section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section* 51104(g))?

- Would the project result in the loss of forest land or conversion of forest land to non-forest use?

- Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section II of Appendix G to the CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on forestry or agricultural resources if construction and/or operation if the Project would:

a. *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;*

b. *Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve;*

c. *Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm");*

d. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use;*

e. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g));*

f. *Result in the loss of forest land or conversion of forest land to non-forest use; or*

g. *Involve other changes in the existing environment which, due to their location or nature, could result in con-version of forest land to non-forest use.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts on forestry and agricultural resources.

4.2.4 Impact Analysis

Threshold a:	***Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

As previously shown on Figure 4.2-1, the entire 111.6-acre Project site is classified by the FMMP as "Farmland of Local Importance." "Farmland" is defined in Section II (a) of Appendix G of the State CEQA Guidelines and by Riverside County to mean "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland." As previously noted, "Farmland of Local Importance" is not considered "Farmland" as that term is defined by CEQA, the County, or the CDC, meaning that the Project would not convert Prime Farmland,

Unique Farmland, Farmland of Statewide Importance, or any other "Farmland" as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Thus, based on the FMMP mapping, the Project would not result in the conversion of Prime Farmland, unique Farmland, or Farmland of Statewide Importance (Farmland) to a non-agricultural use. No impact would occur.

Threshold b: ***Would the Project conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?***

As defined by Riverside County Ordinance No. 625, "lands primarily zoned for agricultural use" include properties that are zoned for "Light Agriculture (A-1)," "Light Agriculture with Poultry (A-P)," "Heavy Agriculture (A-2)," "Agriculture-Dairy (A-D)," or "Citrus/Vineyard (C/V)" (Riverside County, 1994). Under existing conditions, the Project site is zoned A-1-10, which is an agricultural zoning classification based on Ordinance No. 625. Although the Project would conflict with the site's existing zoning classification, the Project Applicant is proposing to rezone the Project site for "One Family Dwellings, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)" land uses as part of Change of Zone No. 2400026 (CZ 2400026), consistent with the site's underlying General Plan land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)." Accordingly, with approval of CZ 2400026, the Project would not conflict with existing agricultural zoning, and impacts would be less than significant.

Under existing conditions, the Project site consists of vacant and undeveloped land. From the late 1960's through the mid 1990's, the Project site utilized for agricultural uses and was fully developed with orchards. By 2006, the orchards had been cleared from the Project site and from 2006 to present, the Project site has remained undeveloped land that is no longer in agricultural use. As such, the Project would not conflict with existing agricultural uses on site, and no impact would occur.

As previously noted, the Project site comprises a portion of the El Sobrante Agricultural Preserve No. 1 and previously was under an active Williamson Act contract. A Notice of Nonrenewal previously was filed in 1982 to remove the Project site from the Williamson Act Contract, and as of 1992 the property no longer is subject to a Williamson Act Contract. Thus, the Project has no potential to conflict with any Williamson Act contracts, resulting in no impact. Although the Project site continues to be located within El Sobrante Agricultural Preserve No. 1, the Project Applicant has filed an application for Agricultural Preserve Diminishment No. 240006 (APD 240006), which would remove the 111.6-acre property from the boundaries of the El Sobrante Agricultural Preserve No. 1. With approval of APD 240006, the Project would not conflict with any agricultural preserves, and impacts would be less than significant.

Threshold c: ***Would the Project cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?***

Riverside County Ordinance No. 625 defines "land zoned for primarily agricultural purposes" as including the following zone classifications established by the Riverside County Land Use Ordinance No. 348: A-1 (Light

Agriculture); A-P (Light Agriculture with Poultry); A-2 (Heavy Agriculture); A-D (Agriculture-Dairy); and C/V (Citrus/Vineyard). According to Riverside County GIS, lands to the immediate south, southeast, southwest, and northwest of the Project site are zoned for A-1 land uses; lands immediately to the northeast and west-central of the Project site are zoned R-1 (Single-Family Residential). (RCIT, n.d.) Although the Project site occurs adjacent to agriculturally-zoned property located south, southeast, southwest, and northwest of the Project site, the Project would be subject to the provisions of Riverside County Ordinance No. 625, which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land. Mandatory compliance with Ordinance No. 625 would ensure that Project-related construction and operational activities would not indirectly cause or contribute to the conversion of off-site farmland to non-agricultural use. Based on mandatory compliance with Ordinance No. 625, impacts would be less than significant.

Threshold d: ***Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?***

There are no components of the Project that would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Although agricultural uses occur in the Project vicinity (refer to the discussion of Threshold c.), there are no components of the proposed Project that could indirectly affect these existing agricultural uses. Additionally, as indicated under the analysis of Threshold c., the Project would be subject to the provisions of Riverside County Ordinance No. 625, which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land. Compliance with Ordinance No. 625 would ensure that future development on the Project site does not result in indirect impacts to existing agricultural uses in the surrounding area. Thus, the Project would not result in any other changes to the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, and impacts would be less than significant.

Threshold e: ***Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?***

Threshold f: ***Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

Threshold g: ***Would the Project involve other changes in the existing environment which, due to their location or nature, could result in con-version of forest land to non-forest use?***

The Project site and surrounding areas are not zoned for forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) (RCIT, n.d.). As such, the Project has no potential to conflict with such zoning, and no impact would occur.

As shown in Figure 4.5.2 of the Riverside County General Plan Update Draft EIR No. 521, which was prepared in conjunction with the County's 2015 General Plan Update, aside from sparsely scattered lowland forests/woodlands there are no forestry resources in the Project's vicinity under existing conditions. The nearest forest land to the Project site is the Cleveland National Forest, located approximately 7.6 miles southwest of the Project site; however, no timber production occurs in association with the Cleveland National Forest (Riverside County, 2015a, Figure 4.5.2). Based on a review of aerial imagery, there are no forest-related uses within the vicinity of the Project site. As such, the Project has no potential to result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

Furthermore, the Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use. No impact would occur.

4.2.5 Cumulative Impact Analysis

The cumulative study area for the evaluation of potential impacts to agriculture and forestry resources includes all of western Riverside County. Lands within western Riverside County generally exhibit similar climate, geologic, and soil characteristics, and agricultural production is evaluated by Riverside County and the State of California at the County level. Additionally, agricultural lands throughout western Riverside County are subject to future development that would preclude agricultural uses, based on the various land use designations applied to lands throughout western Riverside County by the County's General Plan and the general plans of other local jurisdictions.

As discussed under Threshold a., the entire 111.6-acre Project site is classified by the FMMP as "Farmland of Local Importance." As previously noted, "Farmland of Local Importance" is not considered "Farmland" as that term is defined by CEQA, the County, or the CDC, meaning that the Project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or any other "Farmland" as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Thus, based on the FMMP mapping, the Project would not result in the conversion of Prime Farmland, unique Farmland, or Farmland of Statewide Importance (Farmland) to a non-agricultural use, and cumulatively-considerable impacts would not occur.

Under existing conditions, the Project site is zoned A-1-10, which is an agricultural zoning classification based on Ordinance No. 625. Although the Project would conflict with the site's existing zoning classification, the Project Applicant is proposing to rezone the Project site for "One Family Dwellings, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)" land uses as part of CZ 2400026), consistent with the site's underlying General Plan land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)." Accordingly, with approval of CZ2400026, the Project would not conflict with existing agricultural zoning, and cumulatively-considerable impacts would not occur.

Although the Project site occurs adjacent to agriculturally-zoned property located south, southeast, southwest, and northwest of the Project site, the Project would be subject to the provisions of Riverside County Ordinance No. 625, which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land. Other cumulative developments similarly would be

subject to compliance with Ordinance No. 625. Mandatory compliance with Ordinance No. 625 would ensure that cumulative development in the local area does not indirectly cause or contribute to the conversion of off-site farmland to non-agricultural use. Because both the Project and other cumulative developments would be required to comply with Ordinance No. 625, cumulatively-considerable impacts would be less than significant.

There are no components of the Project or other cumulative developments that would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, beyond the land use conversions that already were anticipated by the Riverside County General Plan. Impacts to the environment associated with buildout of the County's General Plan previously were evaluated as part of EIR No. 521, which was certified in conjunction with the County's 2015 update to its general plan. Additionally, as indicated under the analysis of Threshold c., the Project and other cumulative developments would be subject to the provisions of Riverside County Ordinance No. 625, which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land. Compliance with Ordinance No. 625 would ensure that the Project and other cumulative developments do not result in indirect impacts to existing agricultural uses in the surrounding area. Thus, the Project would not result in any other changes to the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use, and impacts would be less than significant on a cumulatively-considerable basis.

The Project site and surrounding areas are not zoned for forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g)). As such, the Project has no potential to conflict with such zoning, and no cumulatively-considerable impacts would occur. In addition, the Project has no potential to result in the loss of forest land or conversion of forest land to non-forest use, and no cumulatively-considerable impacts due to the loss or conversion of forest land would occur. Furthermore, there are no components of the proposed Project that could result in the conversion of forest land to non-forest use, as there are no lands used for forest land uses; thus, no cumulatively-considerable impacts would occur.

4.2.6 Significance of Impacts Before Mitigation

Threshold a: No Impact. The Project would result in direct impacts to 111.6 acres of "Farmland of Local Importance." Accordingly, the Project would not convert any land designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use as defined by the FMMP, and no impact would occur.

Threshold b.: Less-than-Significant Impact. Although the Project would conflict with the site's existing zoning classification, the Project Applicant is proposing to rezone the Project site for "One Family Dwellings, 10,000 s.f. Minimum Lot Sizes (R-1-10,000)" land uses as part of Change of Zone No. 2400026 (CZ 2400026), consistent with the site's underlying General Plan land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)." Accordingly, with approval of CZ 2400026, the Project would not conflict with existing agricultural zoning, and impacts would be less than significant. No active agricultural uses occur on site under existing conditions, and as such the Project would result in no impacts due to a conflict with existing agricultural uses on site.

Although the Project site continues to be located within El Sobrante Agricultural Preserve No. 1, the Project Applicant has filed an application for Agricultural Preserve Diminishment No. 240006 (APD 240006), which would remove the 111.6-acre property from the boundaries of the El Sobrante Agricultural Preserve No. 1. With approval of APD 240006, the Project would not conflict with any agricultural preserves, and impacts would be less than significant.

Threshold c.: Less-than-Significant Impact. Although the Project site occurs adjacent to agriculturally-zoned property located south, southeast, southwest, and northwest of the Project site, the Project would be subject to the provisions of Riverside County Ordinance No. 625, which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land. Mandatory compliance with Ordinance No. 625 would ensure that Project-related construction and operational activities would not indirectly cause or contribute to the conversion of off-site farmland to non-agricultural use. Based on the mandatory compliance with Ordinance No, 625, impacts would be less than significant

Threshold d.: Less-than-Significant Impact. Assuming mandatory compliance with Riverside County Ordinance No. 625, there are no components of the Project that would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Impacts would be less than significant.

Thresholds e., f., and g.: No Impact. There are no forest lands in the Project vicinity, and no lands in the Project vicinity are zoned for timberland, timberland production, or forest uses. The Project would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Prior to Project occupancy, the provisions of Riverside County Ordinance No. 625 shall apply. Ordinance No. 625 requires that when lands are developed adjacent to properties zoned primarily for agricultural purposes (that support agricultural operations that have been in place for at least three years and not considered a nuisance operation at the time the operation began), future land buyers must be notified of any agricultural operations that are on-going in the area, and mandate that such agricultural uses shall not be the subject of nuisance complaints.

Mitigation

Project impacts to agriculture and forestry resources would be less than significant; therefore, mitigation measures are not required.

4.3 AIR QUALITY

This Subsection 4.3 is based on a technical report prepared by Urban Crossroads, Inc. (Urban Crossroads). The report addresses the Project's potential to result in regional and localized air quality impacts, and is entitled, "Highland Grove Vistas 4 TTM No. 38927 Air Quality Impact Analysis" (herein, "AQIA"), dated December 11, 2025, and included as *Technical Appendix B* to this EIR (Urban Crossroads, 2025a). Refer to Section 7.0*, References*, for a complete list of these and other reference sources.

4.3.1 EXISTING CONDITIONS

A. South Coast Air Basin

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As stated, the Project site is located within the SCAB, a 6,745-square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. (Urban Crossroads, 2025a, p. 9)

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. (Urban Crossroads, 2025a, p. 9)

B. Regional Climate

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to mid 60s (degrees Fahrenheit [°F]). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F. (Urban Crossroads, 2025a, p. 9)

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast. (Urban Crossroads, 2025a, p. 9)

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast. (Urban Crossroads, 2025a, p. 9)

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine. (Urban Crossroads, 2025a, p. 10)

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections. (Urban Crossroads, 2025a, p. 10)

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level (amsl). (Urban Crossroads, 2025a, p. 10)

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline. (Urban Crossroads, 2025a, p. 10)

C. *Wind Patterns*

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season. (Urban Crossroads, 2025a, pp. 10-11)

D. *Criteria Pollutants*

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below.

1. *Carbon Monoxide (CO)*

CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO emissions come from any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating. CO concentrations tend to be highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. (Urban Crossroads, 2025a, Table 2-1)

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes. (Urban Crossroads, 2025a, Table 2-1)

2. *Sulfur Oxides (SO_X)*

Sulfur dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms SO_4. Collectively, these pollutants are referred to as sulfur oxides (SO_X). Sources of SO_X include coal or oil burning power plants and industries, refineries, and diesel engines. (Urban Crossroads, 2025a, Table 2-1)

A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor. (Urban Crossroads, 2025a, Table 2-1)

3. *Nitrogen Oxides (NO_X)*

Nitrogen Oxides (NO_X) consist of nitric oxide (NO), nitrogen dioxide (NO_2), and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with O_2. Their lifespan in the atmosphere ranges from one to seven days for NO and NO_2, to 170 years for N_2O. NO_X is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_X results from any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating. NO_2 is a criteria air pollutant and may result in numerous adverse health effects. It absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of NO_X compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by a regional monitoring station. (Urban Crossroads, 2025a, Table 2-1)

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of Ozone (O_3) exposure increases when animals are exposed to a combination of O_3 and NO_2. (Urban Crossroads, 2025a, Table 2-1)

4. *Ozone (O_3)*

O_3 is a highly reactive and unstable gas that is formed when reactive organic gases (ROG) and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil), solvents, petroleum processing, and storage and pesticides. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. (Urban Crossroads, 2025a, Table 2-1)

Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes. (Urban Crossroads, 2025a, Table 2-1)

5. Particulate Matter (PM)

Particulate matter (PM) includes inhalable particles with diameters that are generally 10 micrometers and smaller, which are referred to as PM_{10}, and fine inhalable particles with diameters that are generally 2.5 micrometers and smaller, which are referred to as $PM_{2.5}$. (Urban Crossroads, 2025a, Table 2-1)

PM_{10} is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Sources of PM_{10} include road dust, windblown dust, and construction. PM_{10} also is formed from other pollutants (acid rain, NO_X, SO_X, and organics), and from the incomplete combustion of any fuel. Particulate matter pollution is a major cause of reduced visibility (haze) which is caused by the scattering of light and consequently the significant reduction of air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, PM_{10} is a criteria air pollutant. (Urban Crossroads, 2025a, Table 2-1)

$PM_{2.5}$ is a similar air pollutant to PM_{10} consisting of tiny solid or liquid particles that are 2.5 microns or smaller (often referred to as fine particles). $PM_{2.5}$ comes from fuel combustion in motor vehicles, equipment, and industrial sources, and residential and agricultural burning. $PM_{2.5}$ also is formed from reaction of other pollutants (acid rain, NO_X, SO_X, and organics). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant. (Urban Crossroads, 2025a, Table 2-1)

A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from

lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with preexisting respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$. (Urban Crossroads, 2025a, Table 2-1)

6. Volatile Organic Compounds (VOCs)

Volatile Organic Compounds (VOCs) are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide (CO_2), carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG (as discussed below) are used interchangeably. (Urban Crossroads, 2025a, Table 2-1)

Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while in use, and, to some degree, when they are stored. (Urban Crossroads, 2025a, Table 2-1)

Breathing VOCs can irritate the eyes, nose, and throat; can cause difficulty breathing and nausea; and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several. (Urban Crossroads, 2025a, Table 2-1)

7. Reactive Organic Gases (ROGs)

Similar to VOCs, Reactive Organic Gases (ROGs) also are precursors in forming O_3 and consist of compounds containing methane (CH_4), ethane (C_2H_6), propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see above discussion) are used interchangeably. Sources of ROGs and health effects of ROGs are similar to VOCs, and are described above. (Urban Crossroads, 2025a, Table 2-1)

8. Lead (Pb)

Lead (Pb) is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions include ore and metals processing, particularly Pb smelters; resource recovery; the deterioration of Pb-based paints; and leaded gasoline use and piston-engine aircraft operating on leaded

aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. (Urban Crossroads, 2025a, Table 2-1)

Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotients. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers. (Urban Crossroads, 2025a, Table 2-1)

9. Odor

Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves. Odors can come from many sources including animals, human activities, industry, nature, and vehicles. (Urban Crossroads, 2025a, Table 2-1)

Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. (Urban Crossroads, 2025a, Table 2-1)

E. Existing Air Quality

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 4.3-1, *Ambient Air Quality Standards*. (Urban Crossroads, 2025a, p. 18)

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. The most recent State and federal standards were updated by CARB on July 16, 2024, and are presented in Table 4.3-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the state assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS

Table 4.3-1 Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	9.0 µg/m³	15.0 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		53 ppb (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page …

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Table 4.3-1 Ambient Air Quality Standards (Cont'd)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15.0 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

(Urban Crossroads, 2025a, Table 2-2)

standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area. (Urban Crossroads, 2025a, p. 18)

F. Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for seven of the most common air pollutants: CO, Pb, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and two single-pollutant source Pb air monitoring sites throughout the air district. On January 25, 2024, CARB adopted the proposed 2023 amendments to the State and national area designations. Table 4.3-2, *Attainment Status of Criteria Pollutants in the SCAB*, shows the attainment designations for the SCAB. Appendix 2.1 of the Project's AQIA (*Technical Appendix B*) provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB. (Urban Crossroads, 2025a, p. 21)

Table 4.3-2 Attainment Status of Criteria Pollutants in the SCAB

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb[1]	Attainment	Unclassifiable/Attainment

(Urban Crossroads, 2025a, Table 2-3)

G. Local Air Quality

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide information regarding air quality conditions to Southern California residents. The Project site is located within SRA 23. Within SRA 23, the SCAQMD Metropolitan Riverside County 1 monitoring station, located approximately 8.91 miles northwest of the Project site, is the nearest long-term air quality monitoring station for O_3, CO, NO_2, PM_{10} and $PM_{2.5}$. The most recent three (3) years of data available is shown on Table 4.3-3, *Project Area Air Quality Monitoring Summary (2020-2022)*, and is considered to be representative of the local air quality at the Project site. It should be noted that data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations. (Urban Crossroads, 2025a, p. 21)

Table 4.3-3 Project Area Air Quality Monitoring Summary (2020-2022)

Pollutant	Standard	Year		
		2020	2021	2022
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.143	0.117	0.122
Maximum Federal 8-Hour Concentration (ppm)		0.115	0.097	0.095
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	46	20	30
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	81	57	72
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.9	2.1	3.3
Maximum Federal 8-Hour Concentration	> 20 ppm	1.4	1.8	1.2
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.066	0.052	0.056
Annual Federal Standard Design Value		0.014	0.014	0.013
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	104	76	153
Annual Federal Arithmetic Mean (µg/m^3)		30.0	34.2	37
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	110	16	55
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	41.0	82.1	38.5
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	12.63	12.58	10.80
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	4	10	1

ppm = Parts Per Million; µg/m^3 = Microgram per Cubic Meter
(Urban Crossroads, 2025a, Table 2-4)

4.3.2 Applicable Regulatory Requirements

The following is a brief description of the federal, State, and local environmental laws and related regulations governing air quality emissions.

A. Federal Regulations

1. Federal Clean Air Act

The Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include O_3, CO, NO_x, SO_2, PM_{10}, $PM_{2.5}$, and lead. (EPA, 2023a)

One of the goals of the CAA was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to

appropriate industrial sources in the state, in order to achieve these standards. The CAA was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines. (EPA, 2023a)

The sections of the federal CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions address the urban air pollution problems of ozone (smog), carbon monoxide (CO), and particulate matter (PM_{10}). Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet Federal air quality standards designed to protect public health. (EPA, 2023b) Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO_X on a phased-in basis that began in model year 1994. Automobile manufacturers also are required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. (EPA, 2023c)

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, CAA established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source. (EPA, 2023a)

For major sources, Section 112 requires that EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category, EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk. (EPA, 2023a)

2. National Emissions Standards for Hazardous Air Pollutants (NESHAPS) Program

National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The EPA develops national enforcement initiatives that focus on significant environmental risks and noncompliance patterns. For Fiscal Years 2014 to 2016, the Cutting Hazardous Air Pollutants National Initiatives Strategy focuses on categories of sources that emit HAPs. (EPA, 2024a)

Sources subject to NESHAPs are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, sources are generally required to monitor control device operating parameters which are established during the initial performance test. Sources may also be required to install

and operate continuous emission monitors to demonstrate compliance. Consistent with EPA's Clean Air Act Stationary Source Compliance Monitoring Strategy, NESHAP sources that meet the Clean Air Act definition of "major source" generally receive a full compliance evaluation by the state or regional office at least once every two years. (EPA, 2024a)

B. State Regulations

1. California Clean Air Act (CCAA)

The California Clean Air Act (CCAA) establishes numerous requirements for district plans to attain state ambient air quality standards for criteria air contaminants. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State's ambient air quality standards, the California Ambient Air Quality Standards (CAAQS), by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. Generally, the CAAQS are more stringent than the NAAQS. For districts with serious air pollution, its attainment plan should include the following: no net increase in emissions from new and modified stationary sources; and best available retrofit technology for existing sources. (SCAQMD, n.d.)

2. Air Toxic Hot Spots Act

The Air Toxic Hot Spots Act (Health & Safety Code §§ 44300, et seq.) requires facilities emitting specified quantities of pollutants to conduct risk assessments describing the health impacts to neighboring communities created by their emissions of numerous specified hazardous compounds. If the district determines the health impact to be significant, neighbors must be notified. In addition, state law requires the facility to develop and implement a plan to reduce the health impacts to below significance, generally within five years. Additional control requirements for hazardous emissions from specific industries are established by the state and enforced by districts. (SCAQMD, n.d.)

3. Air Quality Management Planning

The California Air Resources Board (CARB) and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies. (CARB, n.d.)

4. Title 24 Energy Efficiency Standards and California Green Building Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The 2022 Building Energy Efficiency Standards focuses on four key areas in newly constructed homes and businesses: (1) encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units; (2) establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies; (3) expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid; and strengthening ventilation standards to improve indoor air quality. The 2019 Building Energy Efficiency Standards already were seven (7) percent more efficient than the previous (2016) Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous Standards for non-residential construction. The 2016 Building Energy Efficiency Standards also already were 28 percent more efficient for residential construction and five (5) percent more efficient for nonresidential construction than the 2013 Building Energy Efficiency Standards they replaced. (CEC, 2022)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

As previously stated, the Title 24 Building Energy Efficient Standards and CALGreen Code are updated on a regular basis, with the most recent approved updates consisting of the 2022 Building Energy Efficiency Standards and 2022 CALGreen Code, which became effective on January 1, 2023. Residential mandatory measures included in the 2022 CALGreen Code include measures related to building envelopes (air leakage, insulation, etc.); fireplaces, decorative gas appliances; space conditioning, water heating, and plumbing systems; measures related to ducts and fans; requirements related to ventilation and indoor air quality; pool and spa systems and equipment; lighting; and provisions related to solar-ready buildings.

5. South Coast Air Quality Management District Rules

The South Coast Air Quality Management District (SCAQMD) enforces rules related to air pollutant emissions in the SCAB. Rules with applicability to the Project include, but are not limited to, those listed below.

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 431.2: Low Sulfur Fuel
- SCAQMD Rule 1113: Table of Standards
- SCAQMD Rule 1186: PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities

6. Senate Bill 535 – Disadvantaged Communities

Senate Bill 535 ("SB 535"; De León, Chapter 830, 2012) recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality. Disadvantaged communities in California are specifically targeted for investment of proceeds from the State's cap-and-trade program. These investments are aimed at improving public health, quality of life, and economic opportunity in California's most burdened communities while at the same time reducing pollution that causes climate change. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the State's cap-and-trade program is one of several strategies that California uses to reduce greenhouse gas emissions that cause climate change. The funds must be used for programs that further reduce emissions of greenhouse gases. SB 535 requires that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). (OEHHA, 2022)

7. Senate Bill 1000 – Environmental Justice in Local Land Use Planning

In an effort to address the inequitable distribution of pollution and associated health effects in low-income communities and communities of color, the Legislature passed and Governor Brown signed Senate Bill 1000 (SB 1000) in 2016, requiring local governments to identify environmental justice communities (called "disadvantaged communities") in their jurisdictions and address environmental justice in their general plans. This new law has several purposes, including to facilitate transparency and public engagement in local governments' planning and decision-making processes, reduce harmful pollutants and the associated health risks in environmental justice communities, and promote equitable access to health-inducing benefits, such as healthy food options, housing, public facilities, and recreation. SB 1000 requires environmental justice elements to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the community's

exposure to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities. (OAG, n.d.)

8. Assembly Bill 617

Assembly Bill 617 (AB 617) was enacted into law in 2017, and relates to criteria air pollutants and toxic air contaminants from sources other than vehicles. In response to AB 617, the California Air Resources Board (CARB) established the Community Air Protection Program (CAPP or Program). The Program's focus is to reduce exposure in communities most impacted by air pollution. Communities around the State are working together to develop and implement new strategies to measure air pollution and reduce health impacts. This first-of-its-kind statewide effort includes community air monitoring and community emissions reduction programs. In addition, the Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State. This new effort provides an opportunity to continue to enhance air quality planning efforts and better integrate community, regional, and State level programs to provide clean air. (CARB, n.d.)

9. Senate Bill 1137 (SB 1137)

SB 1137 is intended to protect the public health of California's communities by creating a minimum health and safety distance of 3,200-feet between sensitive receptors, such as a residence, school, childcare facility, playground, hospital, or nursing home and an oil and gas production well. Specifically, the bill prohibits the California Geological Energy Management Division (CalGEM) from approving the drilling, re-drilling, or significant alteration of any oil and gas well within this "health protection zone." SB 1137 also requires oil and gas facility operators in these protection zones to implement strict pollution controls, and to develop response plans to protect the health of Californians currently living within 3,200 feet of an existing oil well. SB 1137 also requires operators of wells/facilities to provide an individual indemnity bond sufficient to pay the full cost of properly plugging and abandoning the well and decommissioning the facility in order to prevent operators from failing to properly decommission. (CA Legislative Info, 2022a)

C. Local Regulations

1. Riverside County General Plan Air Quality Element

The Riverside County General Plan Air Quality Element identifies goals, policies, and programs that are meant to balance Riverside County's actions regarding land use, circulation, and other issues with their potential effects on air quality. The Air Quality Element addresses ambient air quality standards set forth by the EPA and CARB. The Air Quality Element contains policies designed to establish a regional basis for improving air quality. The following relevant and applicable policies from Riverside County's General Plan Air Quality Element have been identified for the Project:

AQ 1.1: Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.

AQ 1.4: Coordinate with the SCAQMD and [Mojave Desert Air Quality Management District (MDAQMD)] to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.

AQ 2.1: The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.

AQ 2.2: Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.

AQ 2.3: Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

AQ 3.1: Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.

AQ 3.3: Encourage large employers and commercial/industrial complexes to create Transportation Management Associations.

AQ 4.1: Require the use of all feasible building materials/methods which reduce emissions.

AQ 4.2: Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.

AQ 4.6: Require stationary air pollution sources to comply with applicable air district rules and control measures.

AQ 4.7: To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.

AQ 4.9: Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.

4.3.3 Basis for Determining Significance

A. Thresholds of Significance

Section III of Appendix G to the State CEQA Guidelines addresses typical adverse effects to air quality, and includes the following threshold questions to evaluate a project's impacts due to air quality emissions (OPR, 2018a):

- Would the project conflict with or obstruct implementation of the applicable air quality plan?
- Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

- Would the project expose sensitive receptors to substantial pollutant concentrations?

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

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section III of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact due to air quality emissions if construction and/or operation of 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 non-attainment under an applicable federal or State ambient air quality standard;*

c. *Expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations; or*

d. *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts due to air quality emissions. Riverside County also has chosen to apply SCAQMD significance thresholds, as presented in SCAQMD's CEQA Air Quality Significance Thresholds (March 2023), to evaluate the Project's air quality impacts against the above thresholds.

Accordingly, Threshold a., which addresses Section III.a of Appendix G to the State CEQA Guidelines, evaluates whether the proposed Project would conflict with SCAQMD's 2022 Air Quality Management Plan (AQMP), which addresses State and federal requirements under the CAA. A conflict with the AQMP standards and requirements would inhibit the SCAQMD's ability to achieve State and federal standards for air quality.

Threshold b. addresses Section III.b of Appendix G to the State CEQA Guidelines, and emissions generated by a development project would be significant under Threshold b. if emissions are projected to exceed the Regional Thresholds established by the SCAQMD for criteria pollutants.

Threshold c. addresses Section III.c of Appendix G to the State CEQA Guidelines. Under this threshold, impacts would be potentially significant if emissions are projected to exceed the Localized Significance Thresholds (LSTs) established by the State of California and the SCAQMD for criteria pollutants or if the Project would cause or contribute to CO "Hot Spots."

Threshold d. evaluates Section III.d of Appendix G of the State CEQA Guidelines. SCAQMD Rule 402 ("Nuisance") and California Health & Safety Code, Division 26, Part 4, Chapter 3, Section 41700 prohibit the

emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public, including odors. The potential to violate Rule 402 or § 41700 is used herein as a basis to consider a project's odors or other emissions to be significant and require feasible mitigation measures.

B. Regional Thresholds

As noted above, the SCAQMD has developed Regional Thresholds of significance for other regulated pollutants, as summarized Table 4.3-4, *Maximum Daily Regional Emissions Thresholds*. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively-considerable significant air quality impact. (Urban Crossroads, 2025a, p. 28)

Table 4.3-4 Maximum Daily Regional Emissions Thresholds

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day
(Urban Crossroads, 2025a, Table 3-1)

C. Localized Thresholds

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. (Urban Crossroads, 2025a, p. 36)

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. It should be noted that in order to model worst-case conditions, the highest daily peak on-site emissions resulting from overlapping construction activity were modeled. A ground level release height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM_{10} and $PM_{2.5}$ consistent with SCAQMD's LST guidance. In order to account for equipment exhaust emissions from NO_2, CO, PM_{10}, and $PM_{2.5}$ a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance. In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Riverside Airport monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of

2 meters and regulatory default options were utilized consistent with SCAQMD's LST guidance. (Urban Crossroads, 2025a, p. 36)

D. Methodology

1. California Emissions Estimator Model (CalEEMod)

Land uses such as the Project affect air quality through construction-source and operational-source emissions. In August 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts including the SCAQMD, released the latest version of the California Emissions Estimator Model (CalEEMod) version 2022.1.1.23. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendices 3.1 and 3.2 to the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2025a, p. 29)

2. Construction Emissions

Refer to Subsection 3.4 of the Project's AQIA (*Technical Appendix B*) for a discussion of construction activities, construction duration, and construction equipment assumed as inputs in the analysis of the Project's construction-related air quality impacts (Urban Crossroads, 2025a, pp. 29-33).

3. Operational Emissions

Refer to Subsection 3.5 of the Project's AQIA (*Technical Appendix B*) for a discussion of area source emissions sources, mobile-source emission sources, and energy-source emissions that were assumed as inputs in the analysis of the Project's operational-related air quality impacts. (Urban Crossroads, 2025a, pp. 33-35)

4. Sensitive Receptors

LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities. Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site has been used to determine construction air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time. (Urban Crossroads, 2025a, pp. 36-37)

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and SCAQMD guidance. Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain on-site for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours*." Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8 hours. (Urban Crossroads, 2025a, p. 37)

Receptors in the Project study area are described below and shown in Figure 4.3-1, *Sensitive Receptor Locations*. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site. (Urban Crossroads, 2025a, p. 37)

- Location R1: Location R1 represents the existing residence at 17172 McAllister Street, approximately 54 feet north of the Project site. Receptor R1 is placed in the private outdoor living area (backyard) facing the project site.
- Location R2: Location R2 represents the existing residence at 17360 McAllister Street, approximately 149 feet west of the Project site. Receptor R2 is placed at the building façade facing the Project site.
- Location R3: Location R3 represents the existing residence at 17766 Pinot Noir Dr., approximately 1,400 feet southwest of the Project site. Receptor R3 is placed at the façade facing the Project site.
- Location R4: Location R4 represents the existing residence at 13396 Planet Court, approximately 397 feet northeast of the Project site. Receptor R4 is placed at the façade facing the Project site.
- Location R5: Location R5 represents the existing residence at 13402 Gold Medal Court, approximately 540 feet northeast of the Project site. Receptor R5 is placed in the private outdoor living area (backyard) facing the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). (Urban Crossroads, 2025a, p. 37)

4.3.4 Impact Analysis

Threshold a.: Would the Project conflict with or obstruct implementation of the applicable air quality plan

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of was previously referred to as the Southeast

Figure 4.3-1 Sensitive Receptor Locations



Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards. (Urban Crossroads, 2025a, p. 41)

Currently, these State and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the State and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. (Urban Crossroads, 2025a, p. 41)

In December 2022, the SCAQMD released the Final 2022 AQMP (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the CAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 RTP/SCS[1], a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements. The Project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below. (Urban Crossroads, 2025a, pp. 41-42)

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (27). These indicators are discussed below:

- ***Consistency Criterion No. 1****: The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded. (Urban Crossroads, 2025a, p. 42)

Construction Impacts – Consistency Criterion No. 1

As discussed under the analysis of Thresholds b. and c., the Project's localized and regional construction-source emissions would not exceed any of the applicable regional significance thresholds or LST thresholds. As such, construction activities associated with the Project would not conflict with Consistency Criterion No. 1, and impacts would be less than significant. (Urban Crossroads, 2025a, p. 42)

[1] Although SCAG has since adopted the 2024-2050 version of the RTP/SCS, the 2022 SCAQMD AQMP based its assumptions, in part, on the 2020-2045 version of the RTP/SCS.

Operational Impacts – Consistency Criterion No. 1

As discussed under the analysis of Thresholds b. and c., the Project's localized and regional operation-source emissions would not exceed any of the applicable regional significance thresholds or LST thresholds. As such, operational activities associated with the Project would not conflict with Consistency Criterion No. 1, and impacts would be less than significant. (Urban Crossroads, 2025a, p. 42)

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion. (Urban Crossroads, 2025a, p. 42)

- ***Consistency Criterion No. 2****: The Project will not exceed the assumptions in the AQMP based on the years of Project buildout phase.*

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in County of Riverside General Plan is considered to be consistent with the AQMP. (Urban Crossroads, 2025a, p. 42)

Construction Impacts – Consistency Criterion No. 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds would be exceeded, the Project's construction activities would not conflict with Consistency Criterion No. 2, and a less-than-significant impact would result. (Urban Crossroads, 2025a, p. 43)

Operational Impacts – Consistency Criterion No. 2

The Project site is located within an unincorporated portion of the County of Riverside. As per the General Plan, the unincorporated portions of the County are divided into 19 area plans. These area plans provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas. (Urban Crossroads, 2025a, p. 43)

The County of Riverside General Plan designates the Project site within the Lake Matthew/Woodcrest Area Plan as "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)" land uses and "Light Agricultural, 10-Acre Minimum Lot Size (A-1-10)" zoning uses. The Project Applicant proposes a General Plan Amendment (GPA 240072) which would reconfigure the existing land use designations of "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)" to match the areas proposed for development with residential uses, with no change to the overall acreage for RC-VLDR and RCLDR land uses, which would remain at 6.7 acres and 104.9 acres, respectively. The Project Applicant also proposes a Change of Zone (CZ 2400026) to rezone the site from "Light Agricultural, 10-Acre Minimum Lot Size (A-1-10)" to "One-Family Dwelling Zone (R-1)." (Urban Crossroads, 2025a, p. 43)

The Project includes the development of 206 proposed single family detached residential dwelling units. Although the Project is inconsistent with the current land use designations and zoning classifications and would require approval of a General Plan Amendment and Change of Zone to reconfigure the site's land use designations and zoning classifications, the Project's proposed GPA 240072 and CZ 2400026 would not allow for an intensification of uses on site beyond what already is planned based on the site's existing General Plan land use designations, as areas designated for RC-VLDR and RC-LDR land uses would be reconfigured but would remain unchanged at 6.7 acres and 104.9 acres, respectively. Furthermore, the Project, as evaluated herein would not exceed the regional or localized air quality significance thresholds. As such, the proposed Project would not exceed the assumptions in the AQMP based on the years of Project buildout phase. (Urban Crossroads, 2025a, p. 43)

AQMP Consistency Conclusion

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. Although the Project's proposed uses are not consistent with the General Plan land use designations and zoning classifications, the Project would not allow for an intensification of uses on site beyond what already is planned based on the site's existing General Plan land use designations as areas designated for RC-VLDR and RC-LDR land uses, which would remain at 6.7 acres and 104.9 acres, respectively. As such, the Project is considered to be consistent with the AQMP, and Project impacts due to a conflict with the AQMP would be less than significant. (Urban Crossroads, 2025a, p. 44)

Threshold b.: ***Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

Construction Emissions

Construction activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities: site preparation, grading, building construction, paving, and architectural coating. Refer to Subsection 3.4 of the Project's AQIA Technical Report (*Technical Appendices B*) for a description of the modeling inputs used to calculate the Project's estimated construction-related air pollutant emissions. Provided below is an analysis of potential impacts to air quality during construction of the proposed Project. (Urban Crossroads, 2025a, pp. 29-32)

The estimated maximum daily construction emissions without mitigation are summarized in Table 4.3-5, *Overall Construction Emissions Summary*. Detailed construction model outputs are presented in Appendix 3.1 of the Project's AQIA (*Technical Appendix B*). Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD. As such, Project regional construction-related emissions would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be less than significant. (Urban Crossroads, 2025a, p. 32)

Table 4.3-5 Overall Construction Emissions Summary

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2025	11.00	98.00	88.00	0.13	21.00	12.00
2026	8.30	73.00	70.00	0.18	8.50	4.30
2027	13.00	23.00	39.00	0.06	2.30	1.10
2028	13.00	22.00	38.00	0.06	2.20	1.00
Winter						
2025	11.00	98.00	87.00	0.18	21.00	12.00
2026	8.30	73.00	69.00	0.18	8.50	4.30
2027	13.00	23.00	37.00	0.06	2.30	1.10
2028	13.00	22.00	36.00	0.06	2.20	1.00-
Maximum Daily Emissions	**13.00**	**98.00**	**88.00**	**0.18**	**21.00**	**12.00**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2025a, Table 3-5)

Operational Emissions

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions. Refer to Subsection 3.5 of the Project's AQIA (*Technical Appendix B*) for a description of modeling inputs and assumptions used to calculate the Project's operational emissions. (Urban Crossroads, 2025a, pp. 33-34)

The estimated operational-source emissions for summer and winter scenarios are summarized in Table 4.3-6, *Summary of Peak Operational Emissions*. Detailed operation model outputs for the Project are presented in Appendix 3.1 of the Project's AQIA (*Technical Appendix B*). As shown in Table 4.3-6, the Project's daily regional emissions from on-going operations would not exceed any of the SCAQMD Regional thresholds of significance for any criteria pollutant. As such, Project operational-related regional emissions would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be less than significant. (Urban Crossroads, 2025a, p. 34)

Threshold c: ***Would the Project expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations?***

During both construction and operation, the Project has the potential to expose nearby sensitive receptors to substantial pollutant concentrations. The following provides an analysis based on the applicable LSTs established by the State of California and SCAQMD, and an analysis of the Project's potential to result in or contribute to CO "hot spots."

Table 4.3-6 Summary of Peak Operational Emissions

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	7.80	7.60	72.00	0.19	17.00	4.40
Area Source	11.00	3.50	13.00	0.02	0.28	0.28
Energy Source	0.11	1.80	0.79	0.01	0.15	0.15
Project Maximum Daily Emissions	**18.91**	**12.90**	**85.79**	**0.22**	**17.43**	**4.83**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile Source	7.30	8.20	60.00	0.18	17.00	4.40
Area Source	9.60	3.40	1.50	0.02	0.28	0.28
Energy Source	0.11	1.80	0.79	0.01	0.15	0.15
Project Maximum Daily Emissions	**17.01**	**13.40**	**62.29**	**0.21**	**17.43**	**4.83**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2025a, Table 3-6)

Localized Emissions

The analysis herein makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS and CAAQS. Collectively, these are referred to as Localized Significance Thresholds (LSTs). (Urban Crossroads, 2025a, p. 35)

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. (Urban Crossroads, 2025a, p. 35)

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis herein makes use of methodology included in the LST Methodology. (Urban Crossroads, 2025a, p. 36)

Refer to Subsection 3.6 of the Project's AQIA (*Technical Appendix B*) for a discussion of modeling inputs used in the analysis of the Project's impacts due to LSTs (Urban Crossroads, 2025a, pp. 35-39). Refer also to the discussion of LSTs in EIR subsection 4.3.3.C, above, and to the discussion of sensitive receptors presented in 4.3.3.D.4, above.

Construction-Source Emissions LST Analysis

Emissions during the peak construction activity would not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 4.3-7, *Localized Significance Summary Peak Construction (Without Mitigation)*. All other modeled locations in the study area would experience a lesser concentration and consequently a lesser impact. As such, the Project's localized impacts during construction activity would be less than significant. AERMOD model outputs are provided in Appendix 3.2 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2025a, p. 39)

Table 4.3-7 Localized Significance Summary Peak Construction (Without Mitigation)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.03	0.01	1.81E-02	2.17	1.18
Background Concentration [A]	3.3	1.8	0.066		
Total Concentration	**3.33**	**1.81**	**0.08**	**2.17**	**1.18**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data.
Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in µg/m^3. All others are expressed in ppm.
Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_2.
(Urban Crossroads, 2025a, Table 3-7)

Operational-Source Emissions LST Analysis

The Project includes the development of 206 single-family detached residential dwelling units. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed. Accordingly, long-term operation of the Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant. (Urban Crossroads, 2025a, p. 39)

CO "Hot Spot" Analysis

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the

allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment. To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown in Table 3-8 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2025a, p. 40)

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (23). In contrast, an adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 3.3 ppm and 1.2 ppm, respectively (data from Metropolitan Riverside County 1 station for 2022, the most recent year data was available). Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections. (Urban Crossroads, 2025a, p. 40)

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph) - or 24,000 vph where vertical and/or horizontal air does not mix - in order to generate a significant CO impact. (Urban Crossroads, 2025a, p. 41)

Traffic volumes generating the CO concentrations for the "hot spot" analysis is shown on Table 3-9 of the Project's AQIA (*Technical Appendix B*). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vph and AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm). (Urban Crossroads, 2025a, pp. 40-41)

The proposed Project would generate 1,944 two-way daily vehicle trip ends per day and would not produce the volume of traffic required to generate a CO "hot spot." The Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are

not an environmental impact of concern for the Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

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

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include: agricultural uses (livestock and farming); wastewater treatment plants; food processing plants; chemical plants; composting operations; refineries; landfills; dairies; and fiberglass molding facilities. (Urban Crossroads, 2025a, p. 45)

The Project does not include any proposed land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required. (Urban Crossroads, 2025a, p. 45)

Community Health

Most local agencies, including Riverside County, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), Riverside County has determined that existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are directed to the Project's AQIA (*Technical Appendix B*) as presented above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, the Project's AQIA (*Technical Appendix B*) does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed Project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the Project would not result in localized emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ that would exceed the SCAQMD's LSTs.

Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or State ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

As the Project's emissions would comply with federal, State, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level, and would not provide a reliable indicator of health effects if modeled.

4.3.5 Cumulative Impact Analysis

With exception of the issue of odors, the cumulative study area for air quality includes Riverside County and the SCAB. The SCAB is designated as a nonattainment area for State standards of O_3, PM_{10}, and $PM_{2.5}$. The region also is designated as a nonattainment area for federal standards of O_3 and $PM_{2.5}$. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, with exception of odors, the setting for this cumulative analysis consists of the SCAB and associated growth and development anticipated in the air basin. For the issue of odors, the cumulative study area includes the Project site and lands in close proximity to the Project site, as odors diminish rapidly with distance from the source.

As discussed under the analysis of Threshold a., based on the level of air quality emissions anticipated for the proposed Project, the proposed Project would not result in a conflict with the SCAQMD AQMP. Because the Project would be consistent with and would not interfere with implementation of the SCAQMD AQMP, the Project's cumulatively-considerable impacts due to a conflict with the SCAQMD AQMP would be less than significant.

As previously shown in Table 4.3-2, the CAAQS designates the Project site as nonattainment for O_3, PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 and $PM_{2.5}$. The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution.* In this report the SCAQMD clearly states (Page D-3): (Urban Crossroads, 2025a, pp. 45-46)

> *"…the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds*

are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions exceeding the SCAQMD's thresholds would also not cause a cumulatively considerable increase in emissions for those pollutants for which SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds would be considered cumulatively considerable. (Urban Crossroads, 2025a, p. 46)

The Project-specific evaluation of emissions presented under the analysis of Threshold b. demonstrates that proposed Project construction-source and operation-source air pollutant emissions would not result in exceedances of SCAQMD Regional Thresholds (refer to Table 4.3-5 and Table 4.3-6). Therefore, proposed Project construction-source and operation-source emissions would be considered less than significant on a Project-specific and cumulatively-considerable basis. (Urban Crossroads, 2025a, p. 46)

As indicated under the analysis of Threshold c., the Project's localized emissions during construction would be below the applicable SCAQMD LSTs for emissions of criteria pollutants and would not expose sensitive receptors to substantial pollutant concentrations (refer to Table 4.3-7). Additionally, the analysis under Threshold c. provides substantial evidence that the proposed Project would not cause or contribute to any CO "hot spots." Thus, Project-related air quality emissions would not expose nearby sensitive receptors to substantial pollutant concentrations and impacts would be less-than-cumulatively considerable.

With respect to odors, and as discussed under the analysis of Threshold d., the proposed Project would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances (including odors) during both construction and long-term operation. Other developments within the cumulative study area similarly would be required to comply with SCAQMD rules and regulations and the solid waste regulations of the applicable local jurisdictions. Therefore, Project impacts due to other emissions (such as those leading to odors) would be less-than-cumulatively considerable.

4.3.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project's regional and localized construction- and operational-source emissions would not exceed applicable regional significance thresholds or LSTs. Additionally, although the Project is inconsistent with the site's existing General Plan land use designation and zoning classification, the Project's development intensity is consistent with the development intensities allowed within the General Plan. As discussed in the analysis of Thresholds b. and c. the Project's construction and long-term operational activities would not exceed any of the SCAQMD Regional Thresholds or LSTs. As such, the Project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

Threshold b.: Less-than-Significant Impact. As indicated in Table 4.3-5 and Table 4.3-6, Project construction- and operational-related regional emissions would not exceed any of the SCAQMD Regional Thresholds for

criteria pollutants. As such, Project regional construction- and operational-related emissions would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be less than significant.

Threshold c.: Less-than-Significant Impact. As indicated in Table 4.3-7, Project-related construction emissions would not exceed the SCAQMD LSTs for any criteria pollutant, and long-term operation of the Project would not expose sensitive receptors to substantial pollutant concentrations. Additionally, the Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, the Project would not expose sensitive receptors, which are located within one (1) mile of the Project site, to substantial pollutant concentrations, and impacts would be less than significant.

Threshold d.: Less-than-Significant Impact. The Project does not propose land uses typically associated with emitting objectionable odors. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. The proposed Project also would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

4.3.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable Riverside County regulations and design requirements.

- The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities, such as earth-moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, Riverside County shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.
    - All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.
    - The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.

- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.

- The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 113, *Table of Standards*, by requiring that all architectural coatings must consist of low VOCs (i.e., VOCs of less than 50 grams per liter [g/L]) unless otherwise specified in the SCAQMD Table of Standards.

- The Project is required to comply with applicable SCAQMD rules for construction activities on the Project site. In addition to the SCAQMD requirements listed above, additional SCAQMD rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 431.2 (Low Sulfur Fuel) and Rule 1186 / 1186.1 (Street Sweepers).

- The Project is required to comply with the provisions of SCAQMD Rule 402, "Nuisance" which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.

Mitigation

Project impacts to air quality would be less than significant; therefore, mitigation measures are not required.

4.4 BIOLOGICAL RESOURCES

The analysis in this Subsection is based, in part, on information contained in three technical reports prepared by First Carbon Solutions (herein "FCS"). The first report addresses potential impacts associated with development of the Project as proposed, as well as potential impacts associated with off-site improvements and is titled "Biological Resources Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Highland Grove IV Development Project, Unincorporated Riverside County, California" (herein, "BRA"), dated April 16, 2025, and included as *Technical Appendix C1* (FCS, 2025a). The second report is titled "Determination of Biologically Equivalent or Superior Preservation, Highland Grove IV Project, Riverside County, California" (herein "DBESP"), dated February 4, 2026, and included as *Technical Appendix C2* (FCS, 2026). The third report is titled "Aquatic Resources Delineation Report, Highland Grove IV Development Project, Unincorporated Riverside County, California" (herein "ARDR"), dated April 16, 2025, and included as *Technical Appendix C3* (FCS, 2025b). Refer to Section 7.0, *References*, for a complete list of these and other reference sources.

4.4.1 EXISTING CONDITIONS

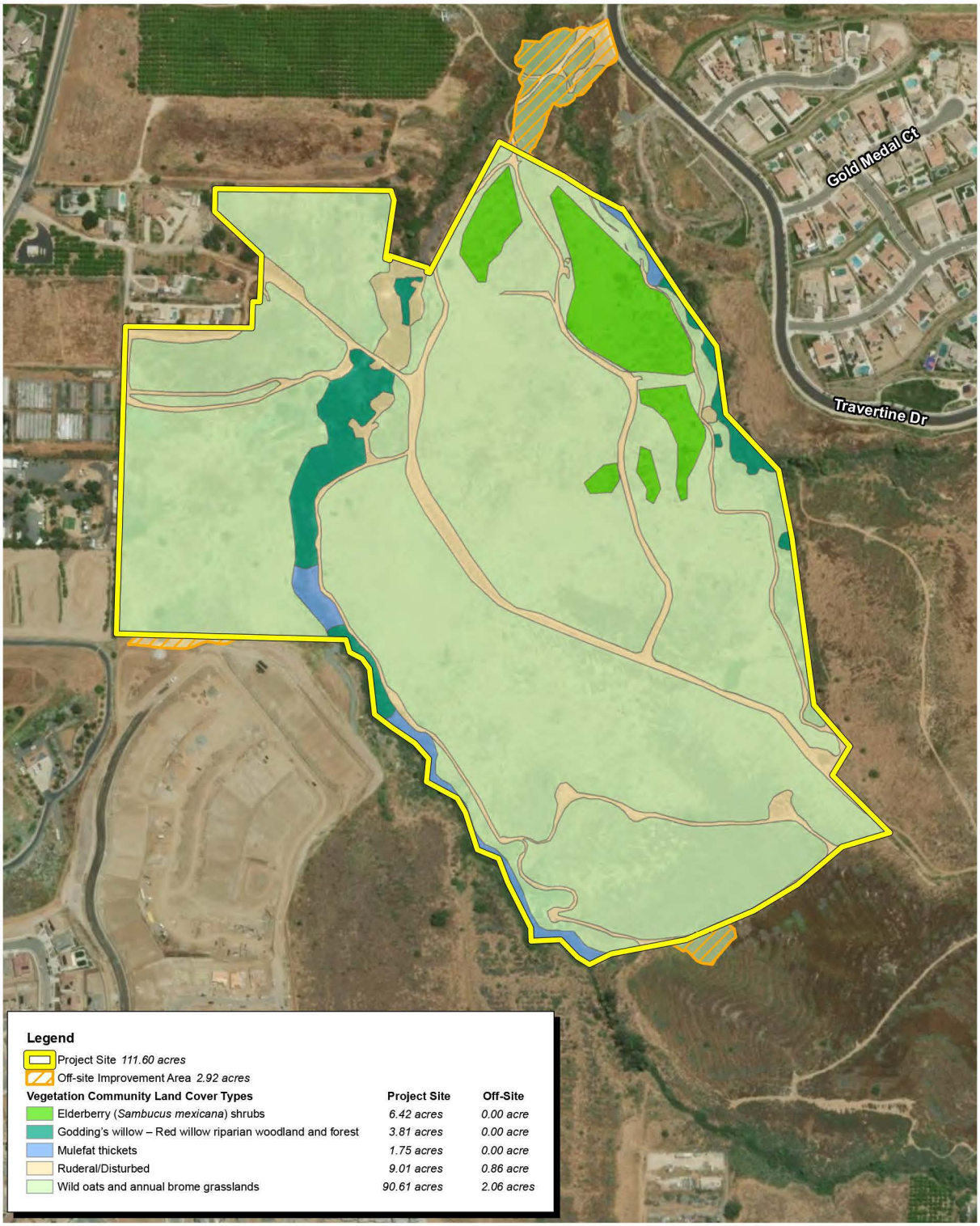
Under existing conditions, the Project site is vacant and undeveloped. The Project site, along with the surrounding undeveloped areas, were utilized as a citrus operation until the early 2000s. Evidence of operational site disturbance includes compacted soils, erosional areas, debris piles, and various dirt roads. A drainage feature bisects the Project site from north to south, continuing along the site's southwestern edge, and a second drainage borders the site to the northeast. Elevations range from approximately 1,180 feet above mean sea level (amsl) near the north central portion of the Project site to 1,348 feet amsl near the southeast corner of the Project site. (FCS, 2026, p. 15)

A. Vegetation Communities

The Project site consists predominantly of agricultural fields in the southern portion of the site, containing a nursery and soil piles, and open, dense grassland in the northern portion of the site. Ephemeral and intermittent drainages that support sparse riparian vegetation are also located within the site's northeastern reaches. (FCS, 2026, p. 16) The vegetation communities and land cover types are summarized in Table 4.4-1, *Vegetation Communities*, and described below. A map showing vegetation communities and land cover types is presented in Figure 4.4-1, *Vegetation Community Land Cover Map*. Photographs are presented in Appendix A of the Project's DBESP (EIR *Technical Appendix C2*).

1. Blue Elderberry Grove

A grove of elderberry shrubs occurs in scattered areas in the northeastern portion of the Project site. These areas were characterized by a dense growth of blue elderberry shrubs with annual grasses and forbs in the understory. (FCS, 2025a, p. 35)



Source(s): First Carbon Solutions (02-04-2026)

Figure 4.4-1

Not to Scale

Vegetation Community Land Cover Map

Table 4.4-1 Vegetation Communities

Vegetation Community/Land Cover Type	Project Site (Acres)	Off-site (Acres)	Total (Acres)
Blue Elderberry Grove	6.42	0.00	6.42
Godding's Willow – Red Willow Riparian Woodland and Forest	0.87	0.00	0.87
Mulefat Thickets	5.99	0.00	5.99
Ruderal/Disturbed	7.68	0.86	8.54
Wild Oats and Annual Brome Grasslands	90.63	2.06	92.69
Totals:	**111.60**	**2.92**	**114.52**

(FCS, 2025a, Exhibit 6)

2. Goodding's Willow–Red Willow Riparian Woodland and Forest

A portion of the drainage along the eastern border of the Project site supports a riparian vegetation community best described as Goodding's Willow – Red Willow Riparian Woodland and Forest. This community is characterized by a relatively dense canopy dominated by Goodding's black willow (*Salix gooddingii*) and red willow *(Salix laevigata*) trees. Other species in this community include arroyo willow (*Salix lasiolepis*), mulefat (*Baccharis salicifolia*), and blue elderberry (*Sambucus mexicana*). (FCS, 2025a, p. 35)

3. Mulefat Thickets

Drainages in the northeastern and central portions of the Project site support riparian vegetation best described as mulefat thickets or *Baccharis salicifolia* Shrubland Alliance as described in the California Native Plant Society (CNPS) Manual of California Vegetation (MCV). This community includes mulefat, willow baccharis (*Baccharis salicina*), blue elderberry, arroyo willow, red willow, and Anderson boxthorn (*Lycium andersonii*). Several emergent trees occur in scattered locations within this community, including Mexican fan palm (*Washingtonia robusta*), Canary Island date palm (*Phoenix canariensis*), and blue gum (*Eucalyptus globulus*). (FCS, 2025a, p. 35)

4. Ruderal/Disturbed

Ruderal/disturbed habitat is present within northern and central portions of the Project site. This land cover type is characterized by disturbed, cleared, and/or bare ground that is being invaded by native and non-native ruderal plant species. On the Project site, ruderal/disturbed lands are found along a bare dirt road that traverses the site. (FCS, 2025a, p. 35)

5. Wild Oats and Annual Brome Grassland

The Project site contains non-native annual grassland that best matches wild oats and annual brome grassland as described in the CNPS MCV. This community is found in much of the central, north, and northwestern portions of Project site. Species observed within this community include red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), black nightshade (*Solanum nigrum*), common fiddleneck (*Amsinckia intermedia*), white horehound (*Marrubium vulgare*), black mustard (*Brassica nigra*), and Italian thistle (*Carduus pycnocephalus*). Additionally, individual California pepper trees (*Schinus molle*) are scattered throughout the northern portion of the site in this community. (FCS, 2025a, p. 35)

B. *Sensitive Native Communities*

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The California Department of Fish and Wildlife (CDFW) maintains a list of natural vegetation communities found in California and ranks them based on rarity. Communities ranked S1 through S3 are considered sensitive natural communities. The CNDDB identifies five sensitive natural community types within 5 miles of the Project site: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. An additional two sensitive natural community types, Southern Interior Cypress Forest and Southern Sycamore Alder Riparian Woodland, have been recorded in the California Natural Diversity Database (CNDDB) between 5 and 10 miles from the site. The riparian habitat located on-site, Goodding's Willow – Red Willow Riparian Woodland is ranked S3 and is considered a sensitive natural community by CDFW. (FCS, 2025a, p. 43)

C. *Special-Status Plant Species*

Four floristic surveys were conducted on the Project site, during which all plant species observed on-site were identified and recorded. The floristic surveys were performed March 17–18, 2024; May 7–9, 2024; and July 2, 2024, by FCS. An additional floristic survey was later performed on July 25, 2024 by FCS. The survey dates covered the blooming periods of target rare plants and most other native annual and perennial species in the region. (FCS, 2025a, pp. 35-36)

Within 10 miles of the Project site, 25 special-status plant species have been recorded in the CNDDB on the nine-quadrangle search area of the California Native Plant Society (CNPS) Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California and in the Information for Planning and Consultation (IPaC) query results. These species were considered in an analysis of their potential to occur on the Project site, and are listed in Appendix D of the Project's BRA (EIR *Technical Appendix C1*). Appendix D of the BRA includes the legal status of each species, their required habitat, and a summary analysis of the potential for each species to occur on the Project site. The potential for occurrence of a species was based on current biological conditions on the Project site and presence of suitable habitats, soil types, and proximity and number of occurrences recorded in the CNDDB. Intensive agricultural land uses and associated previous surface disturbances evident throughout the Project site have limited the possibility for persistence and occurrence of most special-status plant species that were considered in the analysis. (FCS, 2025a, pp. 41-42)

Most special-status plant species considered in the analysis were determined to have no or low potential to occur on-site due to the absence of suitable habitat or the lack of recent records in the Project vicinity. Brand's star phacelia (*Phacelia stellaris*) was not observed on the Project site during any of the floristic surveys and is determined to be absent from the Project site (FCS, 2025a, p. 36). One special-status plant species, paniculate tarplant, was determined to be present on the Project site and is described below. (FCS, 2025a, p. 42)

- **Paniculate Tarplant**: The paniculate tarplant has a CNPS ranking of 4.2 and is an annual herb found in sandy soils (sometimes) and in vernally mesic soils (usually) in coastal scrub, valley and foothill grassland, and vernal pool communities. Its blooming period is between April and November and occurs within elevations of 82–3,083 feet amsl. The Project site supports suitable habitat for this

species in the wild oats and annual brome grassland. This species was observed on the Project site during a Rare Plant Survey conducted by FCS biologists on July 25, 2024. Therefore, this species is considered present on the Project site. (FCS, 2025a, p. 45)

D. Special Status Animal Species

The following special status animal species are either present on the Project site or have a moderate potential to occur on the Project site, and are discussed in the following subsections (FCS, 2025a, pp. 44-45):

- Red-diamond rattlesnake (*Crotalus ruber*): moderate potential to occur
- Cooper's hawk (*Accipiter cooperii*): moderate potential to occur
- Burrowing owl (*Athene cunicularia*): moderate potential to occur
- White-tailed kite (*Elanus leucurus*): moderate potential to occur
- Loggerhead shrike (*Lanius ludovicianus*): moderate potential to occur
- Yellow warbler (*Setophaga petechia*): Present
- Coastal California gnatcatcher (*Polioptila californica californica*): Present
- Least Bell's vireo (*Vireo bellii pusillus*): Present
- Stephens' kangaroo rat (*Dipodomys stephensi*): moderate potential to occur
- Western yellow bat (*Lasiurus xanthinus*): moderate potential to occur
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*): moderate potential to occur
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*): moderate potential to occur

1. Red-diamond Rattlesnake

The red-diamond rattlesnake is a species that occurs in arid, rocky areas in creosote scrub, coastal sage and Riversidean alluvial fan sage scrub, chaparral, oak and pine woodlands, and grasslands and on cultivated areas. The red-diamond rattlesnake is a California Species of Special Concern and it is covered under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project site contains suitable habitat for this species within the wild oats and annual brome grassland, and this species is considered to have a moderate potential to occur on the Project site. There are 12 recent and 12 historical records within 5 miles of the Project site, and there are 10 recent and 15 historical records between 5 and 10 miles from the Project site. (FCS, 2025a, p. 45 and Appendix E, Table 2)

2. Cooper's Hawk

Cooper's hawk is a hawk in the family *Accipitridae*. This species occurs in riparian forests and woodlands throughout California, including urban forests. It prefers patchy wooded areas, such as groves with edges with snags for perching. It nests in dense stands with moderate crown-depths, usually in second-growth conifer stands or in deciduous riparian areas and usually near streams. Cooper's hawk preys on mid-sized birds such as jays, starlings, and doves, but they also consume small rodents. The species capture prey from cover or while flying quickly through dense vegetation, relying on surprise. The Cooper's hawk is designated as a California Watch List species, and it is covered under the MSHCP. Their nests are protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC) pertaining to native nesting avian species. Suitable foraging and nesting habitat for this species is present in the mulefat thickets and other areas

containing trees on and adjacent to the Project site, and this species has a moderate potential to occur on the Project site. There is one recent and one historical record of this species occurring between 5 and 10 miles from the Project site. (FCS, 2025a, p. 49 and Appendix E, Table 2)

3. Burrowing Owl

The burrowing owl is an owl in the family *Strigidae*. Burrowing owls occur in open, dry, annual, or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably those of the California ground squirrel but also those excavated by coyotes, American badgers, and other burrowing mammals. Burrowing owl populations are threatened by habitat loss, pesticide use, and ground squirrel eradication programs, which limit suitable burrowing habitat. The burrowing owl is designated as a California Species of Special Concern and a federal Bird of Conservation Concern, and it is covered under the MSHCP. Limited take of this species is permitted under the MSHCP under certain conditions; however, their nesting burrows are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. The Project site also is located within the MSHCP burrowing owl Species Survey Zone, requiring that a habitat assessment and surveys (if suitable habitat is present) for burrows and burrowing owls be performed. Marginally suitable burrowing and nesting habitat for this species is present on the Project site within the wild oats and annual brome grassland where California ground squirrel burrows also occur. Much of the vegetation in this community is too tall and dense to support burrowing and foraging activities of this species. Focused burrowing owl surveys conducted on the Project site in 2024 did not detect the species, although this species has a moderate potential to occur on site. There are two historical records of the burrowing owl within 5 miles, and there are two recent and 11 historical records between 5 and 10 miles from the Project site. (FCS, 2025a, p. 49 and Appendix E, Table 2)

4. White-tailed Kite

The white-tailed kite is a hawk in the family *Accipitridae*. This species inhabits open habitats such as grasslands, marshes, and farmlands and is often found near agricultural areas. It prefers areas with trees for perching and nesting and forages in open areas that support diurnal rodent populations. Preferred nesting habitat consists of oak woodlands or trees along marsh edges. Suitable nesting substrates include trees or shrubs of moderate height, such as eucalyptus, cottonwoods, toyons, and coyote bush, with the nests placed near the tops of the shrubs or trees. Nesting occurs in February through August, with peak activity in March, April, and May. The white-tailed kite is designated as a California Fully Protected species and it is covered under the MSHCP. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Suitable foraging habitat for this species is present on the Project site and trees adjacent to the Project site provide potentially suitable nesting habitat. Suitable foraging habitat exists within the wild oats and annual brome grassland on and adjacent to the Project site and suitable nesting habitat in trees bordering these areas. This species has a moderate potential to occur on site. There is one historical record of this species occurring between 5 and 10 miles from the Project site. (FCS, 2025a, pp. 49-50 and Appendix E, Table 2)

5. Loggerhead Shrike

The loggerhead shrike (*Lanius ludovicianus*) is a passerine bird in the family *Laniidae*. This species inhabits open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. Loggerhead shrikes were once widely distributed across southern Canada, the contiguous United States, and Mexico; however, their populations have declined significantly since the 1960s. They are considered a California Special Species of Concern and a federal Bird of Conservation Concern and are covered under the MSHCP. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable foraging habitat is present in the wild oats and annual brome grassland on and adjacent to the Project site, and suitable nesting habitat is present in trees and shrubs on and adjacent to the Project site. This species has a moderate potential to occur on site. There is one historical record of this species occurring between 5 and 10 miles from the Project site. (FCS, 2025a, p. 50 and Appendix E, Table 2)

6. Yellow Warbler

The yellow warbler (*Setophaga petechia*) is a passerine bird in the family *Parulidae*. This species is a Neotropical migrant that breeds in California. It inhabits dense, shrubby areas, often near water. It breeds in riparian thickets, especially in willows. They forage predominantly on caterpillars and insects but will also eat berries and other fruits. The yellow warbler is designated as a California Species of Special Concern and it is covered under the MSHCP. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable foraging and nesting habitat is present in the mulefat thickets and riparian areas within the drainage on and adjacent to the Project site. Additionally, this species was observed incidentally during the least Bell's vireo survey and is considered to be present on the Project site. There are two recent records between 5 and 10 miles from the Project site. (FCS, 2025a, p. 50-51 and Appendix E, Table 2)

7. Coastal California Gnatcatcher

The coastal California gnatcatcher inhabits coastal scrub below 2,500 feet elevation. It breeds primarily in coastal sage scrub or Riversidean sage scrub vegetated supporting California sagebrush, with either California buckwheat (*Eriogonum fasciculatum*) in coastal areas or brittlebush (*Encelia farinosa*) in inland areas. The coastal California gnatcatcher is designated as a California Species of Special Concern and federally listed as threatened. This species is covered under the MSHCP without any additional conservation requirements unless it is located within a Criteria Cell. Its nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable foraging and nesting habitat is present in the scrub habitat on Project site. This species was observed during surveys conducted on the Project site and is considered to be present. There are twenty-seven historic and two recent occurrences of the species within 5 miles of the Project site. There are 30 recent and two historic occurrences of the species between 5 and 10 miles of the Project site. (FCS, 2025a, pp. 51 and Appendix E, Table 2)

8. Least Bell's Vireo

Least Bell's vireo (*Vireo bellii pusillus*) is a passerine bird in the family *Vireonidae*. This species is a neotropical migrant that breeds in California. This species occurs and nests in willow-dominated riparian

woodland or scrub habitats in the vicinity of water or in dry river bottoms. Least Bell's vireo is federally and State-listed as an Endangered species and it is covered under the MSHCP. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable habitat for this species exists within the riparian drainage along the northeast Project boundary and in the drainage that bisects the central portion of the site. In addition, South Environmental conducted focused surveys for the least Bell's vireo between May 1 and July 24, 2024. The survey area included riparian habitat in the northeastern and central portions of the Project site. Throughout the eight focused surveys, a total of 28 detections of least Bell's vireo in riparian habitat along the eastern Project boundary and along the drainage that bisects the central portion of the Project site. There are 13 recent and three historical records within 5 miles of the Project site and 29 recent and three historical records between 5 and 10 miles from the Project site. (FCS, 2025a, p. 51 and Appendix E, Table 2)

9. Stephens' Kangaroo Rat

The Stephens' kangaroo rat occurs primarily in annual and perennial grasslands but also occurs in coastal scrub and sagebrush with sparse canopy cover. This species prefers buckwheat, chamise, brome grass, and filaree. It will also burrow into firm soil. The Stephen's kangaroo rat is listed as Threatened under both California Endangered Species Act (CESA) and the federal Endangered Species Act. It is covered under the Stephen's Kangaroo Rat Habitat Conservation Plan (HCP). Suitable habitat for this species exists within the wild oats and annual brome grassland on the Project site, and this species is considered to have a moderate potential to occur on site. There is one recent and 25 historical records within 5 miles of the Project site, and there are 45 historical records between 5 and 10 miles from the Project site. (FCS, 2025a, p. 51-52 and Appendix E, Table 2)

10. Western Yellow Bat

Western yellow bat occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats and is a year-round resident in California. This species roosts in the skirts of dead fronds in both native and non-native palm trees. The western yellow bat is designated as a California Species of Special Concern. Palm trees present on the Project site may provide potential roosting habitat, and this species may forage in the wild oats and annual brome grassland. There is one historical record within 5 miles and there are two historical records between 5 and 10 miles from the Project site. Glenn Lukos Associates (GLA) conducted focused acoustic surveys for bats on the adjacent Highland Grove III project site that supports similar habitat and detected western yellow bats. (FCS, 2025a, p. 52 and Appendix E, Table 2)

11. San Diego Black-tailed Jackrabbit

San Diego black-tailed jackrabbit is a lagomorph in the family *Leporidae*. This species occurs primarily in arid regions with short grass including open grasslands, agricultural fields, and sparse coastal scrub. It nests under bushes or shrubs that have shallow depressions. The San Diego black-tailed jackrabbit is covered under the MSHCP. Suitable habitat for this species is present on and adjacent to the Project site in the wild oats and annual brome grassland. The wild oats and annual brome grassland on the Project site provide suitable habitat for this species. This species has a moderate potential to occur on site. There are two historical records within

5 miles and there are three historical records between 5 and 10 miles from the Project site. (FCS, 2025a, p. 52 and Appendix E, Table 2)

12. Pocketed Free-tailed Bat

Pocketed free-tailed bats are believed to be non-migratory and are generally distributed within a wide range of habitats from sea level to approximately 7,300 feet above mean sea level, including pinon-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian. This bat is colonial and roosts primarily in crevices of rugged cliffs, high rocky outcrops and slopes but may also roost in buildings, caves, and roof tiles. Maternity colonies are formed in and females bear a single young in late June or July. Juveniles become volant in August. This species forages primarily on large moths but will also take small moths, beetles, and a variety of other insects. Suitable foraging habitat is present within the wild oats and annual grassland community and riparian areas on the Project site, and this species has a moderate potential to occur on site. There are two historical records within 5 miles of the Project site and two historical records 5 and 10 miles from the Project site. GLA conducted focused acoustic surveys for bats on the adjacent Highland Grove III project site that supports similar habitat and detected pocketed free-tailed bats. (FCS, 2025a, p. 52-53 and Appendix D, Table 2)

E. Nesting Birds

The Project site and adjacent areas contain vegetation and other potential nesting platforms that could provide suitable nesting habitat for bird species protected under the MBTA and the CFGC, including loggerhead shrike, yellow warbler, coastal California gnatcatcher, least Bell's vireo, Cooper's hawk, burrowing owl, white-tailed kite, and other native avian species. These species are covered under the MSHCP without any additional conservation requirements. (FCS, 2025a, pp. 53, 67-68)

F. Roosting Bats

The Project site offers potentially viable roosting habitat (tree cavities) for special-status bat species, including the pocketed free-tailed bat and the western yellow bat. Bats could potentially forage in the wild oats and annual brome grassland. Roosts are used during the daytime to seek refuge; at night between foraging excursions to rest, digest prey, seek refuge from predators or poor weather conditions, or for social purposes; and in winter for hibernation. Adult females and their young use particularly secure roosts as maternity roosts. The number of bats occupying a given roost can vary from a solitary individual to a large colony, depending on the species. Roosting sites are very sensitive to human disturbance, especially when bats are hibernating or rearing young. At dusk, bats leave their roosts to forage for insects near ponds or riparian habitats. Ecotone areas (areas of transition between habitats) are also used as foraging areas. The Project site and adjacent riparian area have foraging potential for bat species. No bats were observed during the general biological field survey conducted by FCS; however, GLA detected pocketed free-tailed bats and western yellow bats during focused acoustic surveys on the adjacent Highland Grove III project site that supports similar habitat. (FCS, 2025a, p. 53)

G. Burrowing Owl

The Project site is located within the MSHCP Survey Area for the burrowing owl, which requires an assessment of burrowing owl habitat and a determination of species occupancy on-site. During the habitat assessment,

FCS biologists characterized and mapped vegetation communities and searched for suitable habitat for burrowing owls, including open habitats with low-growing and/or spaced vegetation and burrows or other potential cover (e.g., concrete slabs, pipes). FCS biologists then initiated a burrow survey in areas mapped as suitable habitat to locate and record burrows suitable for occupancy by burrowing owls. This included observing the burrows for diagnostic burrowing owl sign, including whitewash (feces), regurgitated pellets, bones, feathers, etc. Following the burrow survey, FCS biologists conducted four focused surveys to search for burrowing owls during the breeding season (February 1 through August 31). The focused surveys were conducted during periods of the day (in the morning 1 hour before sunrise to 2 hours after sunrise or in the early evening 2 hours before sunset to 1 hour after sunset) when burrowing owls are most active and during weather conditions suitable for burrowing owl activity (outside of periods of rain, high winds [>20 mph], dense fog, or temperatures over 90°F [degrees Fahrenheit]). (FCS, 2025a, p. 66)

The habitat assessment found that the wild oat and annual brome grassland on and adjacent to the Project site supports marginally suitable foraging, burrowing, and nesting habitat for burrowing owls. The vegetation in this community is very dense over much of the Project site, but there are scattered areas of sparse vegetation clearings that would provide suitable habitat for burrowing owls. The burrow survey found numerous California ground squirrel burrows on-site and within the 500-foot buffer east of the site that could serve as suitable nesting habitat for burrowing owls. The focused burrowing owl surveys found that no burrowing owls, nor signs of the species (i.e., whitewash, feathers, pellets, etc.), are present on the Project site. Burrowing owls have been recorded in the Project vicinity, with CNDDB records showing two historical records within 5 miles and two recent and 11 historical records between 5 and 10 miles from the Project site. Although burrowing owls were not detected on-site during the focused surveys, there is a moderate potential for burrowing owls to occupy the Project site prior to its development. (FCS, 2025a, p. 67)

H. Crotch's Bumble Bee

Crotch's bumble bee is a bee in the family Apidae that occurs largely in California and primarily in southwestern California, including the Pacific Coast, the western Mojave Desert, and the southern San Joaquin Valley. The species also ranges into southwest Nevada and Baja California, Mexico, though occurrences are rare. This species inhabits scrublands, grasslands, chaparral, and semi-urban settings in foothills and desert margins. Crotch's bumble bee appears to tolerate a narrow range of climatic conditions in comparison to other bumble bee species and requires hotter, drier environments to survive. This species nests underground, often in abandoned rodent dens, or aboveground in tufts of grass, rock piles, old bird nests, or cavities in dead trees. Favored food (nectar) sources for the Crotch's bumble bee include milkweeds (*Asclepias* spp.), pincushions (*Chaenactis* spp.), lupines (*Lupinus* spp.), clovers (*Medicago* spp.), phacelias (*Phacelia* spp.), and sages (*Salvia* spp.). Crotch's bumble bees are generalist foragers and have been commonly associated with plants from the Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepidaeceae, and Boraginaceae families. (FCS, 2025a, Appendix C, p. 5)

Crotch's bumble bee populations have experienced sharp declines over the last 10 years, particularly in northern and southern portions of the Central Valley of California. Declines have been attributed to conversion of habitat for agricultural practices and urbanization. Additionally, climate change and increased aridity have lowered suitable habitat for this species due to its narrow climatic specialization. Pollution and competition

with non-native bees have also impacted Crotch's bumble bee populations. Because of population declines and subsequent inbreeding, genetic diversity in Crotch's bumble bee populations has also declined. (FCS, 2025a, Appendix C, pp. 6-7)

FCS Biologists conducted a Crotch's bumble bee habitat assessment on April 25, 2024, and conducted focused surveys on April 8 and 23, 2025, and on May 13, 2025. Based on the field surveys, the majority of the Project site was determined to be vegetated in a wild oats and annual brome grassland community that exhibits low native species diversity and high densities of non-native annual species that are not Crotch's bumble bee forage species and, thus, is considered poor habitat for Crotch's bumble bees. Despite the presence of brittlebush scattered throughout the annual brome and oat grassland, densities of brittlebush are low and do not provide ample foraging opportunities. Approximately 5.7 percent of the Project site support elderberry groves and 5.3 percent support mulefat thickets; both support a greater diversity of native plant species and these communities were determined to provide marginally suitable foraging habitat for Crotch's bumble bees. Rodent burrows on-site could potentially provide nesting and overwintering opportunities. The Project site has historically been subjected to chronic anthropogenic disturbances and is surrounded by disturbed lands that are likely to reduce the habitat suitability of the area. The western portion of the Project site is heavily used for dumping and is highly disturbed, likely reducing the habitat suitability of the area. In addition, the Project site is directly adjacent to active farming operations and house honeybees on the northwestern portion of the Project site. Honeybees were detected in high abundance during surveys and are known to compete with native bumble bees, increasing disturbance and decreasing habitat suitability. Scoring the project site using the Xerces criteria for rusty patched bumble bees, a system that considers on-site conditions and their context within a wider landscape, FCS Biologists determined that the Project site likely does not contain suitable habitat for Crotch's bumble bee. (FCS, 2025a, Appendix C, pp. 16-17)

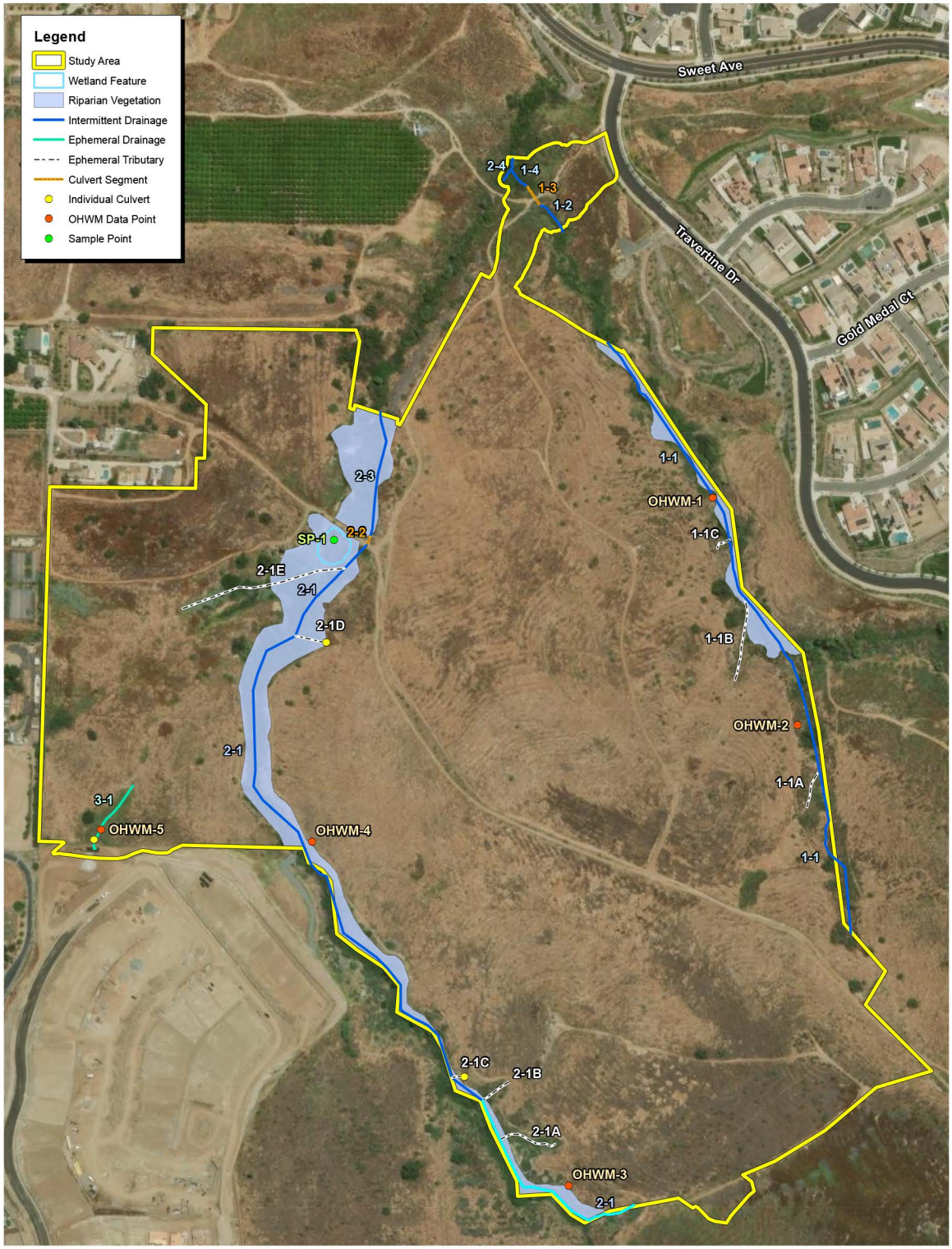
Focused surveys for the species did not detect any bumble bee species. FCS concludes that Crotch's bumble bees are not present on the Project site. It is likely that anthropogenic disturbances observed onsite, including active grubbing, trash from illegal dumping, density of invasive plants, dirt roads, presence of potential competition with honeybees from an adjacent farm, and likely use of pesticides, fungicides, and/or insecticides, has degraded the habitat in a manner that makes it unfavorable for Crotch's bumble bee occupancy. (FCS, 2025a, Appendix C, p. 17)

I. Wildlife Movement Corridors

The Project site consists primarily of non-native grassland and disturbed/ruderal habitat and is surrounded by urbanized and disturbed areas and roads to the south that limit wildlife movement through the Project site. The Project site itself does not serve as a wildlife movement corridor under existing conditions. (FCS, 2025a, p. 37)

J. Jurisdictional Waters

The following is a description and discussion of all observed open drainage channel segments. Dimensions of each segment are shown on Figure 4.4-2, *Aquatic Resources Delineation Map Overview*, and are summarized in Table 4.4-2, *Summary of Aquatic Resources within Study Area*. As shown, the Project site includes 17 open



Source(s): First Carbon Solutions (04-16-2025)

Figure 4.4-2

Not to Scale

Aquatic Resources Delineation Map Overview

Table 4.4-2 Summary of Aquatic Resources within Study Area

Type	Segment ID	Length (linear feet)	Width (feet)	Area (square feet)	Area (acre)
Open Drainage Channel	1-1	2,079	8	16,635	0.38
Open Drainage Channel	1-1A	125	1	125	0.0028
Open Drainage Channel	1-1B	265	1	265	0.006
Open Drainage Channel	1-1C	53	1	53	0.001
Open Drainage Channel	1-2	113	2	227	0.005
Open Drainage Channel	1-4	74	2	148	0.003
Open Drainage Channel	2-1	2,978	10	29,781	0.68
Open Drainage Channel	2-1A	187	1	187	0.004
Open Drainage Channel	2-1B	101	1	101	0.002
Open Drainage Channel	2-1C	36	1	36	0.0008
Open Drainage Channel	2-1D	94	1	94	0.002
Open Drainage Channel	2-1E	528	1	528	0.012
Open Drainage Channel	2-3	395	1.5	593	0.014
Open Drainage Channel	2-4	73	2	146	0.003
Open Drainage Channel	3-1	245	1	245	0.0056
Subtotal - Open Drainage Channels:	**–**	**7,346**	**N/A**	**49,164**	**1.13**
Wetland	N/A	N/A	N/A	8,486	0.19
Subtotal - Wetlands	**–**	**N/A**	**N/A**	**8,486**	**0.19**
Culvert Pipe	1-3	72	1	72	0.002
Culvert Pipe	2-2	30	1	30	0.0007
Subtotal - Culvert Pipes	**–**	**102**	**N/A**	**102**	**0.003**
Totals:	**–**	**7,449**	**N/A**	**57,752**	**1.32**

(FCS, 2025b, Table 1)

and vegetated ephemeral and intermittent channels (with two segments consisting of culvert pipes) and one Freshwater Forested/Shrub Wetland, for a total length of 7,449 linear feet, covering an aggregate area of approximately 57,752 square feet (1.32 acres). Additionally, the Study Area supports 5.52 acres of riparian vegetation (of which 0.19-acre is wetland, entirely vegetated with broadleaved pepperweed [*Lepidium latifolium*]). (FCS, 2025a, p. 38)

The Project site does not include potential waters of the United States regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Under existing conditions, the Project site includes 57,752 square feet (1.32 acre) and 7,449 linear feet of potential waters of the State regulated by the Regional Water Quality Control Board (RWQCB) under Section 13260 of the California Water Code (CWC); and 6.65 acres (5.52 acres of riparian/wetland stream and 1.13 acres of non-riparian stream) of aquatic features and associated riparian habitat regulated pursuant to Section 1602of the CFCG (Lakebed and Streambed Alteration Program). Refer to Section 5, *Results*, of the Project's ARDR (*Technical Appendix C3*) for a detailed description of each of the jurisdictional features identified in Table 4.4-2 and depicted on Figure 4.4-2. (FCS, 2025a, p. 38)

K. MSHCP Riparian/Riverine Areas and Vernal Pools

1. MSHCP Riparian/Riverine Areas

As defined under Section 6.1.2 of the MSHCP*, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, riparian/riverine areas are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a number of listed or special-status water-dependent fish, amphibian, avian, and plant species. Any alteration or loss of riparian/riverine habitat from development of a project requires the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis to ensure the replacement of any lost functions and values of habitats in regards to the listed species. This assessment is independent from considerations given to waters of the United States and waters of the State under the CWA, the California Porter-Cologne Water Quality Control Act, and CDFW jurisdictional streambed under the California Fish and Game Code. Riparian/riverine resources were recorded in the field during a formal jurisdictional delineation conducted by FCS on April 25-26, 2024. (FCS, 2025a, p. 59)

A total of 5.52 acres of riparian habitat occurs on the Project site in the form of Goodding's willow–red willow riparian woodland (CDFW Natural Community Code 61.205.02). The riparian habitat is located in and adjacent to the Intermittent Drainage Segments 1-1, 2-1, and 2-3 that border the northeastern and western boundaries of the Project site. The Goodding's willow–red willow riparian woodland community is considered sensitive by the CDFW and is ranked S3. The Goodding's willow–red willow riparian woodland is dominated by Goodding's black willow, arroyo willow, Mexican fan palm, Canary Island date palm, mule fat, and common fig (*Ficus carica*). The presence of riparian habitat on the Project site requires that habitat assessments and, if habitat is suitable, focused surveys for riparian bird species (least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo) be completed. A portion (0.19 acre) of the riparian habitat adjacent to Ephemeral Drainage Segment 2-1E and Intermittent Drainage Segment 2-1 consists of a wetland as described in the Project's ARDR (EIR *Technical Appendix C3*). (FCS, 2025a, pp. 59-60)

As described above, the Project site includes 17 open and vegetated ephemeral and intermittent channels (with two segments consisting of culvert pipes) that would be considered Riverine features under the MSHCP. These features in total measure 7,449 linear feet, covering an aggregate area of approximately 1.13 acres. (FCS, 2025a, p. 60)

2. MSHCP Vernal Pools and Fairy Shrimp

Vernal pools are depressions in areas where a hard underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime the water gradually evaporates away until the pools become completely dry in the summer and fall. In California, vernal pools formed tens of thousands of years ago on ancient alluvial soils. Soils that support vernal pools include extremely impervious clay layers above thick indurated hardpans or cracked basalt that allows water to slowly percolate downward. (FCS, 2025a, pp. 65-66)

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS), six soil types are mapped on the Project site, all loam soils. One of the soil series mapped on the Project site, Cajalco series, is known to support vernal pool habitat under certain conditions. However, the Cajalco soils on the Project site do not have the clay content to support vernal pools, and no vernal pools or features indicative of the historic presence of vernal pools were observed on the Project site. Furthermore, the surface soils on the Project site have a long history of disturbances due to agricultural use of the site, and vernal pools would not likely persist under this land use regime. Therefore, vernal pools are absent from the Project site. (FCS, 2025a, p. 66)

3. Riparian Birds

The riparian habitat on and adjacent to the Project site is situated within the drainages in the northeastern and central portions of the Project site. The riparian features on-site consists of 5.52 acres of aquatic features and associated riparian habitat. Vegetation present in the riparian habitat include Goodding's willow – red willow riparian woodland and mulefat thickets communities. The riparian habitat includes small areas of tall growing trees such as Goodding's willow but more commonly consists of low-growing species that would be unsuitable for occupancy by western yellow-billed cuckoo (*Coccyzus americanus*), a species that prefers larger or more extensive riparian forests. The riparian habitat includes several willows, but not in densities preferred by southwestern willow flycatcher (*Empidonax traillii extimus*); thus, it is not suitable for occupancy by this species. The riparian habitat could potentially provide suitable foraging and nesting habitat for least Bell's vireo. Focused surveys conducted for the proposed Project for the least Bell's vireo have determined this species is present within the Project site and the associated riparian habitat is considered occupied. No nesting least Bell's vireo were observed on the Project site during the surveys. However, there is high potential for least Bell's vireo to occur and possibly nest on the Project site. (FCS, 2025a, p. 61)

4.4.2 Applicable Environmental Regulations

A. Federal Regulations

1. Endangered Species Act (ESA)

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. (USFWS, 2017)

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants

are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants. (USFWS, 2017)

Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation, the "action" agency receives a "biological opinion" or concurrence letter addressing the proposed action. In the relatively few cases in which the USFWS or NMFS makes a jeopardy determination, the agency offers "reasonable and prudent alternatives" about how the proposed action could be modified to avoid jeopardy. It is extremely rare that a project ends up being withdrawn or terminated because of jeopardy to a listed species. (USFWS, 2017)

Section 10 of the ESA may be used by landowners including private citizens, corporations, tribes, states, and counties who want to develop property inhabited by listed species. Landowners may receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to avoid, minimize, and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat and by addressing economic development with a focus on species conservation. (USFWS, 2017)

2. Clean Water Act Section 401

Clean Water Act (CWA) § 401 water quality certification provides states and authorized tribes with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. Under § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived § 401 certification. The central feature of CWA § 401 is the state or tribe's ability to grant, grant with conditions, deny, or waive certification. Granting certification, with or without conditions, allows the federal permit or license to be issued consistent with any conditions of the certification. Denying certification prohibits the federal permit or license from being issued. Waiver allows the permit or license to be issued without state or tribal comment. States and tribes make their decisions to deny, certify, or condition permits or licenses based in part on the proposed project's compliance with Environmental Protection Agency (EPA)-approved water quality standards. In addition, states and tribes consider whether the activity leading to the discharge will comply with any applicable effluent limitations guidelines, new source performance standards, toxic pollutant restrictions, and other appropriate requirements of state or tribal law. (EPA, 2023i)

Many states and tribes rely on § 401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources. However, § 401 is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a

water of the U.S. If a federal permit or license is not required, or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to the CWA § 401. (EPA, 2023i)

3. *Clean Water Act Section 404*

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities). (EPA, n.d.)

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation's waters would be significantly degraded. Applications for permits must, to the extent practicable: (l) demonstrate steps have been taken to avoid wetland impacts; (2) demonstrate that potential impacts on wetlands have been minimized; and (3) provide compensation for any remaining unavoidable impacts. Proposed activities are regulated through a permit review process. (EPA, n.d.)

An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers (ACOE), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption. (EPA, n.d.)

4. *Executive Order 11990 – Protection of Wetlands*

The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, the Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. (FEMA, 2024) The Order applies to:

- Acquisition, management, and disposition of federal lands and facilities construction and improvement projects which are undertaken, financed, or assisted by federal agencies;

- Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. (FEMA, 2024)

The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. If so, a wetlands assessment must be prepared that describes the alternatives considered. The procedures include a requirement for public review of assessments. (FEMA, 2024)

5. Migratory Bird Treaty Act (16 USC Section 703-712)

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, 2018)

B. State Regulations

1. California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife (CDFW) works with interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met. (CDFW, n.d.)

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs). (CDFW, n.d.)

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA. (CDFW, n.d.)

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal

safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, n.d.)

2. Natural Community Conservation Planning Act (NCCP)

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly. (CDFW, n.d.)

An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP. CDFW and the U.S. Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP participants. (CDFW, n.d.)

There are currently 13 approved NCCPs (includes 6 subarea plans) and 22 NCCPs in the active planning phase (includes 10 subarea plans), which together cover more than 7 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, n.d.)

3. California Fish and Game Code, Section 1600, et seq.

CFGC section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (3) deposit debris, waste or other materials that could pass into any river, stream, or lake. The CFGC indicates that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. (CDFW, n.d.)

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, n.d.)

4. Native Plant Protection Act (NPPA) of 1977

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes

some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, n.d.)

5. Unlawful Take or Destruction of Nests or Eggs (CFGC Sections 3503.5-3513)

Section 3503.5 of the CFGC specifically protects birds of prey, stating: "It is unlawful to take, possess, or destroy any . . . [birds-of-prey] or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 of the CFGC duplicates the federal protection of migratory birds, stating: "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act." (CA Legislative Info, n.d.)

6. Porter-Cologne Water Quality Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2018)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous Non-Point Source (NPS)-related responsibilities, including monitoring and assessment, planning, financial assistance, and management. (SWRCB, 2018)

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease

and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2018)

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the State Water Board. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the EPA, when approved they become water quality standards under the CWA. (SWRCB, 2018)

C. Local and Regional Plans and Regulations

1. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The continued loss of habitat to new development and the cumbersome process of environmental review and habitat mitigation on a project-by-project basis led to preparation of the MSHCP. The MSHCP is a multi-jurisdictional accomplishment that provides a regional conservation solution to species and habitat issues. The primary intent of the MSHCP is to provide for the conservation of a range of plants and animals within natural communities characteristic of western Riverside County and in return, provide take coverage and mitigation for projects throughout the plan area to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. (Riverside County, 2015, p. 4.8-49)

The MSHCP was adopted by Riverside County on June 17, 2003, and is a comprehensive, multijurisdictional Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of FESA, as well as an NCCP pursuant to the California Fish and Game Code. The USFWS issued a Biological Opinion and Federal ESA Section 10 permit for the MSHCP on June 22, 2004, and CDFW issued a Natural Community Conservation Planning (NCCP) Approval and Take Authorization on the same date. As long as adherence to the policies and requirements of the MSHCP is maintained, participants in the MSHCP, which include the County of Riverside and 18 cities, are allowed to authorize 'incidental take' of covered plant and wildlife species. (Riverside County, 2015, p. 4.8-49)

The MSHCP provides for the long-term survival of protected and sensitive species by designating a contiguous system of habitat to be added to existing public/quasi-public lands. The Plan includes an impact fee collected by the permittees and used in part to acquire these lands. Depending on the location of the private or public development project, certain biological studies are required for Plan compliance. These studies may identify the need for specific measures to avoid, minimize and reduce impacts to covered species and their habitat. (Riverside County, 2015, pp. 4.8-49 and 4.8-50)

The MSHCP defines two distinct consistency processes for development projects based on their location within the MSHCP's coverage area, with separate processes for projects located outside of Criteria Areas and those

within a Criteria Area. Criteria Areas consist of 160-acre 'cells' with identified conservation objectives. (Riverside County, 2015, p. 4.8-50)

2. Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP)

The Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) was prepared under the direction of the Riverside County Habitat Conservation Agency (RCHCA) Board of Directors, in consultation with USFWS and CDFW. The County of Riverside is a member agency of the RCHCA. The 30-year SKR HCP was designed to acquire and permanently conserve, maintain, and fund the conservation, preservation, restoration, and enhancement of Stephens' kangaroo rat-occupied habitat. The SKR HCP covers approximately 534,000 acres within the member jurisdictions and includes an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The SKR HCP requires members to preserve and manage 15,000 acres of occupied habitat in seven Core Reserves encompassing over 41,000 acres. (Riverside County, 2015, p. 4.8-52)

On May 3, 1996, the USFWS issued a permit to the Riverside County Habitat Conservation Agency to incidentally take the federally endangered Stephens' kangaroo rat (*Dipodomys stephensi*). Similarly, the CDFW issued a California Endangered Species Act Management Authorization for Implementation of the Stephens' kangaroo rat on May 6, 1996. As of 2015, more than $50 million had been dedicated to the establishment and management of a system of regional preserves designed to ensure the survival of SKR in the plan area. This effort resulted in the permanent conservation of approximately 50% of the SKR-occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. Core reserves were deemed complete in December of 2003. (Riverside County, 2015, p. 4.8-52)

3. Riverside County Oak Tree Management Guidelines

In March 1993, the County of Riverside issued Oak Tree Management Guidelines to address the treatment of oak woodlands in areas where zoning and/or General Plan density restrictions allow the effective use of clustering. The guidelines are generally considered to be the most effective where minimum lot sizes are 2.5 acres or larger, or where oak woodlands are concentrated in a relatively small portion of a project site. The guidelines include recommendations for oak inventories, land use designs to cluster home sites in order to reduce impacts to oaks and mitigation measures for oak conservation. (Riverside County, 2015, p. 4.8-53)

4. Riverside County Ordinance No. 559 – Regulating the Removal of Trees

Riverside County Ordinance No. 559 regulates the removal of living native trees on parcels of property greater than one-half acre, located above 5,000 feet within the unincorporated area of Riverside County without first obtaining a permit to do so. The purpose of the ordinance is to ensure that the timberlands of Riverside County are protected and the ecological balance of such timberlands is preserved. (Riverside County, 2015, p. 4.8-53)

5. Riverside County Ordinance No. 810 – Establishing an Interim Open Space Mitigation Fee

This ordinance implements the Western Riverside County MSHCP and mitigates impacts of new development in western Riverside County. It establishes a development mitigation fee in order to help finance the acquisition of lands containing species protected by the MSHCP. By preserving these habitats and assessing a fee to

develop in these open space areas, the ordinance helps to limit sprawl and encourage concentrated development, thereby reducing greenhouse gas emissions that would arise from trips between wider-flung land uses.

4.4.3 Basis for Determining Significance

Section IV of Appendix G to the State CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project's impacts to biological resources (OPR, 2018a):

- 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- 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 the California Department of Fish and Game or US Fish and Wildlife Service?
- Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- 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?
- Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section IV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on biological resources if construction and/or operation of the Project would:

a. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan;*
b. *Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12);*
c. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service;*

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. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service;

f. 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; and/or

g. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as listed above, were used to evaluate the significance of the proposed Project's impacts to biological resources.

4.4.4 IMPACT ANALYSIS

Threshold a.: ***Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?***

The Project area is subject to two separate habitat conservation plans: the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) and the Western Riverside County MSHCP. Each is discussed below.

A. Project Consistency with SKR HCP

As previously noted, the SKR HCP was prepared under the direction of the RCHCA Board of Directors, in consultation with USFWS and CDFW. Riverside County is a member agency of the RCHCA. According to Figure S-1 of the SKR HCP, the Project site is not located within or adjacent to any SKR core reserve areas, although some lands adjacent to and east and south of Lake Matthews are included in the SKR core reserve areas. Notwithstanding, because the Project site is not located within any areas identified as a Core Reserve by the SKR MSHCP, the Project Applicant would not be required to conserve any lands on site, but would be required to contribute fees towards the establishment and long-term maintenance of the SKR HCP core reserve pursuant to Riverside County Ordinance No. 663. The Project would not conflict with any provisions of the SKR HCP; thus, a less-than-significant impact would occur.

B. Project Consistency with the MSHCP

Provided below is an evaluation of the Project's consistency with the MSHCP Reserve assembly requirements, Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), Section 6.1.3 (Protection of Narrow Endemic Plant Species), Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface), and Section 6.3.2 (Additional Survey Needs and Procedures).

1. Project Relationship to MSHCP Reserve Assembly

The Project site is located within the MSHCP plan area, but is not within or adjacent to a Criteria Cell. The nearest Criteria Cell Group (2026) is located approximately 1.17 miles southwest of the Project site. The Project site is not in or adjacent to a Conservation Area or Public Quasi-Public (PQP) Conserved Land. The Lake Mathews/Stelle Mountain Reserve Parcels (PQP Conserved Land) are located approximately 0.3-mile southwest of the Project site, and the Riverside Land Conservancy Memorandum of Understanding (MOU) (PQP Conserved Land) approximately 1.6 miles west of the Project site. The Project site is not located within any linkage. Because of its location outside of any Criteria Cells or Cell Groups, the Project is not subject to Reserve Assembly Analysis requirements under the MSHCP. As such, the Project has no potential to conflict with the MSHCP Reserve Assembly requirements, and no impact would occur. (FCS, 2025a, p. 55)

2. Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

Impacts to Riparian/Riverine Areas

Requirements for activities within inland streams, wetlands, and riparian areas in MSHCP plan area are described in Section 6.1.2 of the MSHCP. The MSHCP requires, among other things, assessments for riparian/riverine and vernal pool resources. As projects are proposed within the MSHCP plan area, an assessment of the potentially significant effects of those projects on riparian/riverine areas and vernal pools are required, as currently mandated by the California Environmental Quality Act (CEQA), using available information augmented by project-specific mapping provided to and reviewed by the permittee's Biologist(s). Riparian/Riverine areas and vernal pools are defined for this section as follows in accordance with Section 6.1.2, Volume I, of the Final MSHCP Plan. (FCS, 2026, p. 21)

As previously noted, a total of 5.52 acres of riparian habitat occurs on the Project site in the form of Goodding's willow–red willow riparian woodland located in and adjacent to the Intermittent Drainage Segments 1-1, 2-1, and 2-3 that border the northeastern and western boundaries of the Project site (as previously shown on Figure 4.4-2). The Project site also includes 17 open and vegetated ephemeral and intermittent channels (with two segments consisting of culvert pipes) that would be considered riverine features under the MSHCP (Exhibit 10), which in total measure 7,449 linear feet and cover an aggregate area of approximately 1.32 acres. Implementation of the proposed Project would result in permanent direct impacts to 1.44 acres of riparian habitat (of which 0.19-acre is State wetlands), and 0.33-acre of permanent direct impacts to riverine features due to site grading, off-site improvements, and fuel modification areas. No temporary impacts to MSHCP-defined riparian or riverine resources would occur as a result of the Project. Additionally, Project-related fuel management zones would not result in any impacts to any riparian avoidance areas or mitigation areas, and as such would not result in any impacts to riparian/riverine habitats. Total Project impacts to MSHCP-defined riparian/riverine resources would comprise a total of 1.77 acres. (FCS, 2026, p. 22)

Because the Project would result in impacts to MSHCP-defined riparian and riverine areas, a DBESP is required for the Project pursuant to Volume I, Section 6.1.2 of the MSHCP. A DBESP has been prepared for the Project and is included as EIR *Technical Appendix C2*. As documented in the Projects DBESP, Project impacts to 1.77 acres of riparian/riverine resources would be mitigated through on-site mitigation encompassing 3.54 acres (2:1 ratio) that would include the rehabilitation and establishment of riparian habitat

including Goodding's willow-red willow riparian woodland and mulefat thickets adjacent to Drainages 1 and 2. Notwithstanding, because the Project would result in unavoidable permanent impacts to 1.77 acres of riparian/riverine resources, the Project would have the potential to conflict with MSHCP Section 6.1.2 in the absence of mitigation. Accordingly, Project impacts to 1.77 acres of MSHCP riparian/riverine habitat represent a potential conflict with MSHCP Section 6.1.2, resulting in a significant impact for which mitigation would be required. (FCS, 2026, p. 30)

Impacts to Section 6.1.2 Riparian Birds

Focused protocol surveys for riparian bird species such as the least Bell's vireo, southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) are required under the MSHCP if suitable habitat is present. The Project site lacks the size and stratified riparian plant composition that would support the southwestern willow flycatcher and western; however, the Project site does contain suitable habitat for the least Bell's vireo. A habitat assessment and focused least Bell's vireo surveys was conducted for the Project site and off-site improvement areas. (FCS, 2026, p. 22)

The least Bell's vireo was observed in riparian habitat in the drainages along the northern and western boundary of the Project site. A total of four least Bell's vireo territories were observed within the study area on and off-site. A portion of one vireo territory of these territories would be permanently impacted by the Project. Due to the number of territories and span of its presence in the drainages, all riparian habitat present on site and within the Project's off-site improvement areas are considered occupied least Bell's vireo habitat. No nests were detected during the focused surveys, and the 1.44 acres of riparian habitat that would be removed by the proposed Project is not considered to be occupied by nesting least Bells' vireos. However, riparian habitat on-site may become occupied by nesting least Bell's vireo prior to implementation of the proposed Project. Construction of the proposed Project could potentially impact nesting least Bell's vireos if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the species' breeding season (March 15 through September 30). Construction activities could also impact least Bell's vireos nesting in areas within 500 feet of the activities. Destruction of an active least Bell's vireo nest or direct mortality would be considered a violation of the Endangered Species Act, the California Endangered Species Act (CESA), the Migratory Bird Treaty Act (MBTA), and Fish and Game Codes pertaining to the protection of native nesting avian species. Accordingly, Project impacts to 1.44 acres of riparian habitat considered suitable for the least Bell's vireo and indirect impacts to riparian habitat within 500 feet of proposed construction activities represents a potential conflict with MSHCP Section 6.1.2 with respect to riparian birds. This is evaluated as a significant impact of the proposed Project for which mitigation would be required. (FCS, 2026, p. 23)

Species Conservation Objective 3 for least Bell's vireo within the MSHCP requires that 90 percent of riparian habitat occupied by the species shall be protected in a manner consistent with its conservation, including maintaining a buffer of 100 meters (328 feet) of undeveloped land adjacent to occupied habitat. Therefore, if the riparian habitat that would be removed by the proposed Project is determined to be occupied by nesting least Bell's vireos prior to Project development, the proposed Project would be required to implement conservation measures required by the MSHCP. To achieve the 90 percent long-term conservation value standard for this species a mitigation measure is required, which would increase suitable riparian habitat for the species to meet and exceed Species Conservation Objective 3 for least Bell's vireo. (FCS, 2026, p. 23)

Impacts to Vernal Pools

As previously noted, the soil types present on site do not have the clay content to support vernal pools, and no vernal pools or features indicative of the historic presence of vernal pools were observed on the Project site. Furthermore, the surface soils on the Project site have a long history of disturbances due to agricultural use of the site, and vernal pools would not likely persist under this land use regime. Therefore, vernal pools are absent from the Project site, and no impacts to vernal pools or vernal pools species (i.e., fairy shrimp) would occur as a result of the proposed Project. (FCS, 2025a, p. 66)

3. Protection of Narrow Endemic Plant Species

Volume I, Section 6.1.3 of the MSHCP, *Protection of Narrow Endemic Plant Species*, requires that within identified Narrow Endemic Plant Species Survey Areas (NEPSSA), site-specific focused surveys for Narrow Endemic Plants Species will be required for all public and private projects where appropriate soils and habitat are present. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the Project site is not located within any designated NEPSSA survey areas. Accordingly, no impacts to narrow endemic plant species would occur with implementation of the proposed Project; thus, the Project has no potential to conflict with MSHCP Section 6.1.3 and no impact would occur. (FCS, 2026, p. 30)

4. Guidelines Pertaining to the Urban/Wildland Interface

Section 6.1.4 of the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface,* is intended to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildlife Interface Guidelines (UWIG) are intended to ensure that indirect Project-related impacts to the MSHCP Conservation Area, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized. The Project site is not located within or in close proximity of any Criteria Cells or designated conservation areas. As previously noted, the nearest lands that are located subject to conservation and dedication as part of the MSHCP occurs approximately 1.17 miles southwest of the Project site, while the Lake Mathews/Stelle Mountain Reserve Parcels (PQP Conserved Land) are located approximately 0.3-mile southwest of the Project site. Thus, the Project site is not located in close proximity to any MSHCP Conservation Areas. Furthermore, all of the drainages that would convey runoff from the Project site would convey flows northerly towards the City of Riverside and away from areas proposed for conservation under the MSHCP. Accordingly, the Project has no potential to result in edge effects that could adversely affect the MSHCP conservation areas. Therefore, the proposed Project has no potential to conflict with the Urban/Wildlands Interface Guidelines established by MSHCP Section 6.1.4, and no impact would occur.

5. Additional Survey Needs and Procedures

Volume I, Section 6.3.2 of the MSHCP identifies that in addition to the Narrow Endemic Plant Species addressed in Section 6.1.3 of the MSHCP, additional surveys may be needed for other certain plant and animal species in conjunction with MSHCP implementation in order to achieve full coverage for these species. Within areas of suitable habitat, focused surveys are required if a Study Area occurs within a designated Criteria Area Plant Species Survey Area (CAPSSA), or special animal species survey area (i.e., burrowing owl, amphibians,

and mammals). The Project site falls within the burrowing owl survey area, but does not occur within the CAPSSA or other special species survey areas for amphibians or mammals. As such, the Project has no potential to conflict with MSHCP requirements related to CAPSSA species or for special-status amphibians or mammals, and impacts would be less than significant. Project impacts to the burrowing owl are discussed below.

❑ Burrowing Owl

Following the 2006 MSHCP Burrowing Owl Survey Instructions, focused burrowing owl surveys were conducted for the Project site by FCS. Based on these surveys, it was determined that the wild oats and annual brome grassland on the Project site support suitable foraging habitat for burrowing owls. There also are numerous small mammal burrows on-site, including those of California ground squirrels, that could become occupied by burrowing owls and potentially be used for nesting. The CNDDB shows two historical records of the burrowing owl within 5 miles, and there are two recent and 11 historical records between 5 and 10 miles from the Project site. This species is covered under the MSHCP and protected by the MBTA and Fish and Game Codes. (FCS, 2026, p. 43)

No burrowing owls or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project site during the focused surveys. Therefore, the burrowing owl is considered absent from the Project site. However, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins. Thus, construction of the proposed Project could potentially impact burrowing owls if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the burrowing owl breeding season (February 1 through August 31). Ground-disturbing and vegetation-removing construction activities could destroy burrows inhabited by burrowing owls, causing destruction of occupied burrows, including nesting burrows. Construction activities could also impact burrowing owls that occupy or nest on lands within 500 meters (1,640 feet) of the Project site. Accordingly, the Project's potential to impact the burrowing owl is identified as a potentially significant impact for which mitigation, in the form of pre-construction burrowing owl surveys, would be required. (FCS, 2026, pp. 43-44)

Threshold b.:	***Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?***
Threshold c.:	***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 the California Department of Fish and Wildlife or U. S. Wildlife Service?***

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed Project.

A. *Impacts to Special-Status Plants*

As previously noted, most special-status plant species considered in the analysis were determined to have no or low potential to occur on-site due to the absence of suitable habitat or the lack of recent records in the Project vicinity. Brand's star phacelia (*Phacelia stellaris*) was not observed on the Project site during any of the floristic surveys and is determined to be absent from the Project site (FCS, 2025a, p. 36). One special-status plant species, paniculate tarplant, was determined to be present on the Project site. The paniculate tarplant has a CNPS ranking of 4.2 and was observed on the Project site during a Rare Plant Survey conducted by FCS biologists on July 25, 2024. (FCS, 2025a, p. 44) Approximately 460 paniculate tarplants were observed, including 450 on-site and 10 within the northern off-site improvement area (FCS, 2025a, p. 36). Based on the relatively low sensitivity ranking (CNPS 4.2), broad distribution of the species, and an impact to a low number of tarplants which would not negatively impact the regional population, impacts to these special-status plants would be less than significant and no mitigation is required. (FCS, 2025a, p. 69)

B. *Impacts to Special-Status Wildlife*

As previously noted, the following special-status animal species are either present on the Project site or have a moderate potential to occur on the Project site (FCS, 2025a, p. 45):

- Red-diamond rattlesnake (*Crotalus ruber*): moderate potential to occur
- Cooper's hawk (*Accipiter cooperii*): moderate potential to occur
- Burrowing owl (*Athene cunicularia*): moderate potential to occur
- White-tailed kite (*Elanus leucurus*): moderate potential to occur
- Loggerhead shrike (*Lanius ludovicianus*): moderate potential to occur
- Yellow warbler (*Setophaga petechia*): Present
- Coastal California gnatcatcher (*Polioptila californica californica*): Present
- Least Bell's vireo (*Vireo bellii pusillus*): Present
- Stephens' kangaroo rat (*Dipodomys stephensi*): moderate potential to occur
- Western yellow bat (*Lasiurus xanthinus*): moderate potential to occur
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*): moderate potential to occur
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*): moderate potential to occur

Of these species, the red-diamond rattlesnake, Cooper's hawk, white-tailed kite, loggerhead shrike, yellow warbler, coastal California gnatcatcher, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit are listed as covered species by the MSHCP, while the Stephens' kangaroo rat is covered by the SKR HCP. Therefore, impacts to these species would be less than significant with compliance with the MSHCP and payment of SKR HCP and MSHCP open space mitigation fees pursuant to Riverside County Ordinance Nos. 663 and 810, respectively. As demonstrated herein, the proposed Project would be fully consistent with the MSHCP with implementation of mitigation measures, and the Project would be conditioned to require payment of fees pursuant to Riverside County Ordinance Nos. 663 and 810. Therefore, Project impacts to the red-diamond rattlesnake, Cooper's hawk, white-tailed kite, loggerhead shrike, yellow warbler, coastal California gnatcatcher, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit would be less than significant with mandatory fee payments.

As indicated under the analysis of Threshold a., no burrowing owls or characteristic sign such as white-wash, feathers, tracks, or pellets were detected within or immediately adjacent to the Project site during the focused surveys. Therefore, the burrowing owl is considered absent from the Project site. However, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins. Thus, construction of the proposed Project could potentially impact burrowing owls if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the burrowing owl breeding season (February 1 through August 31). Ground-disturbing and vegetation-removing construction activities could destroy burrows inhabited by burrowing owls, causing destruction of occupied burrows, including nesting burrows. Construction activities could also impact burrowing owls that occupy or nest on lands within 500 meters (1,640 feet) of the Project site. Accordingly, the Project's potential to impact the burrowing owl is identified as a potentially significant impact for which mitigation, in the form of pre-construction burrowing owl surveys, would be required. (FCS, 2026, pp. 43-44)

Least Bell's vireos have been detected on-site in the riparian habitat supporting the Goodding's willow–red willow riparian woodland and forest and mulefat thickets communities. A total of four least Bell's vireo territories were observed within the study area on and off-site. A portion of one vireo territory of these territories would be permanently impacted by the Project. Thus, the riparian habitat on-site is considered occupied by least Bell's vireo. No nests were detected during the focused surveys, and the 1.44 acres of riparian habitat that would be removed by the proposed Project is not considered occupied by nesting least Bells' vireos. However, riparian habitat on-site may become occupied by nesting least Bell's vireo prior to implementation of the proposed project. Construction of the proposed Project could potentially impact nesting least Bell's vireos if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the species' breeding season (March 15 through September 30). Construction activities could also impact least Bell's vireos nesting in areas within 500 feet of the activities. Destruction of least Bell's vireo nests or disturbances to nests in adjacent areas that cause nest failure would be a violation of the MBTA and California Fish and Game Code Sections pertaining to the protection of nesting birds. Species Conservation Objective 3 for least Bell's vireo within the MSHCP requires that 90 percent of riparian habitat occupied by the species shall be protected in a manner consistent with its conservation, including maintaining a buffer of 100 meters (328 feet) of undeveloped land adjacent to occupied habitat. Therefore, if the riparian habitat that would be removed by the proposed Project is determined to be occupied by nesting least Bell's vireos prior to Project development, the proposed Project would be required to implement conservation measures required by the MSHCP. Accordingly, the Project's direct impacts to the least Bell's vireo would represent significant impacts of the proposed Project for which mitigation would be required. (FCS, 2026, p. 23)

Species Conservation Objective 3 for least Bell's vireo within the MSHCP requires that 90 percent of riparian habitat with long-term conservation value for the species shall be conserved in a manner consistent with its conservation, including conserving a buffer of 100 meters (328 feet) of undeveloped land adjacent to occupied habitat. The proposed Project includes undeveloped areas adjacent to the riparian habitat, although less than the 100-meter setback specified in the objective. However, the drainage channels are deeply incised, which would provide a topographical buffer for potential noise and visual impacts from the proposed project. If the riparian habitat that would be removed by the proposed project is determined to be occupied by nesting least Bell's vireos prior to project development, the proposed project would be required to implement conservation

measures required by the MSHCP. To achieve the 90 percent long-term conservation value standard for this species, mitigation is required, which would increase suitable riparian habitat for the species to meet and exceed Species conservation Objective 3 for least Bell's vireo. (FCS, 2025a, p. 65)

With respect to indirect impacts to the least Bell's vireo, the Project would provide undeveloped landscape adjacent to the avoided riparian habitat in Drainages 1 and 2. Although the width of this undeveloped landscape is less than the 100 meters identified in Species Conservation Objective 3, site-specific conditions substantially reduce the potential for indirect effects to least Bell's vireo. The occupied portions of Drainages 1 and 2 are deeply incised, with steep banks and pronounced vertical separation from adjacent developable areas. This topography functions as an effective physical buffer that limits visual disturbance, attenuates construction and operational noise, and reduces human activity adjacent to occupied habitat. Additionally, a noise analysis conducted by Vista Environmental found that noise created by the proposed Project would be below 60 dBA Leq at the least Bell's vireo habitat areas and the calculated noise levels at the least Bell's vireo habitat areas would be within the range of the existing ambient noise levels in the project vicinity. Therefore, indirect noise impacts affecting the least Bell's vireo would not occur and permanent sound walls would not be required. (FCS, 2026, p. 38)

In addition to topographic separation, the Project incorporates multiple avoidance, minimization, and design features that further would reduce indirect impacts. These include permanent preservation of riparian habitat; implementation of construction timing restrictions and pre-construction surveys; installation of temporary noise-attenuating walls where necessary; shielding and directional control of lighting away from riparian areas; and the use of physical barriers to discourage unauthorized access into the drainages. Together, these measures would substantially reduce edge effects typically associated with development adjacent to riparian habitat. (FCS, 2026, p. 38)

While the potential for indirect effects to least Bell's vireo cannot be completely eliminated, the combination of topographic buffering, undeveloped adjacent open space, and Project design features are expected to effectively minimize disturbance to least Bell's vireo habitat both during construction and under long-term operational conditions. When considered alongside the proposed on-site riparian rehabilitation and establishment within Drainages 1 and 2, which will improve habitat quality, structure, and long-term suitability for least Bell's vireo, the Project meets the conservation intent of Objective 3 by maintaining and enhancing the long-term conservation value of occupied riparian habitat, notwithstanding localized reductions in the width of undeveloped adjacent lands. However, in the absence of mitigation, Project indirect impacts to the least Bell's vireo would be potentially significant due to a potential conflict with Objective 3. (FCS, 2026, pp. 38-39)

The Project site contains trees that could provide suitable bat roosting habitat, including for special-status bats such as the pocketed free-tailed bat and western yellow bat. Direct and indirect impacts could occur to roosting bats due to removal of potential roosting habitat during Project construction. These activities could potentially subject bats to risk of death or injury, and they would be likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals. Accordingly, Project impacts to special-status bats, including the pocketed free-tailed bat and western yellow bat, would be significant and mitigation would be required. (FCS, 2025a, p. 76)

The soils on the Project site consist of loamy soils that do not contain the level of clay content necessary to support vernal pools. Furthermore, the surface soils on the Project site have a long history of disturbances due to agricultural use of the site, and vernal pools would not likely persist under this land use regime. Therefore, the Project site does not provide suitable habitat for sensitive vernal pool fairy shrimp species, and no impact would occur to Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, or Vernal pool fairy shrimp. (FCS, 2025a, Appendix E, Table 2)

In addition, the Project site contains vegetation with the potential to support native nesting birds. The California Fish and Game Code prohibits mortality of native birds, including eggs. Thus, a significant impact could occur to nesting birds if grading or development were to occur to nesting birds if grading or development were to occur during the nesting season (February 1 to September 30). Accordingly, prior to mitigation requiring pre-construction surveys, the Project has the potential to result in significant impacts to nesting birds. (FCS, 2025a, p. 75)

Threshold d.: ***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?***

There are no wildlife movement corridors on the Project site. The aquatic features on and adjacent to the Project site may provide movement opportunities for common wildlife species, but the construction and operation of the Project would not impact the corridor or influence wildlife movement within it. Additionally, the MSHCP identifies linkages and corridors to provide for the regional movement of wildlife, and does not identify the Project site as being located within any planned or existing linkages or corridors. Therefore, impacts to wildlife movement corridors would be less than significant. (FCS, 2025a, p. 75)

Threshold e.: ***Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?***

As previously noted, sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural vegetation communities found in California and ranks them based on rarity. Communities ranked S1 through S3 are considered sensitive natural communities. The CNDDB identifies five sensitive natural community types within 5 miles of the Project site: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. An additional two sensitive natural community types, Southern Interior Cypress Forest and Southern Sycamore Alder Riparian Woodland, have been recorded in the California Natural Diversity Database (CNDDB) between 5 and 10 miles from the site. The riparian habitat located on-site, Goodding's Willow – Red Willow Riparian Woodland, is ranked S3 and is considered a sensitive natural community by CDFW. None of the other plant communities on site comprise sensitive natural communities or riparian habitat. (FCS, 2025a, p. 43)

The Project site contains a total of 5.52 acres of Goodding's willow–red willow riparian woodland located in and adjacent to the drainages that border the northeastern and western boundaries of the Project site that is considered a Sensitive Vegetation Community by CDFW (ranked S3). The Project Applicant proposes to develop a span bridge that would result in permanent impacts to 1.44 acres of this riparian habitat. Accordingly, Project impacts to 1.44 acres of Goodding's willow–red willow riparian woodland habitat represents a significant impact of the proposed Project for which mitigation would be required. (FCS, 2025a, p. 72)

Threshold f.: ***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?***

The Project site includes 1.32 acre and 7,449 linear feet of potential waters of the State regulated by the RWQCB and 6.65 acres (5.52 acres of riparian/wetland stream and 1.13 acres of non-riparian stream) of aquatic features and associated riparian habitat regulated pursuant to the CDFW Streambed Alteration Program. The Project site also includes 0.19-acre of wetlands. Implementation of the proposed Project would result in 1.77 acres of permanent impacts to potential waters of the State (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) regulated by the RWQCB under Section 13260 of the California Water Code and 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of permanent impacts to aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program (FCS, 2025a, p. 72). This is a significant impact and mitigation would be required.

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

Aside from the SKR HCP and MSHCP, which are addressed under the analysis of Threshold a., the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). There are no oak trees or vegetation communities containing oak trees within the Project site. As such, the Project has no potential to result in a conflict with the County's Oak Tree Management Guidelines. Additionally, Riverside County Ordinance No. 559 applies to properties located above 5,000 feet above mean sea level (amsl) in elevation, while the maximum elevation at the Project site is approximately 1,348 feet amsl; thus, Riverside County Ordinance No. 559 is not applicable to the proposed Project. Accordingly, and aside from potential impacts due to a conflict with the MSHCP (as addressed under the analysis of Threshold a.), the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur.

4.4.5 Cumulative Impact Analysis

The cumulative impact analysis considers development of the Project in conjunction with other development projects located within the purview of the Western Riverside County MSHCP. This study area for cumulatively-considerable impacts to biological resources is appropriate because the MSHCP encompasses a large area surrounding the Project site, and provides for the long-term protection of sensitive plant, animal, and plant communities throughout the MSHCP area. Additionally, most cumulative development projects

within the Project vicinity would be subject to the provisions of the MSHCP, and the general range of habitats, species, climate, etc. are fairly consistent throughout the MSHCP.

As discussed under the analysis of Threshold a., the Project site is not targeted for conservation under the SKR HCP, and the Project would be fully consistent with the SKR HCP with mandatory payment of fees pursuant to Riverside County Ordinance No. 663. As other cumulative developments located within the SKR HCP area and outside of areas proposed for conservation by the SKR HCP also would be subject to payment of fees towards the establishment and long-term maintenance of the SKR HCP core reserve, Project impacts due to a conflict with the SKR HCP would be less than significant on a cumulatively-considerable basis. With respect to the MSHCP, and as discussed under the analysis of Threshold a., the Project site is not located within any designated Criteria Cells or conservation areas, indicating that the Project site is not targeted for conservation under the MSHCP; thus, cumulatively-considerable impacts due to a conflict with the MSHCP Reserve Assembly requirements would not occur. The proposed Project would result in permanent impacts to approximately 1.77 acres of MSHCP Section 6.1.2 riparian/riverine habitat. As other cumulative developments have the potential to result in impacts to riparian/riverine habitat, Project impacts to 1.77 acres of riparian/riverine habitat would be cumulatively considerable prior to mitigation. The Project also would result in impacts to approximately 1.44 acres of riparian habitat considered suitable for the least Bell's vireo and indirect impacts to riparian habitat within 500 feet of proposed construction activities, which represents a significant impact due to a potential conflict with MSHCP Section 6.1.2 with respect to riparian birds. As other cumulatively developments similarly would have the potential to result in impacts to the least Bell's vireo and/or due to a conflict with MSHC Section 6.1.2, Project direct and indirect impacts to the least Bell's vireo would be cumulatively considerable prior to mitigation. No vernal pools or suitable habitat for fairy shrimp occur on site; thus, cumulatively-considerable impacts due to a conflict with MSHCP Section 6.1.2 with respect to vernal pools would not occur. The Project site is not located within any designated NEPSSA survey areas and the Project site does not contain suitable habitat for NEPSSA species; thus, cumulatively-considerable impacts due to a conflict with MSHCP Section 6.1.3 would not occur. The Project site is not in close proximity to lands targeted for conservation under the MSHCP, and the existing drainages on site that would convey Project runoff flow to the north towards the City of Riverside and away from areas proposed for conservation under the MSHCP; thus, the Project is not subject to the MSHCP UWIG requirements, and a cumulatively-considerable impact due to a conflict with Section 6.1.4 of the MSHCP would not occur. Although the Project site is not located within the CAPSSA or other special survey areas for amphibians or mammals, the Project site is located within the survey area for the burrowing owl. Although no burrowing owls or characteristic sign were detected within or immediately adjacent to the Project site during the focused surveys, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins. As other cumulative developments similarly have the potential to result in impacts to burrowing owls that may occupy suitable habitat prior to commencement of construction activities, Project impacts to the burrowing owl and due to a potential conflict with MSHCP Section 6.3.2 would be cumulatively-considerable.

As discussed under the analysis of Thresholds b. and c., Brand’s star phacelia was not observed on the Project site during any of the floristic surveys and is determined to be absent from the Project site. Paniculate tarplant, was determined to be present on the Project site; however, based on the relatively low sensitivity ranking (CNPS 4.2), broad distribution of the species, and an impact to a low number of tarplants (460) which would

not negatively impact the regional population, impacts to these special-status plants would be less than significant. Of the special-status animal species determined either to be present or with a moderate potential to occur, the red-diamond rattlesnake, Cooper's hawk, white-tailed kite, loggerhead shrike, yellow warbler, coastal California gnatcatcher, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit are listed as covered species by the MSHCP, while the Stephens' kangaroo rat is covered by the SKR HCP; therefore, cumulatively-considerable impacts to these species would not occur with compliance with the MSHCP (as would be required by the mitigation measures identified herein) and mandatory payment of SKR HCP and MSHCP open space mitigation fees pursuant to Riverside County Ordinance Nos. 663 and 810. Although no burrowing owls or characteristic sign were detected within or immediately adjacent to the Project site during the focused surveys, and although the burrowing owl is considered absent from the Project site, due to the presence of suitable burrowing owl habitat it is possible that burrowing owl individuals could occupy the site before construction begins. As other cumulative developments similarly have the potential to result in impacts to burrowing owls that may occupy suitable habitat prior to commencement of construction activities, Project impacts to the burrowing owl would be cumulatively considerable prior to mitigation. In addition, the Project has the potential to directly and indirectly impact nesting least Bell's vireos if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the species' breeding season (March 15 through September 30). As other cumulative developments similarly have the potential to result in direct and indirect impacts to the least Bell's vireo, the Project's direct and indirect impacts to the least Bell's vireo would be cumulatively considerable prior to mitigation. Additionally, the Project site contains trees that could provide suitable bat roosting habitat, including for special-status bats such as the pocketed free-tailed bat and western yellow bat, and Project construction activities have the potential to result in direct and/or indirect impacts to roosting bats. As other cumulative developments also would have the potential to result in direct and/or indirect impacts to roosting bats, Project impacts to special-status bats, including the pocketed free-tailed bat and western yellow bat, would be cumulatively considerable prior to mitigation. The Project site does not provide suitable habitat for sensitive vernal pool fairy shrimp species, and as such cumulatively-considerable impacts to vernal pool fairy shrimp species would not occur. In addition, the Project site contains vegetation with the potential to support native nesting birds, which are protected by the CFGC. As other cumulative developments similarly would have the potential to result in impacts to nesting birds, Project impacts to nesting birds would be cumulatively considerable if grading or development were to occur during the nesting season (February 1 to August 31).

As discussed under the analysis of Threshold d., the Project site does not contain any wildlife nursery sites; thus, cumulatively-considerable impacts to wildlife nursery sites would not occur. In addition, the aquatic features on and adjacent to the Project site may provide movement opportunities for common wildlife species, but the construction and operation of the Project would not impact the corridor or influence wildlife movement within it. Additionally, the MSHCP identifies linkages and corridors to provide for the regional movement of wildlife, and does not identify the Project site as being located within any planned or existing linkages or corridors. Therefore, Project impacts to wildlife movement corridors and native wildlife nursery sites would be less than significant on a cumulatively-considerable basis.

As discussed under the analysis under Threshold e., the 5.52 acres of riparian habitat located on-site, identified herein as Goodding's Willow – Red Willow Riparian Woodland, is ranked S3 and is considered a sensitive natural community by CDFW, although none of the other plant communities on site comprise sensitive natural

communities or riparian habitat. The Project Applicant proposes to develop a span bridge that would result in permanent impacts to 1.44 acres of permanent impacts to riparian habitat, which represents a significant impact of the proposed Project for which mitigation would be required. As other cumulative developments similarly would have the potential to result in impacts to riparian habitat or other sensitive natural communities, Project impacts to 1.44 acres of riparian habitat would be cumulatively considerable prior to mitigation.

As discussed under the analysis of Threshold f., the Project would result in 1.77 acres of permanent impacts to potential waters of the State (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) regulated by the RWQCB under Section 13260 of the California Water Code; and 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of permanent impacts to aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program. As other cumulative developments within the region also would have the potential to result in impacts to areas subject to jurisdiction by the RWQCB and/or CDFW, Project impacts would be cumulatively considerable.

As indicated under the analysis of Threshold g., aside from the SKR HCP and MSHCP (which are addressed under the analysis of Threshold a.), the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines, Riverside County Ordinance No. 499, and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). However, the Project site does not contain any oak trees that would be subject to the County's Oak Tree Management Guidelines, and Riverside County Ordinance No. 559 applies only to properties located above 5,000 feet amsl. Accordingly, Project impacts due to a conflict with local policies or ordinances protecting biological resources would be less-than-cumulatively considerable.

4.4.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Cumulatively Considerable Impact. The Project would not conflict with the MSHCP Reserve Assembly requirements. Prior to mitigation, the proposed Project would result in unavoidable permanent impacts to 1.77 acres of riparian/riverine resources, which represents a significant impact due to a potential conflict with MSHCP Section 6.1.2. Although no least Bell's vireo nests were identified during biological surveys, riparian habitat on-site may become occupied by nesting least Bell's vireo prior to implementation of the proposed Project. Construction of the proposed Project could potentially impact nesting least Bell's vireos if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the species' breeding season (March 15 through September 30). Construction activities could also impact least Bell's vireos nesting in areas within 500 feet of the activities. Accordingly, Project impacts to 1.44 acres of riparian habitat considered suitable for the least Bell's vireo and indirect impacts to riparian habitat within 500 feet of proposed construction activities represents a potential conflict with MSHCP Section 6.1.2 with respect to riparian birds. This is evaluated as a significant impact of the proposed Project for which mitigation would be required. No vernal pools or features indicative of the historic presence of vernal pools were observed on the Project site and vernal pools are unlikely to form or persist on site due to a long history of agricultural-related disturbances; thus, no impacts to vernal pools or sensitive fairy shrimp species would occur as a result of the Project. The Project site is not located within the MSHCP NEPSSA area; thus, no impacts to narrow endemic plant species would occur with implementation of the proposed Project and no impact would occur due to a conflict with MSHCP Section 6.1.3. The Project site is not located within or in

close proximity of any Criteria Cells or designated conservation areas, and all of the drainages that would convey runoff from the Project site would convey flows northerly towards the City of Riverside and away from areas proposed for conservation under the MSHCP; thus, the Project has no potential to conflict with the MSHCP UWIG (MSHCP Section 6.1.4), and no impact would occur. Although no burrowing owls or characteristic sign were detected within or immediately adjacent to the Project site during the focused surveys, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins; thus, the Project has the potential to result in impacts to the burrowing owl, which represents a significant impact due to a conflict with MSHCP Section 6.3.2. Project impacts due to a conflict with the MSHCP would be significant on both a direct and cumulatively-considerable basis.

Thresholds b. and c.: Significant Direct and Cumulatively Considerable Impact. Most special-status plant species considered in the analysis were determined to have no or low potential to occur on-site due to the absence of suitable habitat or the lack of recent records in the Project vicinity. One special-status plant species, paniculate tarplant, was determined to be present on the Project site. The paniculate tarplant has a CNPS ranking of 4.2 and was observed on the Project site during a Rare Plant Survey conducted by FCS biologists on July 25, 2024. Based on the relatively low sensitivity ranking (CNPS 4.2), broad distribution of the species, and an impact to a low number of tarplants (460) which would not negatively impact the regional population, impacts to these special-status plants would be less than significant and no mitigation is required. Of the sensitive animal species with a potential to occur on site, the red-diamond rattlesnake, Cooper's hawk, white-tailed kite, loggerhead shrike, yellow warbler, coastal California gnatcatcher, Stephens' kangaroo rat, and San Diego black-tailed jackrabbit are listed as covered species by the MSHCP, while the Stephens' kangaroo rat is covered by the SKR HCP. Therefore, impacts to these species would be less than significant with compliance with the MSHCP and payment of SKR HCP and MSHCP open space mitigation fees pursuant to Riverside County Ordinance Nos. 663 and 810. Although no burrowing owls or characteristic sign were detected within or immediately adjacent to the Project site during the focused surveys, due to the presence of suitable burrowing owl habitat, it is possible that burrowing owl individuals could occupy the site before construction begins; thus, the Project impacts to the burrowing owl would be potentially significant prior to mitigation. In addition, the 1.44 acres of riparian habitat on-site is considered occupied by least Bell's vireo, and a significant direct and/or indirect impact could occur to the least Bell's vireo if Project construction activities were to commence or occur within suitable habitat and/or within 500 feet of suitable habitat for the least Bell's vireo during the least Bell's vireo breeding season (March 15 through September 30). Additionally, the Project site contains trees that could provide suitable bat roosting habitat, including for special-status bats such as the pocketed free-tailed bat and western yellow bat. Direct and indirect impacts could occur to roosting bats due to removal of potential roosting habitat during Project construction. Accordingly, Project impacts to special-status bats, including the pocketed free-tailed bat and western yellow bat, would be significant and mitigation would be required. No impacts to sensitive vernal pool fairy shrimp species would occur with implementation of the Project. However, the Project site contains vegetation with the potential to support native nesting birds, a significant impact could occur to nesting birds if grading or development were to occur to nesting birds if grading or development were to occur during the nesting season (February 1 to August 31); thus, Project impacts to nesting birds would be significant prior to mitigation.

Threshold d.: No Impact. There are no wildlife movement corridors on the Project site. The aquatic features on and adjacent to the Project site may provide movement opportunities for common wildlife species, but the construction and operation of the Project would not impact the corridor or influence wildlife movement within it. Additionally, the MSHCP identifies linkages and corridors to provide for the regional movement of wildlife, and does not identify the Project site as being located within any planned or existing linkages or corridors. Therefore, impacts to wildlife movement corridors would be less than significant.

Threshold e.: Significant Direct and Cumulatively-Considerable Impact. The Project site contains a total of 5.52 acres of Goodding's willow–red willow riparian woodland located in and adjacent to the drainages that border the northeastern and western boundaries of the Project site that is considered a Sensitive Vegetation Community by CDFW (ranked S3). There are no other sensitive natural communities present on the Project site. The Project Applicant proposes to develop a span bridge that would result in permanent impacts to 1.44 acres of this riparian habitat. Accordingly, Project impacts to 1.44 acres of Goodding's willow–red willow riparian woodland habitat represents a significant impact of the proposed Project for which mitigation would be required.

Threshold f: Significant Direct and Cumulatively Considerable Impact. The Project site includes 1.32 acres and 7,449 linear feet of potential waters of the State regulated by the RWQCB and 6.65 acres (5.52 acres of riparian/wetland stream and 1.13 acres of non-riparian stream) of aquatic features and associated riparian habitat regulated pursuant to the CDFW Streambed Alteration Program. The Project site also includes 0.19-acre of State wetlands. Implementation of the proposed Project would result in 1.77 acres of permanent impacts to potential waters of the State (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) regulated by the RWQCB under Section 13260 of the California Water Code and 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of permanent impacts to aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program. This is a significant impact and mitigation would be required.

Threshold g.: No Impact. Aside from the SKR HCP and MSHCP, which are addressed under the analysis of Threshold a., the only other local policies or ordinances protecting biological resources are the Riverside County Oak Tree Management Guidelines and Riverside County Ordinance No. 559 (Regulating the Removal of Trees). There are no oak trees or vegetation communities containing oak trees within the Project site. As such, the Project has no potential to result in a conflict with the County's Oak Tree Management Guidelines. Additionally, Riverside County Ordinance No. 559 applies to properties located above 5,000 feet above mean sea level (amsl) in elevation, while the maximum elevation at the Project site is approximately 1,348 feet amsl; thus, Riverside County Ordinance No. 559 is not applicable to the proposed Project. Accordingly, and aside from potential impacts due to a conflict with the MSHCP (as addressed under the analysis of Threshold a.), the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur.

4.4.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Prior to issuance of grading permits, the Project Applicant shall make payment of Western Riverside County MSHCP fees pursuant to Riverside County Ordinance No. 810, *Establishing an Interim Open Space Mitigation Fee*.

- Prior to issuance of grading permits, the Project Applicant shall make payment of fees in accordance with the Stephen's Kangaroo Rat Habitat Conservation Plan pursuant to Riverside County Ordinance No. 663, *Establishing the Riverside County Stephens' Kangaroo Rat Habitat Conservation Plan and Setting Mitigation Fees*.

- Prior to issuance of grading permits or other permits authorizing ground-disturbing activities associated with the Project, the Project Applicant shall provide the Riverside County Planning Department with copies of the appropriate Wildlife Agency permits to address permanent impacts to 1.77 acres of potential waters of the State (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) regulated by the RWQCB under Section 13260 of the California Water Code and 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of permanent impacts to aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program. Permits required include, but may not be limited to, a Waste Discharge Order pursuant to Section 13260 of the California Water Code from the Santa Ana Regional Water Quality Control Board (Regional Board), and a Section 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Wildlife (CDFW).

Mitigation

MM 4.4-1 In order to mitigate Project impacts to 1.77 acres of areas under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB) (consisting of 0.19-acre wetland waters and 1.44 acres of impacts to riparian/wetland habitat regulated by the RWQCB under Section 13260 of the California Water Code), and in order to mitigate Project impacts to 1.77 acres of areas subject to jurisdiction by the California Department of Fish and Wildlife (CDFW) (consisting of impacts 1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream), prior to the issuance of grading permits the Project Applicant shall off-set impacts to 1.77 acres of riparian/riverine resources through on-site mitigation at a 2:1 ratio (3.54 acres), including the rehabilitation and establishment of riparian habitat. The potential on-site mitigation sites include a minimum 1.82 acres of rehabilitation area and 1.76 acres of establishment area. The final amount will be determined during the preparation of a Habitat Mitigation and Monitoring Plan (HMMP), but in all cases a minimum of 3.54 acres of mitigation shall be provided. The required mitigation area shall be located in Drainages 1 and

2. As a component of the required mitigation, the Project Applicant shall prepare a Habitat Mitigation and Monitoring Plan (HMMP) for review and approval by the Riverside County Environmental Programs Department (EPD), Santa Ana Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). The required HMMP shall include information on the plant palette for reestablishment and rehabilitation, site preparation requirements and timeline, maps showing the location of restoration, performance standards for the reestablishment and rehabilitation area, and methods for non-native species management. Prior to commencement of grading activities, the required mitigation areas shall be established as required by the approved HMMP, and this area shall be fenced in accordance with Mitigation Measure MM 4.4-7. The Project Applicant shall be responsible for ensuring that the performance criteria are met as established and required by the approved HMMP.

MM 4.4-2 In accordance with MSHCP Objective 6, prior to issuance of grading permits or other permits authorizing ground disturbance or discing, the Project Applicant shall retain a qualified biologist to perform a burrowing owl survey at all potentially suitable habitat sites within the Project's limits of disturbance within 30 days prior to commencement of any ground-disturbing activities at the Project site, as discussed below.

- Pre-Construction Survey: The pre-construction survey shall be performed by a qualified biologist that will survey the site for the presence/absence of burrowing owls within 30 days prior to commencement of ground-disturbing activities at the Project site. If burrowing owls are detected on-site during the pre-construction survey, the owls shall be relocated/excluded from the site outside of the breeding season following accepted protocols, and subject to the approval of the RCA and Wildlife Agencies (i.e., CDFW and/or USFWS).

- Burrowing Owl Management Plan: In the event that burrowing owl is determined to be present, or in the event that an assumption is made that the burrowing owl occurs on site, a burrowing owl management plan shall be prepared and implemented in coordination with the Western Riverside County Regional Conservation Authority (RCA) and CDFW that shall detail the relocation of owls from the Project site, passively and/or actively. If additional site visits determine the species is absent, then the pre-construction survey (as discussed above) shall instead be implemented.

A copy of the results of the pre-construction survey (and all additional surveys), as well as copies of the Burrowing Owl Management Plan, if required, shall be provided to the Riverside County Planning Department for review and approval (in the case of the Burrowing Owl Management Plan) prior to any vegetation clearing and ground-disturbing activities.

MM 4.4-3 If ground-disturbing or vegetation-removing Project activities are initiated in riparian habitat during the breeding season for least Bell's vireo (March 15 through September 30), the Project Applicant shall implement a pre-construction survey for the species. The pre-construction

survey for least Bell's vireo shall be implemented by a qualified biologist within any affected riparian habitat on the project site, as well as in riparian habitat (on-site or off-site) within 500 feet of the Project activities. The survey shall be implemented within 7 days of the initiation of Project activities. If more than 7 days passes following implementation of the survey, an additional pre-construction survey shall be implemented. If the pre-construction survey is negative for least Bell's vireo nests, no further action is necessary. If nesting least Bell's vireo are detected within 500 feet of planned Project activities, the Project Applicant shall implement Mitigation Measure MM 4.4-4. If nesting least Bell's vireos are detected in the 1.44-acres of riparian habitat that will be permanently impacted by the Project, the Project Applicant shall implement Mitigation Measures MM 4.4-4 and MM 4.4-5.

MM 4.4-4 If an active least Bell's vireo nest is located during the pre-construction survey required per Mitigation Measure MM 4.4-3, a qualified biologist shall establish and demarcate a 500-foot avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s). Construction personnel shall be instructed not to enter the ESAs, and the biologist(s) shall ensure that ESA boundaries are maintained. The ESA buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

MM 4.4-5 If an active least Bell's vireo nest is found in the 1.44-acre riparian habitat that would be permanently impacted by the proposed Project, the Project Applicant shall establish a 500-foot Environmentally Sensitive Area (ESA) around the active least Bell's vireo nest(s) until the young have fledged. The Project Applicant shall also prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP) report that details on-site and/or off-site mitigation to off-set loss of occupied least Bell's vireo habitat. The Project Applicant shall consult with the California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and Regional Conservation Authority (RCA) to determine appropriate mitigation for the loss of least Bell's vireo habitat due to Project implementation. The outcome of the consultation shall determine the need for on-site or off-site mitigation for least Bell's vireo, including habitat area mitigation ratios, which shall be detailed in the DBESP. At a minimum, the Project Applicant shall mitigate for the loss of suitable least Bell's vireo habitat at a minimum 3:1 ratio through purchase of mitigation credits from the Riverpark Mitigation Bank, Skunk Hollow Mitigation Bank, or other approved mitigation bank, subject to agreement by the CDFW, USFWS, and RCA.

MM 4.4-6 If ground-disturbing or vegetation-removing construction activities are planned within the least Bell's vireo breeding season (March 15 through September 15) and conducted within the 500-foot ESA buffer, prior to conducting any grading or noise-generating project-related disturbance that may exceed 60 dBA, a temporary noise-attenuating wall shall be erected along the portion of the perimeter of the temporary impact boundary that occurs within 328 feet (100 meters) of the occupied least Bell's vireo habitat within Drainage 1 and 2. The required noise-attenuating wall shall be in place prior to commencement of construction activities within the

ESA during the least Bell's vireo breeding season, and these requirements also shall be included as part of the DBESP required pursuant to Mitigation Measure MM 4.4-5.

MM 4.4-7 Prior to construction, the on-site limits of the aquatic features and associated riparian habitat shall be delineated with fencing or flagging (orange plastic snow fence, orange silt fencing, or stakes and flagging) and designated as an Environmentally Sensitive Area (ESA). No construction activities and/or access would be permitted within the ESA designated areas. If work occurs within the ESA areas, all work shall cease until the issue has been resolved through the appropriate regulatory agencies and the County. ESA fencing and/or flagging shall be maintained in good repair by the Contractor and shall be removed upon completion of Project construction. The Project Applicant shall ensure that silt-laden runoff is not allowed to enter the aquatic features. Erosion control measures shall be utilized throughout all phases of construction where sediment runoff from the proposed Project may enter the aquatic features. Best Management Practices (BMPs) to avoid erosion and uncontrolled stormwater runoff shall be implemented. BMPs typically include silt fencing, coir rolls, and/or straw bale dikes.

MM 4.4-8 The Project shall comply with all applicable water quality regulations, including obtaining and complying with those conditions established in Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit. Standard Best Management Practices (BMPs), which may include but are not limited to silt fencing, gravel berm, and fiber rolls, shall be installed to prevent any sediment and stormwater flows from entering the riverine area. A Project-specific Water Quality Management Plan and/or a Storm Water Pollution Prevention Plan (SWPPP) shall be implemented for the proposed Project and shall detail project-specific BMPs.

MM 4.4-9 Prior to approval of grading or building permits, Riverside County shall condition the permit(s) to require implementation of the following Best Management Practices (BMPs) during the construction phase:

- Time construction activities to avoid impact to sensitive biological resources and protect water quality. To the extent possible, construction activities shall occur during the dry season, between April 15 and October 15, or as otherwise determined by permitting agencies and in compliance with Section 401 of the Federal Clean Water Act.
- Locate equipment maintenance, refueling, and staging areas at least 100 feet from creeks or other aquatic habitat. Conduct refueling behind a containment barrier that prevents spilled or leaked fuel from entering the aquatic habitat. All equipment servicing shall be conducted within designated areas with appropriate setbacks from the aquatic features. All motorized equipment used during construction shall be inspected for oil, fuel, and coolant leaks prior to initiating work.
- Implement a SWPPP as part of the proposed Project, to ensure that sediment and contaminants from construction areas do not enter creek channels or other aquatic habitat.

- Use only native plant species for reseeding and re-planting to minimize the expansion of exotic plants. Mitigation plantings should be implemented in accordance with applicable regulatory agency permit requirements and consistently with MSHCP requirements.

MM 4.4-10 The following shall be made conditions of all grading permits to reduce construction-related impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA). These items also shall be included as notes on grading plans, and shall be specified in bid documents issued to prospective construction contractors.

> *"Vegetation clearing shall be conducted outside of the bird nesting season (February 1 to August 31) to the extent feasible. If avoidance of the nesting season is not feasible, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist shall establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers shall be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The biologist shall review and verify compliance with these nesting boundaries and shall verify the nesting effort has finished. Work may resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to Riverside County for mitigation monitoring compliance record keeping. If vegetation removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds."*

MM 4.4-11 A qualified biologist with relevant roosting bat experience shall conduct a survey of the Project site to determine whether active bat roosts are located on or directly adjacent to the Project site. The survey shall be conducted no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction in connection with each individual development phase. The survey shall be conducted during an appropriate time of day to maximize detectability of roosting bats. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.).

If the biologist determines or presumes bat roosts are present, the biologist shall exclude the bats from suitable cavity spaces by installing one-way exclusion devices. After the bats vacate the space, the biologist shall close off the space to prevent recolonization. Construction activities in connection with the subject individual development phase shall only commence after the biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the

biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). If bats are present outside the exclusion and eviction period (October 2 through April 31), then the Project Applicant shall coordinate with California Department of Fish and Wildlife (CDFW) to establish an appropriate buffer.

MM 4.4-12 To maintain consistency with Multiple Species Habitat Conservation Plan (MSHCP) requirements during construction, prior to issuance of grading or building permits the Riverside County Building & Safety Department shall impose conditions of approval requiring compliance with or implementation of the following Construction Minimization Measures, per Section 7.5.3 of the MSHCP:

- Plans for water pollution and erosion control shall be prepared. The plans shall describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control.
- Work in riparian areas shall be avoided during most active breeding season, typically designated as March 1 to June 30 by the California Department of Fish and Wildlife (CDFW)/MSHCP Guidelines. Disturbance shall be restricted to a minimum of 300 feet away from any active nest.
- If vegetation removal must occur during this avoidance period, then a nest survey by a qualified biologist shall be required. The nest survey shall be conducted for five consecutive days and no more than 3 days prior to clearing. If an active nest is observed, then the nest location shall be fenced off surrounding a minimum 300-foot (500-foot for raptors) radius buffer zone. The buffer zone shall not be disturbed until the nest is inactive.
- Sediment and erosion control measures shall be implemented until such time as soils are determined to be successfully stabilized.
- Short-term stream diversions, if needed, shall be accomplished by use of sandbags or other methods that shall result in minimal instream impacts. Short-term diversions shall consider effects on wildlife.
- Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activities to minimize the transport of sediments off-site.
- Settling ponds where sediment is collected shall be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds shall be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care shall be exercised during removal of silt fencing to minimize release of debris or sediment into streams.
- No erodible materials shall be deposited into water courses. Brush, loose soils, or other debris material shall not be stockpiled within stream channels or on adjacent banks.

- The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall occur on pre-existing access routes to the greatest extent possible.
- Equipment storage, fueling, and staging areas shall be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types.

MM 4.4-13 To maintain consistency with Multiple Species Habitat Conservation Plan (MSHCP) requirements, prior to issuance of grading or building permits the Riverside County Building & Safety Department shall impose conditions of approval requiring compliance with or implementation of the following Best Management Practices (BMPs) during the construction phase of the proposed project:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct Worker Environmental Awareness Program (WEAP) training for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act and the MSHCP, the need to adhere to the provisions of the Endangered Species Act and the MSHCP, the penalties associated with violating the provisions of the Endangered Species Act, the general measures that are being implemented to conserve the species of concern as they relate to the proposed Project, and the access routes to and Project site boundaries within which the proposed project activities must be accomplished.
2. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
3. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat.
4. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to the City, United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and/or Regional Water Quality Control Board (RWQCB), as applicable, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
5. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
6. The qualified project biologist shall monitor construction activities for the duration of the proposed Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.

7. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

8. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

9. To avoid attracting predators of the species of concern, the Project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).

10. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the proposed project and shall be specified in the construction plans. Construction limits shall be fenced with orange snow screens. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

11. The County shall have the right to access and inspect the project site to determine its compliance with project approval conditions, including these BMPs.

4.4.8 Significance of Impacts After Mitigation

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would ensure that Project permanent impacts to 1.44 acres of riparian habitat (of which 0.19-acre is wetlands) and permanent impacts to 0.33-acre of riverine features are mitigated through the on-site enhancement, rehabilitation, and establishment of riparian habitat including Goodding's willow–red willow riparian woodland and mulefat thickets at a minimum 2:1 ratio, which would provide for higher quality riparian habitat with more canopy cover available, thereby increasing the values and functions of the drainage and providing a biological improvement to riparian habitat compared to what currently exists on site. The on-site mitigation also would provide contiguous habitat for the least Bell's vireo which would allow for additional vireo territories to be established at an equivalent or superior number. When considered alongside the proposed on-site riparian rehabilitation and establishment within Drainages 1 and 2, which would improve habitat quality, structure, and long-term suitability for least Bell's vireo, the Project would meet the conservation intent of Objective 3 by maintaining and enhancing the long-term conservation value of occupied riparian habitat, notwithstanding localized reductions in the width of undeveloped adjacent lands. Thus, implementation of the required mitigation would reduce the Project's direct and indirect impacts to the least Bell's vireo to below a level of significance. (FCS, 2026, pp. 38-39) Implementation of Mitigation Measures MM 4.4-7 through MM 4.4-9 would mitigate for potential indirect impacts to impacts to aquatic features and associated riparian habitat and wetlands by requiring fencing of on-site aquatic features and complying with applicable water quality requirements. Implementation of Mitigation Measure MM 4.4-2 and MM 4.4-3 would ensure that appropriate pre-construction surveys are conducted prior to ground disturbing activities, in accordance with MSHCP Objective 6 for the burrowing owl, and would require preparation and implementation of a Burrowing Owl Management Plan in the event any burrowing owl individuals are identified during the pre-construction surveys. With implementation of the required mitigation, Project

impacts due to a conflict with MSHCP Sections 6.1.2 and 6.3.2 pertaining to riparian/riverine resources and the burrowing owl, respectively, would be reduced to less-than-significant levels.

Thresholds b. and c.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-2 would ensure that appropriate pre-construction surveys are conducted prior to ground disturbing activities, and would require preparation and implementation of a Burrowing Owl Management Plan in the event any burrowing owl individuals are identified during the pre-construction surveys. Mitigation Measures MM 4.4-3 and MM 4.4-5, in conjunction with Mitigation Measure MM 4.4-1, would ensure potential Project impacts to least Bell's vireo are reduced to less-than-significant levels by requiring appropriate buffers and by requiring additional consultation with the Wildlife Agencies in the event that any active least Bell's vireo nest is found in the 1.44-acre riparian habitat that would be permanently impacted by the Project. The on-site mitigation required by Mitigation Measure MM 4.4-1 also would provide contiguous habitat for the least Bell's vireo which would allow for additional vireo territories to be established at an equivalent or superior number. When considered alongside the proposed on-site riparian rehabilitation and establishment within Drainages 1 and 2, which would improve habitat quality, structure, and long-term suitability for least Bell's vireo, the Project would meet the conservation intent of Objective 3 by maintaining and enhancing the long-term conservation value of occupied riparian habitat, notwithstanding localized reductions in the width of undeveloped adjacent lands. Thus, implementation of the required mitigation would reduce the Project's direct and indirect impacts to the least Bell's vireo to below a level of significance. (FCS, 2026, pp. 38-39) Mitigation Measure MM 4.4-6 would ensure that Project-related construction activities within the 500-foot ESA buffer would be subject to noise restrictions. In the event that Project construction activities occur during the nesting season for birds (February 1 to September 15), Mitigation Measures MM 4.4-10 through MM 4.4-13 would ensure pre-construction nesting surveys are conducted prior to commencement of construction activities, and further requires appropriate avoidance of any active nests that may be identified. Implementation of the required mitigation would reduce Project impacts to the burrowing owl and nesting birds to below a level of significance.

Threshold e.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would ensure that Project impacts to 1.44 acres of riparian habitat (of which 0.19-acre are wetlands) and 0.33-acre of impacts to riverine features are mitigated through the on-site enhancement, rehabilitation, and establishment of riparian habitat including Goodding's willow–red willow riparian woodland and mulefat thickets at a minimum 2:1 ratio, which would provide for higher quality riparian habitat with more canopy cover available, thereby increasing the values and functions of the drainage and providing a biological improvement to riparian habitat compared to what currently exists on site.

Threshold f.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would ensure that Project permanent impacts to 1.77 acres (0.19-acre wetland waters and 1.44 acres of riparian/wetland habitat) of potential waters of the State regulated by the RWQCB and Project impacts to 1.77 acres (1.44 acres of riparian/wetland stream and 0.33-acre of non-riparian stream) of potential impacts to aquatic features and associated riparian habitat regulated pursuant to the CDFW Streambed Alteration Program are mitigated through the aquatic features and associated riparian habitat and wetlands regulated pursuant to the CDFW Streambed Alteration Program are mitigated through the on-site enhancement, rehabilitation, and establishment of riparian habitat including Goodding's willow–red willow

riparian woodland and mulefat thickets at a minimum 2:1 ratio, which would provide for higher quality riparian habitat with more canopy cover available, thereby increasing the values and functions of the drainage and providing a biological improvement to riparian habitat compared to what currently exists on site. Implementation of Mitigation Measures MM 4.4-7 through MM 4.4-9 mitigate for impacts to impacts to aquatic features and associated riparian habitat and wetlands by requiring all aquatic features to be fenced during construction activities and mandating compliance with standard water quality measures and requirements. Implementation of the required mitigation would reduce the Project's impacts to federally-protected wetlands and waters subject to jurisdiction by the Corps, Regional Board, and CDFW to less-than-significant levels.

4.5 CULTURAL RESOURCES

The analysis in this Subsection is based on a Cultural Resources Assessment Update (herein, "CRA") prepared by BFSA Environmental Services (herein "BFSA"), entitled "A Cultural Resources Assessment Update for the Willow Creek Project, TTM 38927" dated April 29, 2024, and included as *Technical Appendix D* to this EIR (BFSA, 2024a). All references used in this Subsection are included in EIR Section 7.0, *References*.

It should be noted that confidential information has been redacted from *Technical Appendix D* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the County of Riverside, and BFSA is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.5.1 EXISTING CONDITIONS

The Project site is located in unincorporated western Riverside County, California. The following provides a brief discussion on the prehistoric and historic context of the Project area for better understanding the relevance of resources identified within its proximity. Refer to Section 2.3 of the Project's CRA (*Technical Appendix D*) for a complete discussion of the prehistoric and historic setting.

A. Prehistoric Setting

1. Paleo-Indian Period (Late Pleistocene: 11,500 to circa 9,000 Year Before the Present [YBP])

Archaeologically, the Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands. However, by the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes. The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location. Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals. (BFSA, 2024a, p. 2.0-7)

2. Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

Archaeological data indicates that between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast. This complex is locally known as the La Jolla Complex, which is regionally associated with the Encinitas Tradition and shares cultural components with the widespread Milling Stone Horizon. The Encinitas Tradition is best recognized for its pattern of large coastal

sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area, cobble-based tools, and flexed human burials. While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period. Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads. (BFSA, 2024a, pp. 2.0-7 and 2.0-8)

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP. The ensuing millennia were not stable environmentally and, by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned. The abandonment of the area is usually attributed to the sedimentation of coastal lagoons and the resulting deterioration of fish and mollusk habitat. By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed "Pauma Complex." By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex, it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. (BFSA, 2024a, p. 2.0-8)

More recent work has identified a more localized complex known as the Greven Knoll Complex, which is a redefined northern inland expression of the Encinitas Tradition. All expressions of the inland Milling Stone in southern California north of San Diego County be grouped together in the Greven Knoll Complex. The Greven Knoll Complex is broken into three phases and obtained its name from the type-site Greven Knoll located in Yucaipa, California. Presently, the Greven Knoll Site is part of the Yukaipa't Site and was combined with the adjacent Simpson Site. Excavations at Greven Knoll recovered manos, metates, projectile points, discoidal cogged stones, and a flexed inhumation with a possible cremation. It is believed that the Greven Knoll Site was occupied between 5,000 and 3,500 YBP. The Simpson Site contained mortars, pestles, side-notched points, and stone and shell beads. (BFSA, 2024a, p. 2.0-9)

Phase I of the Greven Knoll Complex is generally dominated by the presence of manos and metates, core tools, hammerstones, large dart points, flexed inhumations, and occasional cremations. Mortars and pestles are absent from this early phase, and the subsistence economy emphasized hunting. The similarity of the material culture of Greven Knoll Phase I and that found in the Mojave Desert at Pinto Period sites indicates that the Greven Knoll Complex was influenced by neighbors to the north at that time. Accordingly, Greven Knoll Phase I may have appeared as early as 9,400 YBP and lasted until about 4,000 YBP. Greven Knoll Phase II is associated with a period between 4,000 and 3,000 YBP. Artifacts common to Greven Knoll Phase II include manos and metates, Elko points, core tools, and discoidals. Pestles and mortars are present; however, they are only represented in small numbers. Finally, there is an emphasis upon hunting and gathering for subsistence. Greven Knoll Phase III includes manos, metates, Elko points, scraper planes, choppers, hammerstones, and discoidals. Again, small numbers of mortars and pestles are present. Greven Knoll Phase III spans from approximately

3,000 to 1,000 YBP and shows a reliance upon seeds and yucca. Hunting is still important, but bones seem to have been processed to obtain bone grease more often in this later phase. (BFSA, 2024a, pp. 2.0-9 and 2.0-10)

The shifts in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods eventually became the primary dietary resource. The development of mortars and pestles during the middle Holocene can be attributed to the year-round exploitation of acorns as a main dietary provision. Additionally, the warmer and drier climate may have been responsible for groups from the east moving toward coastal populations, which is archaeologically represented by the interchange of coastal and eastern cultural traits. (BFSA, 2024a, p. 2.0-10)

3. Late Prehistoric Period (Late Holocene: 1,300 YCP to 1790)

Many Luiseño hold the worldview that as a population they were created in southern California. Archaeological and anthropological data, however, proposes a scientific/archaeological perspective, suggesting that at approximately 1,350 YBP, Takic-speaking groups from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. Inland southern California was occupied by "proto-Yuman" populations before 1,000 YBP. It is believed that Takic expansion occurred starting around 3,500 YBP moving toward southern California, with the Gabrielino language diffusing south into neighboring Yuman (Hokan) groups around 1,500 to 1,000 YBP, possibly resulting in the Luiseño dialect. (BFSA, 2024a, p. 2.0-10)

The final Takic expansion would not have occurred until about 1,000 YBP, resulting in Vanyume, Serrano, Cahuilla, and Cupeño dialects. The Luiseño did not simply replace Hokan speakers, but were rather a northern San Diego County/southern Riverside County Yuman population who adopted the Takic language. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin and cremation of the dead. (BFSA, 2024a, p. 2.0-10)

4. Protohistoric Period (Late Holocene: 1790 to Present)

Ethnohistoric and ethnographic evidence indicates that three Takic-speaking groups occupied portions of Riverside County: the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times are difficult to place, but the Project site is located well within the borders of ethnographic Luiseño territory. This group was a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. These distinctions include cremation of the dead, the use of the bow and arrow, and exploitation of the acorn as a main food staple. Along the coast, the Luiseño made use of available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. Elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching

trade network that included trade of Obsidian Butte obsidian and other resources from the eastern deserts, as well as steatite from the Channel Islands. Groups in the vicinity of the Project site, neighboring the Luiseño, include the Cahuilla and the Gabrielino. (BFSA, 2024a, p. 2.0-11)

B. Historic Setting

1. Early Southern California History

Traditionally, the history of the State of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. (BFSA, 2024a, p. 2.0-17)

European exploration along the California coast began in 1542 with the landing of Juan Rodríguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastián Vizcaíno made an extensive and thorough exploration of the Pacific coast. The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals. (BFSA, 2024a, pp. 2.0-17 and 2.0-18)

The historic background of the Project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region. As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas. (BFSA, 2024a, p. 2.0-18)

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories. Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as “ranchos,” covered expansive portions of California and, by 1846, more than 600 land grants had been issued by the Mexican government. (BFSA, 2024a, p. 2.0-19)

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. The Mexican and American ranchers did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Circa 1852, the Native

Americans of southern Riverside County, including the Luiseño and the Cahuilla, thought they had signed a treaty resulting in their ownership of all lands from Temecula to Aguanga east to the desert, including the San Jacinto Valley and the San Gorgonio Pass. The Temecula Treaty also included food and clothing provisions for the Native Americans. However, Congress never ratified these treaties, and the promise of one large reservation was rescinded. (BFSA, 2024a, p. 2.0-19)

With the completion of the Southern Pacific Railroad in 1869, southern California saw its first major population expansion. The population boom continued circa 1874 with the completion of connections between the Southern Pacific Railroad in Sacramento to the transcontinental Central Pacific Railroad in Los Angeles. The population influx brought farmers, land speculators, and prospective developers to the region. As the Jurupa area became more and more populated, circa 1870, Judge John Wesley North and a group of associates founded the city of Riverside on part of the former rancho. (BFSA, 2024a, p. 2.0-20)

Although the first orange trees were planted in Riverside County circa 1871, it was not until a few years later when a small number of Brazilian navel orange trees were established that the citrus industry truly began in the region. The Brazilian navel orange was well suited to the climate of Riverside County and thrived with assistance from several extensive irrigation projects. At the close of 1882, an estimated half a million citrus trees were present in California. It is estimated that nearly half of the citrus tree population was in Riverside County. Population growth and 1880s tax revenue from the booming citrus industry prompted the official formation of Riverside County in 1893 out of portions of what was once San Bernardino County. (BFSA, 2024a, p. 2.0-20)

Shortly thereafter, with the start of World War I, the United States began to develop a military presence in Riverside County with the construction of March Air Reserve Base. During World War II, Camp Haan and Camp Anza were constructed in what is now the current location of the National Veteran's Cemetery. In the decades that followed, populations spread throughout the county into Lake Elsinore, Corona, Norco, Murrieta, and Wildomar. However, a significant portion of the county remained largely agricultural well into the 1970s. Following the 1970s, Riverside saw a period of dramatic population increase as the result of new development, more than doubling the population of the county to a population of over 1.3 million residents. (BFSA, 2024a, pp. 2.0-20 and 2.0-21)

C. Methods

BFSA previously studied the Project site in 2016 and 2017 as part of the 325.4-acre Greentree Ranch residential subdivision, located on the north side of El Sobrante Road and east of McAllister Street. During the 2017 survey three prehistoric bedrock milling sites (P-33-026660, P-33-026661, and P-33-026663) and one historic trash scatter (P-33-026659) were identified within the proposed Project site. The purpose of the CRA update was to determine if any cultural resources would be affected by the proposed Project. The proposed limits of the Project consist of the northern approximately 111.6 acres of the previously studied 325.4-acre property. The archaeological program for the proposed Project consisted of an updated institutional records search, a review of previous studies for the approximately 111.6-acre property, a review of the previous evaluation program for Sites P-33-026659, P-33-026660, P-33-026661, and P-33-026663 within the Project area, and an updated survey of the property. The Project's archaeological study conforms to County of Riverside Cultural

Resource Guidelines (Draft) and the statutory requirements of CEQA Section 15064.5. (BFSA, 2024a, p. 3.0-1)

1. Archaeological Records Search Methods

The updated records search conducted by the Eastern Information Center (EIC) at the University of California, Riverside (UCR) was reviewed for an area of one mile surrounding the Project site in order to determine the presence of any previously recorded sites. The EIC records search also included the standard review of the National Register of Historic Places and the Office of Historic Preservation Historic Property Directory. Land patent records, held by the Bureau of Land Management (BLM) and accessible through the BLM General Land Office website, were also reviewed for pertinent project information. In addition, the BFSA research library was consulted for any relevant historical information. (BFSA, 2024a, p. 3.0-1)

2. Native American Consultation

BFSA requested a review of the Sacred Lands Files (SLF) by the Native American Heritage Commission (NAHC) in May 2016, December 2016, and March 2024, to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within one mile of the project. None of the NAHC SLF searches have identified any presence of sacred sites or locations of religious or ceremonial importance within the Project site. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the 2016 NAHC response letters. BFSA provided the letters to Native American representatives at least two weeks prior to the initiation of the original field surveys. (BFSA, 2024a, p. 3.0-1)

Responses were received during the two-week interim period and after the date of the field survey. None of the tribal responses received during the two-week interim period requested participation in the survey. The Soboba Band of Luiseño Indians previously requested that they be included in the mandated Assembly Bill 52 consultation process, the Morongo Band of Mission Indians previously indicated that the Project is considered a Traditional Use Area that they have cultural ties with, and the Pechanga Band of Indians previously indicated that they have concerns about Tribal Cultural Resources and the Traditional Cultural Landscape “that comprises much of this region” (the letter states that this designation is currently under review by the United States Army Corps of Engineers and the State Historic Preservation Office). (BFSA, 2024a, p. 3.0-2)

A site visit was conducted on November 17, 2016, that included representatives from Pechanga, the County of Riverside, the previous applicant, the Project engineer, and BFSA. The goal of the meeting was to provide the representatives from Pechanga and the County of Riverside an opportunity to review the Project site and observe the identified prehistoric sites, as well as to provide design input and recommendations with regards to the prehistoric cultural resources identified within the Project site. (BFSA, 2024a, p. 3.0-2)

Archaeological testing of the sites within the Project site, which occurred between January 25 and February 3, 2017, was conducted with assistance from a Pechanga tribal monitor. For the current updated survey, representatives from the Pechanga Band of Indians and the Soboba Band of Luiseño Indians accompanied BFSA during the updated survey process. (BFSA, 2024a, p. 3.0-2)

3. Field Survey Methods

BFSA conducted previous studies on the Project site in 2017 and 2018. The archaeological testing program for Sites P-33-026659, P-33-026660, P-33- 026661, and P-33-026663 were previously conducted by BFSA with the assistance of a tribal representative from the Pechanga Band of Indians. An updated survey of the Project site was conducted on April 16, 2024 by BFSA. Tribal representatives from Soboba and Pechanga participated in the updated survey. (BFSA, 2024a, p. 2.0-1)

D. Results

Provided below is a summary of the results of the Project's CRA (*Technical Appendix D*). Refer to section 4.0 of the CRA for a complete description of the results of the cultural resources investigation.

1. Records Search Results

The results of the updated records search conducted by BFSA identified 67 (55 prehistoric and 12 historic) cultural resource locations recorded within a one-mile radius of the Project site. The updated records search confirmed that historic site P-33-026659 and prehistoric sites P-33-026660, P-33-026661, and P-33-026663 are recorded within the Project site. The remaining prehistoric sites primarily are bedrock milling feature sites while the historic resources are built resources or trash scatters. (BFSA, 2024a, p. 4.0-1)

The records search identified a total of 29 previous studies, which have been completed within one mile of the project. None of these studies except for the previous BFSA Greentree Ranch studies include the Project site. (BFSA, 2024a, p. 4.0-3)

The records search also included a review of the following historic sources:

- The National Register of Historic Places Index
- The Office of Historic Preservation, Archaeological Determinations of Eligibility
- The Office of Historic Preservation, Directory of Properties in the Historic Property Data File
- The 15' USGS *Riverside* topographic map (1901, 1942)
- The 30' USGS *Elsinore* topographic map (1901)

These sources did not indicate the presence of any additional archaeological resources within the Project site. The complete records search results are provided in *Technical Appendix D*. BFSA also requested an updated SLF search from the NAHC to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within the vicinity of the Project site. The results of the updated NAHC SLF search were consistent with previous 2016 SLF findings and no sacred sites or locations of religious or ceremonial importance were identified within the Project site. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the 2016 NAHC response letters. BFSA provided the letters to Native American representatives at least two weeks prior to the initiation of the original field surveys. As a result, the previous field operations as well as the current updated survey have been conducted with tribal involvement by Soboba and Pechanga. (BFSA, 2024a, p. 4.0-7)

A review of historic aerial photographs indicates that the property has been partially dry farmed since the 1940s. By 1959, a citrus orchard had been planted across much of the property. The orchard appears to have been removed from the property between 2002 and 2005. (BFSA, 2024a, p. 4.0-10)

2. Field Survey Results

Previous survey work was conducted by BFSA on the Project site as part of the larger Greentree Ranch Project on June 14, 2016. The property was visited again on October 25, 2016, to assist with site relocation for detailed engineering maps, and again on November 17, 2016, for Native American inspection and review. Additional off-site road alignments associated with the larger Greentree Ranch Project were surveyed on December 29, 2016. The archaeological survey of the Project site was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately five- to 15-meter intervals. The entire Project site was accessible and good to excellent ground visibility was reported. The Project site's topography is characterized by rolling hills cut by canyons, sloping generally to the north, with drainages flowing to the northwest. (BFSA, 2024a, p. 4.0-10)

The previous study indicated that nearly the entire Project site had been disturbed by past agricultural use, primarily for citrus orchards, and many areas have been disturbed by rural residential dumping, the grading of dirt access roads, the terracing of slopes for agricultural use, and the subsequent removal of those fields. This characterization of the Project site as moderately to severely surficially disturbed is relevant to the consideration of cultural resources being present within the Project site. (BFSA, 2024a, p. 4.0-10)

The survey resulted in the identification of four cultural resources within the current updated study area that include:

- P-33-026659: Small historic trash scatter
- P-33-026660, P-33-026661, and P-33-026663: Bedrock milling feature(s)

Phase II significance testing and evaluations were recommended for the four sites identified within the Project site, as stipulated by CEQA and County of Riverside guidelines. An updated survey of the property was conducted on April 16, 2024. BFSA conducted the survey with assistance from representatives of Pechanga and Soboba. All sites within the Project site were found to be consistent with results of the previous BFSA studies. (BFSA, 2024a, p. 4.0-15)

❑ Site P-33-026659

Site P-33-026659 was identified during the Phase I archaeological survey as a historic refuse scatter located in the northwestern portion of the Project site. The approximately 375-square-meter site consists of historic-period artifacts situated on the east side of a minimally used north/south-trending dirt access road. The site likely developed as a result of roadside trash dumping. Disturbances at the site include natural erosion, the construction of graded terraces for agriculture, and impacts from travel along the dirt road. Vegetation at the site during survey was minimal, which allowed for excellent surface visibility. (BFSA, 2024a, p. 4.0-15)

The field investigations at Site P-33-026659 were conducted using the standard methodologies on January 26, 2017, and consisted of the collection of selective surface artifacts and the excavation of five shovel tests. The entire surface of the site was inspected for artifacts. Because many of the artifacts were fragmented or redundant in nature, only a representative sample was collected based upon artifacts that were diagnostic as to origin, function, or date. The surface collection consisted of nine metal food cans, a small medicine bottle, a jar closure, and a hardware fastener. (BFSA, 2024a, p. 4.0-15)

The potential for subsurface archaeological deposits at Site P-33-026659 was investigated by excavating five shovel test pits (STPs) in a radial pattern. No artifacts were recovered from the STPs excavated at Site P-33-026659. Cultural materials represented at the site are predominantly metal with one glass artifact. All 12 artifacts were identifiable to various functional categories. The diagnostic items recovered from Site P-33-026659 are classified as consumer items, household items, and hardware items. Consumer and medical household items, such as food and milk cans and medicine bottles, are the most directly useful artifacts in terms of dating the use of the site since they would have been used over a short period and then discarded. Temporally diagnostic artifacts collected from the site include sanitary lap seam food cans (manufactured circa 1935 to 1980), sanitary drawn-redrawn food cans (manufactured circa 1963 to present), and one small, patent-finished, automated bottling machine-manufactured medicine bottle (manufactured post-1904). The temporally diagnostic items recovered from Site P-33-026659 indicate that the site likely resulted from one or more visits to the location for trash dumping. The majority of the temporally diagnostic artifacts suggest that the limited trips to the site were spread out over as many as 20 years, occurring sometime in the mid-1940s to the 1960s. (BFSA, 2024a, pp. 4.0-20 and 4.0-21)

On April 16, 2024, BFSA conducted an updated survey of the Project site and visited the location of Site P-33-026659. Tribal representatives from Soboba and Pechanga also participated in the updated survey. At the time of the survey, the site was overgrown by dense vegetation. However, the site was relocated and found to be consistent with the information obtained during the previous testing of the resource. (BFSA, 2024a, pp. 4.0-22 and 4.0-23)

❑ Site P-33-026660

Site P-33-026660 was identified during the Phase I archaeological survey as a prehistoric bedrock milling site located in the northwestern portion of the Project site. The site has two loci: Locus 1 consists of 15 bedrock milling features (BMFs) and measures approximately 12,103.2 square feet (1,125.0 square meters); Locus 2 is located approximately 55 meters northwest of Locus 1, consists of one bedrock milling feature, and covers approximately 269.0 square feet (25.0 square meters). Vegetation at the site during the survey was minimal and included native grasses and weeds and a single pomegranate tree along the western edge of the site. Disturbances at the site include natural erosion, bioturbation in the form of small mammal burrows, and impacts from previous grading for agricultural activities. (BFSA, 2024a, p. 4.0-24)

Testing of the site was conducted on February 1 and 2, 2017, and consisted of removing soil and vegetation from the margins of the bedrock milling features, collecting surface artifacts, and excavating 23 shovel tests. The area of the site was defined by the bedrock milling features and surface artifacts. Locus 1 measures approximately 147.6 feet (45.0 meters) from north to south and 82.0 feet (25.0 meters) from east to west,

covering an area of approximately 12,103.2 square feet (1,125.0 square meters). Locus 2 measures approximately 16.4 feet (5.0 meters) from north to south and 16.4 feet (5.0 meters) from east to west, covering an area of approximately 269.0 square feet (25.0 square meters). The entire surface of the site was inspected for artifacts and milling features. Two fragments of quartz debitage and one fragment of volcanic debitage were recovered from the surface of Locus 1 and no cultural materials were identified on the surface of Locus 2. (BFSA, 2024a, p. 4.0-25)

The investigation of Site P-33-026660 revealed that the site was primarily used for bedrock milling, focusing upon floral and/or faunal food and hide processing. The debitage recovered from the surface of the site suggests that the manufacture and use of prehistoric lithic tools took place at Site P-33-026660. Shovel test investigations did not identify any subsurface deposits at the site. The documentation of the milling features and the collection of the surface artifacts have exhausted the research potential of the site. No further archaeological investigations are recommended for Site P-33-026660. On April 16, 2024, BFSA conducted an updated survey of the project and visited the location of Site P-33-026660. Tribal representatives from Soboba and Pechanga also participated in the updated survey. At the time of the survey, the site was overgrown by dense vegetation. However, the site was relocated and found to be consistent with the information obtained during the previous testing of the resource. (BFSA, 2024a, p. 4.0-54)

❑ Site P-33-026661

Site P-33-026661 was identified during the Phase I archaeological survey as a prehistoric bedrock milling site located in the southwestern portion of the Project site. A north/south-trending drainage runs along the western boundary of the site. The approximately 812.5-square-meter site consists of eight bedrock milling features with a total of two rubs and 12 slicks. Vegetation at the site during the survey was minimal and included native grasses and weeds. Disturbances at the site include natural erosion, bioturbation, and impacts from previous grading for agricultural activities. (BFSA, 2024a, p. 4.0-56)

Testing of the site was conducted on February 2 and 3, 2017, and consisted of removing soil and vegetation from the margins of the bedrock milling features and excavating 16 shovel tests. The entire surface of the site was inspected for artifacts and milling features. No cultural materials were identified on the surface of the site; however, eight bedrock milling features (BMFs A through H) with 12 slicks and two rubs were identified. The potential for subsurface archaeological deposits at Site P-33-026661 was investigated by excavating 16 STPs. No artifacts were recovered from the STPs excavated at Site P-33-026661. (BFSA, 2024a, pp. 4.0-57 and 4.0-71)

The investigation of Site P-33-026661 revealed that the site was used for bedrock milling with site activities primarily focused upon floral and/or faunal food and hide processing. The integrity of the site appears to have been impacted by agricultural use and clearing. Shovel test investigations did not identify any subsurface deposits at the site. The documentation of the milling features has exhausted the research potential of the site. No further archaeological investigations are recommended for Site P-33-026661. On April 16, 2024, BFSA conducted an updated survey of the Project site and visited the location of Site P-33-026661. Tribal representatives from Soboba and Pechanga also participated in the updated survey. At the time of the survey,

the site was overgrown by dense vegetation. However, the site was relocated and found to be consistent with the information obtained during the previous testing of the resource. (BFSA, 2024a, pp. 4.0-72 and 4.0-73)

- **Site P-33-026663**

Site P-33-026663 was identified during the Phase I archaeological survey as a possible prehistoric bedrock milling site located in the central portion of the Project site. The approximately 6.3-square-meter site consists of a granite boulder that is highly exfoliated but displays a very small area (less than four by three centimeters) with a barely perceptible, smooth, polished surface that may be a remnant of a milling surface. Vegetation at the site during the survey was minimal and included native grasses and weeds. Disturbances at the site include natural erosion, bioturbation in the form of small mammal burrows, and impacts from previous grading for agricultural activities.

Testing of the site was conducted on January 31, 2017, and included recording the possible milling surface and excavating four shovel tests. The entire surface of the site was inspected for artifacts and milling features. No cultural materials were identified on the surface of the site; however, one possible bedrock milling feature (BMF A) with one small, possible slick remnant was identified. The potential for subsurface archaeological deposits at Site P-33-026663 was investigated by excavating four STPs around possible BMF A. No artifacts were recovered from the STPs excavated at Site P-33-026663. (BFSA, 2024a, pp. 4.0-75 and 4.0-79)

The investigation of Site P-33-026663 revealed that the site was possibly or minimally used for bedrock milling, primarily focusing upon floral and/or faunal food processing. Shovel test investigations did not identify any subsurface deposits at the site. The documentation of the milling feature exhausted the research potential of the site. No further archaeological investigations are recommended for Site P-33-026663. On April 16, 2024, BFSA conducted an updated survey of the Project site and visited the location of Site P-33-026663. Tribal representatives from Soboba and Pechanga also participated in the updated survey. At the time of the survey, the site was overgrown by dense vegetation. However, the site was relocated and found to be consistent with the information obtained during the previous testing of the resource. (BFSA, 2024a, p. 4.0-80)

3. Summary of Results

The updated cultural resources study for the Project resulted in the identification of four archaeological sites, consisting of three prehistoric bedrock milling sites (P-33-026660, P-33-026661, and P-33-026663) and one historic trash scatter (P-33-026659), within the Project site. In order to accurately evaluate the archaeological sites and potential impacts of the project development on these resources, an archaeological testing program was required to augment the level of work completed as part of the Phase I survey. The testing programs for these sites were previously conducted in 2017 and were completed in accordance with County of Riverside report guidelines and CEQA (Section 15064.5) significance evaluation criteria. Based upon the previous studies and evaluations for resources within the Project area, and due to the lack of any significant subsurface deposits at any of the sites, all of the identified resources were determined to retain no further research potential beyond recording their locations and attributes, which has been completed. Negative subsurface tests provide the foundation from which to state that the potential for buried cultural deposits at all of the sites is unlikely, and no significantly different information would be gathered from further investigations. None of the resources

within the Project site are eligible for listing on the California Register of Historic Resources (CRHR). (BFSA, 2024a, p. 5.0-1)

4.5.2 Applicable Environmental Regulations

A. *Federal Regulations*

1. National Register of Historic Places (NRHP)

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the NPS's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. (NPS, 2024a)

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance, as follows:

- Age and Integrity. Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?

- Significance. Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were important in the past? With significant architectural history, landscape history, or engineering achievements? Does it have the potential to yield information through archeological investigation about our past? (NPS, 2024a)

Nominations can be submitted to a SHPO from property owners, historical societies, preservation organizations, governmental agencies, and other individuals or groups. The SHPO notifies affected property owners and local governments and solicits public comment. If the owner (or a majority of owners for a district nomination) objects, the property cannot be listed but may be forwarded to the National Park Service (NPS) for a Determination of Eligibility (DOE). Listing in the National Register of Historic Places provides formal recognition of a property's historical, architectural, or archeological significance based on national standards used by every state. (NPS, 2024a)

Under Federal Law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually funding or licensing/permitting. National Register listing does not lead to public acquisition or require public access. (NPS, 2024a)

2. National Historic Landmarks Program

National Historic Landmarks (NHLs) are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, just over 2,500 historic places bear this national distinction. Working with citizens throughout the nation, the National Historic Landmarks Program draws upon the expertise of National Park

Service staff who guide the nomination process for new Landmarks and provide assistance to existing Landmarks. (NPS, 2024b)

3. American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) requires each executive branch agency with statutory or administrative responsibility for the management of Federal lands, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies are also required to maintain the confidentiality of sacred sites. Each executive branch agency with statutory or administrative responsibility for the management of Federal lands are required to implement procedures to ensure reasonable notice is provided of proposed actions or land management policies that may restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites. (NOAA, n.d.)

4. Federal Antiquities Act

The Antiquities Act is the first law to establish that archaeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. (NPS, 2024c)

B. State Regulations

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (NPS, n.d.)

2. California Code of Regulations Title 14, Section 1427

California Code of Regulations Title 14, Section 1427 provides that: "No person shall collect or remove any object or thing of archeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archeological or historical interest or value is found." (NAHC, n.d.)

3. California Register of Historic Resources

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. (OHP, n.d.)

In order for a resource to be included on the Register of Historic Resources, the resources must meet one of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4). (OHP, n.d.)

For resources included on the Register of Historic Resources, environmental review may be required under CEQA if property is threatened by a project. Additionally, local building inspectors must grant code alternatives provided under State Historical Building Code. Further, the local assessor may enter into contract with property owner for property tax reduction pursuant to the Mills Act. A property owner also may place his or her own plaque or marker at the site of the resource. (OHP, n.d.)

Consent of owner is not required, but a resource cannot be listed over an owner's objections. The State Historical Resources Commission (SHRC) can, however, formally determine a property eligible for the California Register if the resource owner objects. (OHP, n.d.)

4. Traditional Tribal Cultural Places Act (Senate Bill 18, "SB 18")

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. (OPR, 2005)

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government. (OPR, 2005)

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation

and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)

5. Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017a)

§ 21074 of the Public Resources Code defines "tribal cultural resources." In brief, in order to be considered a "tribal cultural resource," a resource must be either:

(1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or

(2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)

6. State Health and Safety Code

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery…" until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. HSC § 7051 specifies that the removal of human remains from "internment or a place of storage while awaiting internment" with the intent to sell them or to dissect them with "malice or wantonness" is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that "all California Indian human remains and cultural items are to be treated with dignity and respect." It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Info, n.d.)

California Health and Safety Code, Section 5097.98 states that whenever the commission receives notification of a discovery of Native American human remains pursuant to HSC subdivision (c) of Section 7050.5, it shall immediately notify those persons that are the most likely descendants. The descendants may inspect the site and make recommendations to the landowner as to the treatment of the human remains. The landowner shall ensure that the immediate vicinity around the remains is not damaged or disturbed by further development activity until coordination has occurred with the descendants regarding their recommendations for treatment, taking into account the possibility of multiple human remains. The descendants shall complete their inspection and make recommendations within 48 hours of being granted access to the site. (CA Legislative Info, n.d.)

7. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows: (OPR, 2018a)

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic,*

agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:

- *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
- *Is associated with the lives of persons important in our past;*
- *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; or*
- *Has yielded, or may be likely to yield, information important in prehistory or history.*

- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

C. Local Regulations

1. Ordinance No. 578 - Establishment of Historic Preservation Districts

This ordinance is intended to facilitate the preservation of areas deemed historically important to the County of Riverside. The ordinance specifies that a Historic Preservation District may be established if the Riverside County Board of Supervisors adopts a resolution that includes the boundaries of the Historic Preservation District and finds that the proposed Historic Preservation District is in conformity with the Cultural and Paleontological section of the Multipurpose Open Space Element of the Riverside County General Plan. It must also find that, for the county, state or nation: the area exemplifies or reflects significant aspects of the cultural, political, economic or social history; the area is identified with historic personages or with important events in history; or, that the area embodies the distinguishing characteristics of a significant architectural period which is inherently valuable for the study of architecture unique to the history of the county, state or nation. (Riverside County, 2015a, p. 4.9-25)

Under this ordinance, no building or structure within the boundaries of an adopted Historic Preservation District can be constructed or altered, except in strict compliance with the plans approved in conjunction with the issuance of a Historic District Alteration Permit by the Riverside County Planning Director. The ordinance also outlines how such certificates are to be reviewed and processed in order to preserve the "historical significance and related construction theme" of the Historic District. (Riverside County, 2015a, p. 4.9-26)

2. Riverside County Historic Preservation Commission

The Riverside County Historical Commission was established in 2005 to advise the Board of Supervisors on historical preservation matters. It is tasked with working to discover and identify persons, events and places of

historical importance within Riverside County, and to make recommendations relating to the preservation of appropriate historic sites and structures. To accomplish this, the Commission established criteria and procedures to identify and recognize historic landmarks in Riverside County. These criteria should be used when reviewing a potentially historically or culturally significant site that could be affected by the proposed development. Such resources are noted in the countywide list provided in Table 4.9-A of Riverside County EIR No. 521. (Riverside County, 2015a, p. 4.9-26)

3. Riverside County Planning Department Procedures

The Riverside County Archeologist reviews all proposed land use projects subject to CEQA and not otherwise deemed categorically exempt. The Riverside County Archeologist reviews various internal databases for information that might pertain to the age of any buildings found on site, grading permits, ground disturbance activities and building permits. Where buildings are 45 years or older, the project applicant is required to perform an architectural history evaluation to assess potential historic value as part of a Phase I Cultural Resources study. When the study is completed, and if historic-period resources were identified during a survey, a copy of the report is transmitted to the Riverside County Historic Preservation Officer (CHPO) for review and comment. The CHPO sends relevant comments back to the Riverside County Archeologist. (Riverside County, 2015a, p. 4.9-26)

Vacant parcels within areas known to have prehistoric or historic resources trigger a Phase I Cultural Resources study. Similarly, any parcels with environmental, geomorphological or vegetative features known to increase the likelihood of cultural resources being present trigger a "Phase I" cultural resources study. Such studies are required to follow the reporting formula found on the Riverside County Planning Department's website which mirror the recommendations published by the State Historic Preservation Office (SHPO) in 1987. (Riverside County, 2015a, p. 4.9-26)

The Riverside County Archeologist reviews all Phase I cultural resources studies for completeness and reasonable conclusions based on current industry standards in archeology. The Phase I study serves to advise the Riverside County Archeologist on matters relating to any identified prehistoric or historic resources, provide the requisite information to complete the project-related CEQA analysis and guide the Riverside County Archeologist in determining which land use conditions of approval and/or mitigation measures apply to the proposed project. (Riverside County, 2015a, p. 4.9-26)

Copies of studies are provided to tribes, upon their request, as a confidential document. If a proposed project is subject to the requirements of the Traditional Tribal Places Act (commonly referred to as Senate Bill 18), a Phase 1 report is forwarded to tribes who request it as part of consultation under SB 18. Typically, official tribal consultations are scheduled after the report has been sent to the tribe(s) to maximize consultation efforts. (Riverside County, 2015a, p. 4.9-26)

4.5.3 Basis for Determining Significance

Section V of Appendix G to the State CEQA Guidelines addresses typical adverse effects to cultural resources, and includes the following threshold questions to evaluate the Project's impacts on cultural resources. (OPR, 2018a)

- *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?*
- *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*
- *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

Significance thresholds set forth in Riverside County's Environmental Assessment Checklist, are derived from Section V of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on cultural resources if construction and/or operation of the Project would:

a. *Alter or destroy an historic site;*
b. *Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, § 15064.5;*
c. *Alter or destroy an archaeological site;*
d. *Cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code of Regulations, § 15064.5;*
e. *Disturb any human remains, including those interred outside of formal cemeteries.*

The significance thresholds set forth in the Riverside County's Environmental Assessment Checklist form, as modified by the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on cultural resources.

4.5.4 Impact Analysis

Threshold a.:	***Would the Project alter or destroy an historic site?***
Threshold b.:	***Would the Project cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?***

As discussed in detail above in subsection 4.5.1.D, based on the results of the CRA update prepared for the Project site, three of the previously-recorded resources, bedrock milling sites (P-33-026660, P-33-026661, and P-33-026663) represent pre-historic resources, and one resource, a historic trash scatter (P-33-026659), represents a historic resource. Site P-33-026659 was identified during the Phase I archaeological survey as a historic refuse scatter located in the northwestern portion of the Project site. The diagnostic items recovered from Site P-33-026659 are classified as consumer items, household items, and hardware items. The majority of the temporally diagnostic artifacts suggest that the limited trips to the site were spread out over as many as 20 years, occurring sometime in the mid-1940s to the 1960s. Due to a lack of unique elements, according to the criteria listed in CEQA, Section 15064.5, the site was evaluated as not CEQA-significant and no further archaeological investigations were recommended. Because Site P-33-026663 was previously evaluated as not

significant, Project impacts to Site P-33-026663 would be less than significant. (BFSA, 2024a, pp. 4.0-20 and 4.0-21)

However, there is the potential for the Project area to contain unidentified subsurface historical resources. Thus, there is a potential that previously-undiscovered historical resources may be uncovered during on- or off-site grading or ground-disturbing activities. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold c.: ***Would the Project alter or destroy an archaeological site?***

Threshold d.: ***Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?***

As previously summarized in 4.5.1.D, the updated records search conducted by BFSA identified 67 (55 prehistoric and 12 historic) cultural resource locations recorded within a one-mile radius of the Project site. The updated records search confirmed that historic site P-33-026659 and prehistoric sites P-33-026660, P-33-026661, and P-33-026663 are the only recorded sites within the Project site. The records search did not indicate the presence of any additional archaeological resources within the Project site. Based on the current project design, prehistoric sites P-33-026660 and P-33-026661(Features A though F) would be left in undeveloped areas of the property. Implementation of the proposed Project would result in direct physical impacts to historic site P-33-026659 and prehistoric site P-33-026663. Project impacts to sites P-33-026659 and P-33-026663 would not represent a significant impact because these features are not eligible for the NRHP or CRHR under any criteria and thus are not considered a historical resource under CEQA or historic properties under Section 106 of the NHPA. Therefore, Project impacts to sites P-33-026659 and P-33-026663 represent a less-than-significant impact.

Nevertheless, the Project site has the potential to contain unidentified archaeological resources. Due to concerns of the Native American representatives involved in the Project and due to the potential to encounter buried cultural materials during grading, Project impacts to previously-undiscovered archaeological resources that may occur on the Project site would be significant prior to mitigation.

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

The Project site does not contain a cemetery and no known cemeteries are located within the immediate Project site vicinity. Field surveys conducted on the Project site by BFSA did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code, § 7050.5, "Disturbance of Human Remains." According to § 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that

they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code § 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or their authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code § 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

Notwithstanding the requirements of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097.98, due to the potential to discover buried human remains during Project construction activities (i.e., grading), a potentially significant impact would occur and mitigation would be required.

4.5.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within western Riverside County. This study area was selected for evaluation because it encompasses a broad region with similar geological, biological, and climatic conditions.

As noted above under Thresholds a. and b., the Project site includes one historical site (Site P-33-026659). However, this resource is not considered eligible for listing in the CRHR. As such, Project impacts to previously-identified cultural resources would be less than significant on a cumulatively-considerable basis. However, there is a possibility that previously-undiscovered subsurface historical resources may be impacted by development of the Project as proposed. Other developments envisioned with buildout of the Riverside County General Plan and the general plans of cities within the County also have the potential to result in impacts to historical sites or resources, including sites or resources that may be buried beneath the ground surface. As such, the Project's potential impacts to previously-undiscovered historical resources on the Project site would be cumulatively considerable prior to mitigation.

As indicated under the analysis of Thresholds c. and d., the Project would result in direct physical impacts to sites P-33-026659 and P-33-026663. Sites P-33-026659 and P-33-026663 are eligible for the NRHP and CRHR, and therefore do not comprise significant pre-historic resources under CEQA or significant historic properties under Section 106 of the NHPA. Nevertheless, there is a potential for the Project site to contain unidentified surface or subsurface archaeological resources. As other cumulative developments within the cumulative study area similarly have the potential to result in impacts to known or previously-undiscovered resources, the Project's impacts to archaeological resources would be cumulatively considerable prior to mitigation.

As discussed under Threshold e., although the Project would be subject to compliance with the provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq., there is a potential that buried human remains could be uncovered during construction of the proposed Project. Other cumulative developments similarly would have the potential to uncover buried human remains. Accordingly, the Project's potential impacts to human remains would be cumulatively considerable prior to mitigation.

4.5.6 Significance of Impacts Before Mitigation

Thresholds a. and b.: Significant Direct and Cumulatively-Considerable Impact. Although no significant historical resources, as defined by the CRHR and CEQA, were identified as part of the Project's CRA update on the Project site, there is a potential for previously-undiscovered historical resources to occur beneath the surface of areas planned for physical impact (i.e., grading) as part of the Project. Potential impacts to previously-undiscovered historical resources on the Project site would be significant on both a direct and cumulatively-considerable basis prior to mitigation.

Threshold c. & d.: Significant Direct and Cumulatively-Considerable Impact. Implementation of the proposed Project would result in direct physical impacts to sites P-33-026659 and P-33-026663. Sites P-33-026659 and P-33-026663 are not eligible for the NRHP or CRHR, and therefore do not comprise pre-historic resources under CEQA and historic properties under Section 106 of the NHPA. Nevertheless, given the presence of previously-identified archaeological resources within the Project vicinity, including within the Project site, there is a potential for the Project site to contain unidentified surface or subsurface archaeological resources. Therefore, potential impacts to previously unidentified sub-surface pre-historic resources represents a significant impact of the proposed Project for which mitigation would be required.

Threshold e.: Significant Direct and Cumulatively-Considerable Impact. The Project site and off-site improvement areas do not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Although the Project Applicant would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq., the Project's potential impacts to buried human remains would be significant on a direct and cumulatively-considerable basis prior to mitigation.

4.5.7 County Regulations, Design Requirements, and Mitigation

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 (r), parties, and Lead Agencies, will be asked

to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

Mitigation

MM 4.5-1 **060 – Planning-CUL.1**: **Controlled Grading.** The bedrock milling features at cultural site(s) P-33-026661 Features G and H, and P-33-026663 Feature A will be impacted during construction activities and the souls surrounding them will be disturbed. To address controlled grading in this area, a plan will be developed and included in the CRMP by the Project Archaeologist. The controlled grading plan shall require the systematic removal of the ground surface to allow for the identification, documentation and recovery of any subsurface cultural deposits. Results of the controlled grading program shall be included in the Phase IV monitoring report.

MM 4.5-2 **060 – Planning-CUL.2**: **ECS Sheet – Resource Relocation and Reburial Area.** Prior to issuance of grading permits: the developer/applicant shall provide evidence to the Riverside County Planning Department that an Environmental Constraints Sheet has been included in the Grading Plans. This sheet shall indicate avoidance of site P-33-026660 and P-33-026661 Features A to F. The Sheet shall also indicate an area to be used for relocation of the bedrock milling features that cannot be avoided by this Project. This shall include P-33-26661 Features G and H and P-33-026663 Feature A. In addition, a permanent space within this area will be predetermined and designated on a confidential map for reburial of any artifacts that will be impacted and/or discovered during grading.

MM 4.5-3 **060 – Planning-CUL.3**: **Feature Relocation.** Site(s) P-33-026661 Features G and H, and p-33-026663 Feature A cannot be avoided through Project design. Prior to grading permit issuance, the Project Supervisor and Project Archaeologist and a representative from the consulting Tribe(s) shall meet onsite to determine the strategy for relocating the milling features to a permanent open space area predetermined and designated on a confidential map. Before construction activities are allowed to start and using professional archaeological methods, any visible artifacts shall be recovered and recorded, and photo documentation of each feature in situ shall occur. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which features were relocated, the process through which this was done, and updated maps using sub meter GIS technology to document the new location of each feature. The relocation information shall be included in the Phase IV Monitoring Report.

MM 4.5-4 **060 – Planning-CUL.4**: **Native American Monitor.** Prior to the issuance of grading permits, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for a Native American Monitor. The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification,

evaluation, and potential recovery of cultural resources. The developer/permit applicant shall submit a fully executed copy of the agreement to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition. This agreement shall not modify any condition of approval or mitigation measure.

MM 4.5-5 **060 – Planning-CUL.5**: **Project Archaeologist.** Prior to issuance of grading permits, the applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist (Project Archaeologist) has been contracted to implement a Cultural Resource Monitoring Program (CRMP). In consultation with the consulting tribes, a Cultural Resource Monitoring Plan shall be developed that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. A fully executed copy of the contract and a wet-signed copy of the Monitoring Plan shall be provided to the County Archaeologist to ensure compliance with this condition of approval. Working directly under the Project Archaeologist, and adequate number of qualified Archaeological Monitors shall be present to ensure that all earth moving activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist.

MM 4.5-6 **060 – Planning-CUL.6**: **Temporary Fencing.** Temporary fencing shall be required for the protection of cultural site(s) P-33-026660 and P-33-026661 Features A to F during grading activities. Prior to commencement of grading or brushing, the project archaeologist shall confirm the site boundaries and determine an adequate buffer for protection of the site(s). The applicant shall direct the installation of fencing under the supervision of the project archaeologist and Native American Monitor. The fencing can be removed only after grading operations have been completed.

MM 4.5-7 **070 – Planning-CUL.1**: **Artifact Disposition.** In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources and provide evidence to the satisfaction of the County Archaeologist that all archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), have been handled through the following methods. Any artifacts identified and collected during construction and grading activities are not to leave the project area and shall remain onsite in a secure location until final disposition.

1. *Historic Resources:* All historic archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), have been curates at

the Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

2. *Prehistoric and/or Tribal Cultural Resources:* One of the following treatments shall be applied.

    a. Preservation-in-place, if feasible is the preferred option. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.

    b. Reburial of the resources on the Project property. The measures for reburial shall be culturally appropriate as determined through consultation with the consulting Tribe(s) and include, at least, the following:

        i. Measures to protect the reburial area from any future impacts in perpetuity. Reburial shall not occur until all required cataloguing (including a complete photographic record) and analysis have been completed on the cultural resources, with the exception that sacred and ceremonial items, burial goods, and Native American human remains are excluded.

        ii. No cataloguing, analysis, or other studies may occur on human remains grave goods, and sacred and ceremonial items.

        iii. Any reburial processes shall be culturally appropriate and approved by the consulting tribe(s).

        iv. Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the County and SCIC.

        v. Any artifacts identified and collected during construction grading activities are not to leave the project area and shall remain onsite in a secure location until final disposition.

MM 4.5-8 **070 – Planning-CUL.2**: **Deed Restriction.** At the conclusion of all construction activities, the Project proponent and landowner shall record a deed restriction on the avoidance areas (and the reburial location, if used) with the County to restrict development of these areas in the future. Deed restrictions shall not disclose the nature of the avoidance areas. A copy of the

deed restriction(s) shall be submitted to the County planning staff as proof of compliance prior to the issuance of certificates of occupancy for the Project.

MM 4.5-9 **070 – Planning-CUL.3**: **Phase IV Monitoring Report.** Prior to Grading Permit Final Inspection, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the TLMA website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance to procedures stipulated in the Cultural Resources Management Plan.

MM 4.5-10 **070 – Planning-CUL.4**: **Tribal Monitoring Notes.** Prior to Grading Final, a complete set of Tribal Monitoring Notes shall be submitted to the County Archaeologist. Upon receipt and approval of the notes, the condition will be cleared.

MM 4.5-11 **Human Remains**: In the event that human remains are encountered during ground-disturbing construction activities on site or within the Project's off-site improvement areas, compliance with California Health and Safety Code § 7050.5 and Public Resources Code § 5097 et. seq. shall be required. State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. The County Coroner shall determine that no investigation of the cause of death is required, and determine if the remains are of Native American origin. In the event that the remains are determined to be of Native American origin, the Native American Heritage Commission (NAHC) shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "Most Likely Descendant." The Most Likely Descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. If the NAHC is unable to identify a Most Likely Descendant, or if the Most Likely Descendant failed to make a recommendation within 48 hours after being notified by the NAHC, or the Project Applicant rejects the recommendation of the Most Likely Descendent, the Project Applicant shall rebury the Native American human remains and associated grave goods on the property in a location not subject to further ground disturbance. Evidence of compliance with this mitigation measure, if human remains are found, shall be provided to Riverside County upon the completion of a treatment plan and final report detailing the significance and treatment finding.

4.5.8 Significance of Impacts After Mitigation

Thresholds a. and b.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-10 would ensure that any historical resources identified on site or within the Project's off-site improvement areas during ground-disturbing activities are appropriately treated, including if necessary curation of the historical artifact(s) at the Western Science Center in Hemet or as directed by the County Archaeologist. Implementation of the required mitigation would ensure that any potential impacts to subsurface historical sites or resources would be reduced to less-than-significant levels.

Thresholds c. and d.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-10 would ensure that any previously-undiscovered archaeological sites or resources identified on site or within the Project's off-site improvement areas during ground-disturbing activities are appropriately treated as directed by the Archaeological Monitor, County Archaeologist, and Native American Monitor. Implementation of the required mitigation would reduce the Project's potential impacts to subsurface archaeological sites or resources to below a level of significance.

Threshold e.: Less-than-Significant Impact with Mitigation. In the event that human remains are discovered during construction activities, Mitigation Measure MM 4.5-11 would require the Project Applicant to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 et. seq. Mandatory compliance with Mitigation Measure MM 4.5-11, State law and applicable regulatory requirements would reduce the Project's potential impacts to buried human remains to less-than-significant levels.

4.6 ENERGY

This Subsection is based in part on the information contained in the Project's Energy Analysis Report (herein, "EA"), titled "Highland Grove Vistas 4 TTM No. 38927 Energy Analysis," dated December 11, 2025, and appended to this EIR as *Technical Appendix E* (Urban Crossroads, 2025b). Refer to Section 7.0, *References,* for a complete list of reference sources.

4.6.1 EXISTING CONDITIONS

A. Overview

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2021 and 2022, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and 2022 and included: (Urban Crossroads, 2025b, p. 7)

- As of 2021, approximately 7,359 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2021, approximately 605 million barrels of petroleum
- As of 2022, approximately 2,059 billion cubic feet of natural gas
- As of 2022, approximately 1,322 thousand short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. In 2022, about 253,289 million gallons (or about 6.03 million barrels) of finished petroleum products were consumed in the U.S., an average of about 694 million gallons per day (or about 16.5 million barrels per day). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day). (Urban Crossroads, 2025b, p. 7)

The most recent data provided by the EIA for energy use in California is reported from 2021 and provided by demand sectors as follows: (Urban Crossroads, 2025b, p. 7)

- Approximately 41.3% transportation sector
- Approximately 23.5% industrial sector
- Approximately 18.1% residential sector
- Approximately 17.0% commercial sector

According to the EIA, California used approximately 251,869 gigawatt hours of electricity in 2022. By sector in 2022, residential uses utilized 35.6% of the state's electricity, followed by 45.3% for commercial uses, 18.9% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. (Urban Crossroads, 2025b, p. 7)

According to the EIA, California used approximately 200,871 million therms of natural gas in 2022. In 2023 (the most recent year for which data is available), by sector, industrial uses utilized 31% of the state's natural gas, followed by 32% used as fuel in the electric power sector, 23% from residential, 13% from commercial,

1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself. While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas. (Urban Crossroads, 2025b, pp. 7-8)

In 2022, total system electric generation for California was 287,220 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 203,257 GWh which accounted for approximately 71% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (17%). Natural gas is the main source for electricity generation at 47.46% of the total in-state electric generation system power as shown in Table 4.6-1, *Total Electricity System Power (California 2022)*. (Urban Crossroads, 2025b, p. 8)

Table 4.6-1 Total Electricity System Power (California 2022)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	273	0.13%	181	5,716	5,897	6,170	2.15%
Natural Gas	96,457	47.46%	44	7,994	8,038	104,495	36.38%
Oil	65	0.03%	-	-	-	65	0.2%
Other (Waste Heat/Petroleum Coke)	315	0.15%	-	-	-	315	0.11%
Unspecified	-	0.0%	12,485	7,943	20,428	20,428	7.11%
Total Thermal and Unspecified	**97,110**	**47.78%**	**12,710**	**21,653**	**34,363**	**121,473**	**45.77%**
Nuclear	17,627	8.67%	397	8,342	8,739	26,366	9.18%
Large Hydro	14,607	7.19%	10,803	1,118	11,921	26,528	9.24%
Biomass	5,366	2.64%	771	25	797	6,162	2.15%
Geothermal	11,110	5.47%	253	2,048	2,301	13,412	4.67%
Small Hydro	3,005	1.48%	211	13	225	3,230	1.12%
Solar	40,494	19.92%	231	8,225	8,456	48,950	17.04%
Wind	13,938	6.86%	8,804	8,357	17,161	31,099	10.83%
Total Non-GHG and Renewables	**106,147**	**52.22%**	**21,471**	**28,129**	**49,599**	**155,747**	**54.23%**
SYSTEM TOTALS	***203,257***	***100.0%***	***34,180***	***49,782***	***83,962***	***287,220***	***100.0%***

(Urban Crossroads, 2025b, Table 2-1)

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below: (Urban Crossroads, 2025b, p. 8)

- In 2023, California was the seventh-largest producer of crude oil among the 50 states, and the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.

- California is the second-largest total energy consumer among the states, after Texas, but its per capita energy consumption is the fourth-lowest in the nation.
- In 2023, renewable resources, including hydroelectric power and small-scale solar power, supplied 54% of California's in-state electricity generation. Natural gas fueled another 39% and nuclear power provided almost all the rest.
- In 2023, California was the fourth-largest electricity producer in the nation. It is also the nation's third-largest electricity consumer and imports more electricity than any other state.

As indicated above, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project. (Urban Crossroads, 2025b, p. 8)

B. Electricity

The usage associated with electricity use was calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once- through cooling policy, the retirement of San Onofre complicated the situation. California ISO studies revealed the extent to which the South Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts. Similarly, the subsequent 2023 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system. (Urban Crossroads, 2025b, p. 10)

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities. (Urban Crossroads, 2025b, p. 10)

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to

accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State. (Urban Crossroads, 2025b, p. 10)

Electricity is currently provided to the Project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2022 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers. (Urban Crossroads, 2025b, p. 10)

Table 4.6-2, *SCE 2022 Power Content Mix*, identifies SCE's specific proportional shares of electricity sources in 2022. As indicated in Table 4.6-2, the 2022 SCE Power Mix has renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0%. (Urban Crossroads, 2025b, pp. 10-11)

Table 4.6-2 SCE 2022 Power Content Mix

Energy Resources	2022 SCE Power Mix
Eligible Renewable	**33.2%**
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	17.0%
Wind	9.8%
Coal	**0.0%**
Large Hydroelectric	**3.4%**
Natural Gas	**24.7%**
Nuclear	**8.3%**
Other	**0.1%**
Unspecified Sources of power*	30.3%
Total	**100%**

*"Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.
(Urban Crossroads, 2025b, Table 2-2)

C. *Natural Gas*

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC). (Urban Crossroads, 2025b, pp. 11-14)

> *"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also*

regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercials customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution

pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's

backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California."

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State. (Urban Crossroads, 2025b, p. 14)

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2021, about 33% of the

natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2021. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1%. (Urban Crossroads, 2025b, p. 14)

D. Transportation Energy Resources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California, and those vehicles consume an estimated 17.2 billion gallons of fuel each year1. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets. (Urban Crossroads, 2025b, p. 15)

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of jet fuel and the second-largest of motor gasoline, and 83% of the petroleum consumed in California is used in the transportation sector. (Urban Crossroads, 2025b, p. 15)

4.6.2 Applicable Regulatory Requirements

The following is a brief description of the federal, State, and local environmental laws and related regulations related to energy use and conservation.

A. Federal Regulations

1. Intermodal Surface Transportation Efficiency Act (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. The applicable MPO for Riverside County is the Southern California Association of Governments (SCAG). SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the applicable planning document for the area. (FHWA, 2020)

2. Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) authorizes over $200 billion to improve the Nation's transportation infrastructure, enhance economic growth and protect the environment. TEA-21 creates new opportunities to improve air and water quality, restore wetlands and natural habitat, and rejuvenate urban

areas through transportation redevelopment, increased transit and sustainable alternatives to urban sprawl. Several provisions of TEA-21 create new opportunities for water quality improvements. (FHWA, 2022a)

B. State Regulations

1. Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR). (CEC, n.d.)

The 2023 IEPR focuses on provides updates on a variety of energy issues facing California. These issues require action if the state is to meet its climate, energy, air quality, and other environmental goals in an equitable way while maintaining reliability and controlling costs. The 2023 Integrated Energy Policy Report discusses speeding connection of clean resources to the electricity grid, the potential use of clean and renewable hydrogen, and the California Energy Demand Forecast to 2040. The report also provides updates on topics such as gas decarbonization, energy efficiency, the Clean Transportation Program, Assembly Bill 1257 (Bocanegra, Chapter 749, Statutes of 2013), and publicly owned utilities' progress toward peak demand reserves and margins. (CEC, n.d.)

2. California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2019 Standards for building construction, which went into effect on January 1, 2020, improved upon the former 2016 Standards for residential and nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code. The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The 2022 Title 24 standards require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting standards for nonresidential buildings. (CEC, 2022)

3. California Renewable Portfolio Standards (RPS)

The California Energy Commission (CEC) implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable

sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and California Air Resources Board (CARB) to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. (CEC, n.d.)

4. Pavley Fuel Efficiency Standards (AB 1493)

In California, AB 1493 establishes fuel efficiency ratings for model year 2009-2016 passenger cars and light trucks. (CARB, n.d.)

5. Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed, SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions: (CA Legislative Info, 2015)

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

6. State of California Energy Plan

The State Energy Plan, drafted by the CEC, identifies emerging trends in energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan recommends reductions in congestion and increased efficiency in the use of fuel supplies. The plan also encourages urban designs that reduce vehicle miles traveled (VMT) and promote pedestrian and bicycle access.

C. *Local Regulations*

1. Riverside County Climate Action Plan

The County of Riverside's most current Climate Action Plan, updated in November 2019 uses several methods to promote renewable energy and energy efficiency. The regulation most relevant to the project is R2-CE1: Clean Energy, which states:

- *Clean energy includes energy efficiency and clean energy supply options such as highly efficient combined heat and power as well as renewable energy sources. Installing solar photovoltaics panels on residential and commercial building rooftops is an effective way to produce renewable energy on-site. Moreover, when combined with energy storage systems, solar panels could continuously meet residential and commercial energy demand. The Riverside County Settlement Agreement requires that on-site renewable energy production (including but not limited to solar) shall apply to any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development. Renewable energy production shall be onsite generation of at least 20 percent of energy demand for commercial, office, industrial or manufacturing development, meet or exceed 20 percent of energy demand for multi-family residential development, and meet or exceed 30 percent of energy demand for single-family residential development. These renewable energy requirements should be updated with every CAP Update by the County based on most recent technology advancements.* (Riverside County, 2019, pp. 4-11 and 4-12)

The County of Riverside also has several other non-mandatory regulations that would serve to benefit the Project. For example, CAP measure R2-L1, *Tree Planting for Shading and Energy Saving*, encourages residents and developers to plant trees to lower outdoor summer temperatures. CAP measure R2-L2, *Light Reflecting Surfaces for Energy Saving*, advocates for coating surfaces such as roofs and asphalt with substances that reflect sunlight, for example by painting them white or installing rooftop gardens.

4.6.3 Basis for Determining Significance

Section VI of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects due to energy consumption, and includes the following threshold questions to evaluate a project's impacts on energy resources (OPR, 2018a).

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

- Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The following thresholds are derived directly from Section VI of Appendix G to the State CEQA Guidelines and the County's Environmental Assessment form. The proposed Project would have a significant impact on energy resources if construction and/or operation of 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.

4.6.4 IMPACT ANALYSIS

A. Methodology for Calculating Project Energy Demands

Information from the CalEEMod Version 2022.1.1.23 outputs for the Project's Air Quality Impact Analysis (AQIA) (*Technical Appendix B*) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands. (Urban Crossroads, 2025b, p. 23)

In August 2023, California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released the latest version of the CalEEMod Version 2022.1.1.23. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage. Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendix 4.1 of the Project's AQIA (*Technical Appendix B*). (Urban Crossroads, 2025b, p. 23)

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. The Project's EA (*Technical Appendix E*) utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2025 through 2028 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Output from the EMFAC2021 model run is provided in Appendix 4.3 of the Project's EA (*Technical Appendix E*). (Urban Crossroads, 2025b, pp. 23-24)

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

A. Construction Energy Demands

1. Construction Power Cost and Electricity Use

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

Construction of Project is expected to commence in September 2025 and would last through October 2028. The construction schedule utilized in the analysis, previously shown in EIR Table 3-2, represents a "conservative" analysis scenario. Should construction occur any time after the respective dates, impacts would be reduced since emission factors for construction decrease as time passes and fuel efficiency increases due to emission regulations becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet. (Urban Crossroads, 2025b, p. 24)

The *2024 National Construction Estimator* identifies a typical power cost per 1,000 s.f. of construction per month of $2.66, which was used to calculate the Project's total construction power cost. As shown on Table 4.6-3, *Construction Power Cost*, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately $345,997.07. (Urban Crossroads, 2025b, p. 24)

Table 4.6-3 Construction Power Cost

Land Use	Power Cost (per 1,000 SF)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
Single Family Detached Residential	$2.66	401.700	33	$35,261.23
Landscape	$2.66	2,412.849	33	$211,799.89
Other Asphalt Surfaces	$2.66	1,118.378	33	$98,171.22
Off-Site Improvements	$2.66	8.712	33	$764.74
CONSTRUCTION POWER COST				***$345,997.07***

(Urban Crossroads, 2025b, Table 4-2)

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4.6-3) by the utility provider cost per kilowatt hour (kWh) of electricity. The SCE's general service rate schedule was used to determine the Project's electrical usage. As of March 28, 2024, SCE's general service rate is $0.15 per kilowatt hours (kWh) of electricity for industrial $0.19 for residential services. As shown on Table 4.6-4, *Construction Electricity Usage*, the total electricity usage from on-site Project construction related activities is estimated to be approximately 2,359,500 kWh. (Urban Crossroads, 2025b, p. 25)

Table 4.6-4 Construction Electricity Usage

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Single Family Detached Residential	$0.15	240,461
Landscape	$0.15	1,444,353
Other Asphalt Surfaces	$0.15	669,471
Off-Site Improvements	$0.15	5,215
CONSTRUCTION ELECTRICITY USAGE		***2,359,500***

(Urban Crossroads, 2025b, Table 4-3)

2. Construction Equipment Fuel Estimates

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules,

equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4.6-5, *Construction Equipment Fuel Consumption Estimates*. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. The calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing fuel providers serving the Project area and region. As presented in Table 4.6-5, Project construction activities would consume an estimated 270,703 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2025b, pp. 25-27)

3. Construction Trips and Vehicle Miles Traveled (VMT)

Construction generates on-road vehicle emissions from vehicle usage for workers, hauling, and vendors commuting to and from the site. The number of workers, hauling, and vendor trips are presented below in Table 4.6-6, *Construction Trips and VMT*. (Urban Crossroads, 2025b, p. 30)

4. Construction Worker Fuel Estimates

With respect to estimated Vehicle Miles Traveled (VMT) for the Project, the construction worker trips would generate an estimated 1,207,717 VMT during the 33 months of construction. Based on CalEEMod methodology, it is assumed that 50% of all vendor trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT12), and 25% are from light-duty-trucks (LDT23). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA (*Technical Appendix B*). (Urban Crossroads, 2025b, p. 30)

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2025 through 2028 calendar years. Data from EMFAC2021 is shown in Appendix 4.3 of the Project's EA (*Technical Appendix E*). (Urban Crossroads, 2025b, p. 30)

Table 4.6-7, *Construction Worker Fuel Consumption Estimates*, provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 4.6-7, it is estimated that 40,761 gallons of fuel would be consumed related to construction worker trips during full construction of the Project. (Urban Crossroads, 2025b, p. 30)

5. Construction Vendor/Hauling Fuel Estimates

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 145,243 VMT along area roadways for the Project over the duration of construction activity. It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% of vendor trips are from heavy-heavy duty trucks (HHDT). These assumptions are consistent with

Table 4.6-5 Construction Equipment Fuel Consumption Estimates

Construction Activity		Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Project Site	Site Preparation	23	Rubber Tired Dozers	367	8	8	0.40	9,395	11,681
			Crawler Tractors	87	10	8	0.43	2,993	3,721
	Grading	130	Graders	148	2	8	0.41	971	6,822
			Excavators	36	1	8	0.38	109	769
			Scrapers	423	8	8	0.48	12,995	91,313
			Rubber Tired Dozers	367	1	8	0.40	1,174	8,253
			Crawler Tractors	87	3	8	0.43	898	6,309
	Building Construction	587	Forklifts	82	3	8	0.20	394	12,489
			Generator Sets	14	2	8	0.74	166	5,260
			Cranes	367	1	8	0.29	851	27,016
			Welders	46	2	8	0.45	331	10,509
			Tractors/Loaders/Backhoes	84	5	8	0.37	1,243	39,446
	Paving	587	Pavers	81	2	8	0.42	544	17,271
			Paving Equipment	89	2	8	0.36	513	16,266
			Rollers	36	2	8	0.38	219	6,945
	Architectural Coating	284	Air Compressors	37	1	8	0.48	142	2,181
Off-Site Improvements	Linear, Grubbing & Land Clearing	10	Excavators	36	1	8	0.38	109	59
			Tractors/Loaders/Backhoes	84	1	8	0.37	249	134
			Other Construction Equipment	82	1	8	0.42	276	149
	Linear, Grading & Excavation	45	Excavators	36	1	8	0.38	109	266
			Tractors/Loaders/Backhoes	84	1	8	0.37	249	605
			Other Construction Equipment	82	1	8	0.42	276	670
	Linear, Drainage, Utilities, & Sub-Grade	30	Excavators	36	1	8	0.38	109	177
			Tractors/Loaders/Backhoes	84	1	8	0.37	249	403
			Other Construction Equipment	82	1	8	0.42	276	447
	Linear, Paving	15	Excavators	36	1	8	0.38	109	89
			Tractors/Loaders/Backhoes	84	1	8	0.37	249	202
			Other Construction Equipment	82	1	8	0.42	276	223
	Linear, Trenching	30	Excavators	36	1	8	0.38	109	177
			Tractors/Loaders/Backhoes	84	1	8	0.37	249	403
			Other Construction Equipment	82	1	8	0.42	276	447
TOTAL CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)									***270,703***

(Urban Crossroads, 2025b, Table 4-5)

Table 4.6-6 Construction Trips and VMT

Construction Activity		Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Project	Site Preparation	45	1	0
	Grading	38	4	11
	Building Construction	74	17	0
	Paving	15	0	0
	Architectural Coating	15	0	0
Off-Site Improvements	Linear, Grubbing & Land Clearing	8	1	0
	Linear, Grading & Excavation	8	1	0
	Linear, Drainage, Utilities, & Sub-Grade	8	1	0
	Linear, Paving	8	1	0
	Linear, Trenching	8	1	0

(Urban Crossroads, 2025b, Table 4-6)

the CalEEMod defaults utilized within the within the AQIA. Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHDT and HHDT vehicle classes within the California sub-area for the 2025 through 2028 calendar years. Data from EMFAC2021 is shown in Appendix 4.3 of the Project's EA (*Technical Appendix E*). Based on Table 4.6-8, *Construction Vendor Fuel Consumption Estimates*, it is estimated that 20,239 gallons of fuel would be consumed related to construction vendor trips during full construction of the Project. It should be noted that Project construction vendor trips would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2025b, p. 35)

6. Construction Energy Efficiency/Conservation Measures

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel. (Urban Crossroads, 2025b, p. 38)

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. (Urban Crossroads, 2025b, p. 38)

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints. (Urban Crossroads, 2025b, p. 38)

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the

Table 4.6-7 Construction Worker Fuel Consumption Estimates

Year	Construction Activity		Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2025	Project	LDA						
		Site Preparation	23	23	18.5	9,787	32.49	301
		Grading	66	19	18.5	23,199	32.49	714
		LDT1						
		Site Preparation	23	12	18.5	5,106	25.14	203
		Grading	66	10	18.5	12,210	25.14	486
		LDT2						
		Site Preparation	23	12	18.5	5,106	25.29	202
		Grading	66	10	18.5	12,210	25.29	483
2026	Project	LDA						
		Grading	65	19	18.5	22,848	33.43	683
		Building Construction	197	37	18.5	134,847	33.43	4,033
		Paving	197	8	18.5	29,156	33.43	872
	Off-Site Improvements	Linear, Grubbing & Land Clearing	10	4	18.5	740	33.43	22
		Linear, Grading & Excavation	45	4	18.5	3,330	33.43	100
		Linear, Drainage, Utilities, & Sub-Grade	30	4	18.5	2,220	33.43	66
		Linear, Trenching	30	4	18.5	2,220	33.43	66
		Linear, Paving	15	4	18.5	1,110	33.43	33
2026	Project	LDT1						
		Grading	65	10	18.5	12,025	25.70	468
		Building Construction	197	19	18.5	69,246	25.70	2,694
		Paving	197	4	18.5	14,578	25.70	567
	Off-Site Improvements	Linear, Grubbing & Land Clearing	10	2	18.5	370	25.70	14
		Linear, Grading & Excavation	45	2	18.5	1,665	25.70	65
		Linear, Drainage, Utilities, & Sub-Grade	30	2	18.5	1,110	25.70	43
		Linear, Trenching	30	2	18.5	1,110	25.70	43
		Linear, Paving	15	2	18.5	555	25.70	22
	Project	LDT2						
		Grading	65	10	18.5	12,025	26.01	462
		Building Construction	197	19	18.5	69,246	26.01	2,662
		Paving	197	4	18.5	14,578	26.01	561
	Off-Site Improvements	Linear, Grubbing & Land Clearing	10	2	18.5	370	26.01	14
		Linear, Grading & Excavation	45	2	18.5	1,665	26.01	64
		Linear, Drainage, Utilities, & Sub-Grade	30	2	18.5	1,110	26.01	43
		Linear, Trenching	30	2	18.5	1,110	26.01	43
		Linear, Paving	15	2	18.5	555	26.01	21
2027	Project	LDA						
		Building Construction	261	37	18.5	178,655	34.29	5,211
		Paving	261	8	18.5	38,628	34.29	1,127
		Architectural Coating	154	8	18.5	22,792	34.29	665
		LDT1						
		Building Construction	261	19	18.5	91,742	26.22	3,499
		Paving	261	4	18.5	19,314	26.22	737
		Architectural Coating	154	4	18.5	11,396	26.22	435
		LDT2						
		Building Construction	261	19	18.5	91,742	26.63	3,445
		Paving	261	4	18.5	19,314	26.63	725
		Architectural Coating	154	4	18.5	11,396	26.63	428
2028	Project	LDA						
		Building Construction	130	37	18.5	88,985	35.14	2,532
		Paving	130	8	18.5	19,240	35.14	547
		Architectural Coating	130	8	18.5	19,240	35.14	547
	Project	LDT1						
		Building Construction	130	19	18.5	45,695	26.76	1,707
		Paving	130	4	18.5	9,620	26.76	359
		Architectural Coating	130	4	18.5	9,620	26.76	359
2028	Project	LDT2						
		Building Construction	130	19	18.5	45,695	27.23	1,678
		Paving	130	4	18.5	9,620	27.23	353
		Architectural Coating	130	4	18.5	9,620	27.23	353
		TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION						***40,761***

(Urban Crossroads, 2025b, Table 4-7)

Table 4.6-8 Construction Vendor Fuel Consumption Estimates

Year	Construction Activity		Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2025	Project	MHDT						
		Site Preparation	23	1	10.2	235	8.58	27
		Grading	66	2	10.2	1,346	8.58	157
		HHDT (Vendor)						
		Site Preparation	23	1	10.2	235	6.22	38
		Grading	66	2	10.2	1,346	6.22	217
		HHDT (Hauling)						
		Grading	66	11	20	14,520	6.22	2,335
2026	Project	MHDT						
		Grading	65	2	10.2	1,326	8.71	152
		Building Construction	197	9	10.2	18,085	8.71	2,077
	Off-Site Improvements	Linear, Grubbing & Land Clearing	10	1	10.2	102	8.71	12
		Linear, Grading & Excavation	45	1	10.2	459	8.71	53
		Linear, Drainage, Utilities, & Sub-Grade	30	1	10.2	306	8.71	35
		Linear, Trenching	30	1	10.2	306	8.71	35
		Linear, Paving	15	1	10.2	153	8.71	18
2026	Project	HHDT (Vendor)						
		Grading	65	2	10.2	1,326	6.33	210
		Building Construction	197	9	10.2	18,085	6.33	2,859
		HHDT (Hauling)						
		Grading	65	11	20	14,300	6.33	2,261
2026	Off-Site Improvements	Linear, Grubbing & Land Clearing	10	1	10.2	102	6.33	16
		Linear, Grading & Excavation	45	1	10.2	459	6.33	73
		Linear, Drainage, Utilities, & Sub-	30	1	10.2	306	6.33	48
		Linear, Trenching	30	1	10.2	306	6.33	48
		Linear, Paving	15	1	10.2	153	6.33	24
2027	Project	MHDT						
		Building Construction	261	9	10.2	23,960	8.85	2,706
		HHDT (Vendor)						
		Building Construction	261	9	10.2	23,960	6.45	3,714
2028	Project	MHDT						
		Building Construction	130	9	10.2	11,934	9.07	1,316
2028	Project	HHDT (Vendor)						
		Building Construction	130	9	10.2	11,934	6.60	1,809
TOTAL CONSTRUCTION VENDOR FUEL CONSUMPTION								***20,239***

(Urban Crossroads, 2025b, Table 4-8)

energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared. (Urban Crossroads, 2025b, p. 38)

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. (Urban Crossroads, 2025b, p. 38)

B. Operational Energy Demands

Energy consumption in support of or related to Project operations would include transportation energy

demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities). (Urban Crossroads, 2025b, p. 39)

1. Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluated in the vehicle fleet mix and the total VMT. As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB. EMFAC2021 was run for the Riverside County subarea for the 2028 calendar year. Data from EMFAC2021 is shown in Appendix 4.3 of the Project's EA (*Technical Appendix E*). As summarized on Table 4.6-9, *Total Project-Generated Traffic Annual Fuel Consumption*, the Project would result in an estimated 8,539,717 annual VMT and an annual fuel consumption of 329,305 gallons of fuel. (Urban Crossroads, 2025b, p. 39)

2. Facility Energy Demands

Project building operations activities would result in the consumption of electricity and natural gas. Electricity and natural gas would be supplied to the Project by SCE and SoCal Gas. Electricity and natural gas demands

Table 4.6-9 Total Project-Generated Traffic Annual Fuel Consumption

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	35.14	4,232,717	120,441
LDT1	26.76	315,827	11,800
LDT2	27.23	1,780,541	65,386
MDV	21.91	1,341,123	61,202
LHDT1	17.78	263,824	14,842
LHDT2	16.65	75,391	4,528
MHDT	9.07	127,059	14,012
HHDT	6.60	140,132	21,238
OBUS	6.97	5,057	726
UBUS	6.13	3,273	534
MCY	42.30	194,764	4,604
SBUS	6.50	11,387	1,753
MH	5.90	48,622	8,237
TOTAL (ALL VEHICLES)		***8,539,717***	***329,305***

(Urban Crossroads, 2025b, Table 4-9)

of the Project are summarized in Table 4.6-10, *Project Annual Operational Natural Gas Demand Summary*, and provided in Appendix 4.1 of the Project's EA (*Technical Appendix E*). (Urban Crossroads, 2025b, p. 39)

3. Operational Energy Efficiency/Conservation Measures

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent State and federal regulatory actions addressing vehicle fuel economies and vehicle emissions

standards, and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code). (Urban Crossroads, 2025b, p. 40)

Table 4.6-10 Project Annual Operational Natural Gas Demand Summary

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBTU/year)
Single Family Detached Residential	1,063,908	7,326,249
Landscape	0	0
Other Asphalt Surfaces	0	0
Off-Site Improvements	0	0
TOTAL PROJECT ENERGY DEMAND	***1,063,908***	***7,326,249***

kBTU – kilo-British Thermal Units
(Urban Crossroads, 2025b, Table 4-10)

Project annual fuel consumption estimates presented previously in Table 4.6-10 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. (Urban Crossroads, 2025b, p. 40)

Enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) likely would decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. (Urban Crossroads, 2025b, p. 40)

C. Summary of Energy Demands

1. Construction Energy Demands

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately $345,997.07. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 2,359,500 kWh. (Urban Crossroads, 2025b, p. 40)

Construction equipment used by the Project would result in single event consumption of approximately 270,703 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies. (Urban Crossroads, 2025b, pp. 40-41)

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this

requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints. (Urban Crossroads, 2025b, p. 41)

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 40,761 gallons of fuel. Additionally, fuel consumption from construction vendor trips (MHDTs and HHDTs) would total approximately 15,643 gallons. Diesel fuel would be supplied by County and regional residential vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2023 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements. As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. (Urban Crossroads, 2025b, p. 41)

2. Operational Energy Demands

Transportation Energy Demands

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 329,305 gallons of fuel. Fuel would be provided by current and future residential vendors. Trip generation and VMT generated by the Project are consistent with other residential uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual ((11th Ed., 2021) and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other residential uses. (Urban Crossroads, 2025b, p. 41)

It should be noted that the State strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals. (Urban Crossroads, 2025b, p. 41)

Enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and County requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. (Urban Crossroads, 2025b, pp. 41-42)

Facility Energy Demands

Project facility operational energy demands are estimated at: 1,063,908 kWh/year of electricity and 7,326,249 kBTU/year of natural gas. Electricity would be supplied by SCE, and natural gas would be supplied by SoCal Gas. The Project proposes conventional residential uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration. (Urban Crossroads, 2025b, p. 42)

Implementation of the Project would increase the demand for electricity at the Project site and petroleum consumption in the region during operation. However, the electrical consumption demands of the Project during operation would conform to the state's Title 24 and to CALGreen standards, which implement conservation measures. Further, the proposed Project would not directly require the construction of new energy generation or supply facilities and providers of electricity are in compliance with regulatory requirements that assist in conservation, including requirements that electrical providers achieve state-mandated renewal energy production requirements. With compliance with Title 24 conservation standards and other regulatory requirements, the Project would not be wasteful or inefficient or unnecessarily consume energy resources during construction or operation and would result in a less-than-significant impact with respect to consumption of energy resources. Lastly, the Project would comply with the applicable 2022 Title 24 standards. Compliance with applicable Title 24 standards would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. (Urban Crossroads, 2025b, p. 42)

D. Conclusion

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would be required to comply with the applicable Title 24 standards. As such, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other older residential uses of similar scale and intensity that are constructed and operating in California. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Accordingly, the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

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

1. Consistency with Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because SCAG is not planning for intermodal facilities on or through the Project site.

2. Consistency with the Transportation Equity Act for the 21st Century (TEA-21)

The Project site is located in an area with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

3. Consistency with 2022 Integrative Energy Policy Report (IEPR)

Electricity would be provided to the Project by SCE. SCE's Clean Power and Electrification Pathway (CPEP) white paper builds on existing State programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2022 IEPR. Additionally, the Project would comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2022 IEPR.

4. Consistency with State of California Energy Plan

The Project site is located in an area with proximate access to the Interstate freeway system. The site selected for the Project facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

5. Consistency with California Code Title 24, Part 6, Energy Efficiency Standards

The 2022 version of Title 24 was adopted by the CEC and will become effective on January 1, 2023. As the Project building construction is anticipated in 2024, it is presumed that the Project would be required to comply with the Title 24 standards in place at that time. Therefore, the Project would not result in a significant impact on energy resources.

6. Consistency with California Code Title 24, Part 11, CALGreen

CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that were published on July 1, 2022, and became effective on January 1, 2023. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. Thus, the Project would not conflict with the provisions of CALGreen.

7. Consistency with AB 1493

AB 1493 is not applicable to the Project as it is a Statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

8. Consistency with Renewable Portfolio Standard (RPS)

California's RPS is not applicable to the Project as it is a Statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

9. Consistency with Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)

The proposed Project would use energy from SCE, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350 and SB 100. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new residential and educational developments and would include several measures designed to reduce energy consumption in accordance with Title 24.

Conclusion

As indicated above, the Project would not conflict with any of the state or local plans. As such, impacts would be less than significant.

4.6.5 Cumulative Impact Analysis

As indicated under the analysis of Threshold a., there are no components of the proposed Project that would result in the wasteful, inefficient, or unnecessary consumption of energy resources. Although it is possible other cumulative developments could result in the wasteful, inefficient, or unnecessary consumption of energy resources, the Project's projected energy demand during operations would be less-than-cumulatively considerable with mandatory compliance with applicable regulations.

As indicated under the analysis of Threshold b., the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As such, the Project has no potential to result in cumulatively-considerable impacts due to a conflict with or obstruction of such plans.

4.6.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would, therefore, not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California. As such, Project impacts due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant requiring no mitigation.

Threshold b.: Less-than-Significant Impact. Energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other single-family residential projects of similar scale and intensity that are operating in California, as the Project would be subject to current regulatory requirements, such as the 2022 version of Title 24, which was not in effect when most existing residential developments were

constructed. Based on the analysis presented herein, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

4.6.7 County Regulations, Design Requirements, and Mitigation

A. Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within the County of Riverside. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements.

- Renewable Portfolio Standards (SB 100): Increases California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

- CCR Title 13, Motor Vehicles, Section 2449(d)(3): *Idling*. Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.

B. Mitigation

Project impacts due to energy consumption would be less than significant; therefore, mitigation is not required.

4.7 GEOLOGY AND SOILS

This Subsection assesses the existing surface and subsurface geologic conditions and features of the Project site and determines the potential for impacts associated with these features. The analysis in this Subsection is based, in part, on information from the report titled, "Geotechnical Investigation Report Proposed Highland Grove IV Lake Mathews Area, Riverside County, California" (herein, "Geotechnical Evaluation"), prepared by Leighton and Associates, Inc. (herein, "Leighton"), dated August 8, 2024, and included as *Technical Appendix F* to this EIR (Leighton, 2024). Refer to Section 7.0*, References*, for a complete list of these and other reference sources.

4.7.1 EXISTING CONDITIONS

A. Regional Geology

The Project site is located within the Peninsular Ranges, a prominent physiographic province forming much of southwestern California. This region is characterized by relatively steep, elongated northwest trending mountain ranges and valleys. More specifically, the Project site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline bedrock. The Perris Block, approximately 20 miles by 50 miles in extent, is bounded by the San Jacinto Fault Zone to the northeast, the Elsinore Fault Zone to the southwest, the Cucamonga Fault Zone to the northwest, and the Temecula Basin to the southeast. The southeast boundary of the Perris block is poorly defined. The Perris Block has had a complex tectonic history, apparently experiencing relative vertical land movements of several thousand feet in response to movement along the Elsinore and San Jacinto Fault Zones. Sedimentary and volcanic deposits locally mantle the crystalline bedrock. Alluvial and colluvial deposits fill the valley areas. Geologic deposits underlying the Project site include Quaternary alluvium within the low-lying drainage areas of the site and Cretaceous-age granitic bedrock exposed on the hillsides and underlying the alluvium. (Leighton, 2024, p. 5)

B. Local Geology and Subsurface Soil Conditions

The geologic units encountered at the Project site are described below in order of increasing age and further described on the logs of borings in *Technical Appendix F*. (Leighton, 2024, pp. 5-6)

- Artificial Fill. Artificial fill was observed as existing fill embankments supporting the unpaved access roads that traverse the site, as well as the berms associated with the water storage pond. Some minor undocumented fill exists associated with some end dump piles and previous grading associated with past agricultural activities and a home site.

- Topsoil/Residual Soil. Topsoil/residual soils were observed in the majority of the explorations overlying the bedrock and appear to be derived from in-place weathering of the bedrock below. As encountered in the explorations on-site, these materials are generally composed of silty sand, and clayey sand with varying amounts of gravel. The topsoil/residual soils are anticipated possess very low to low expansive potential (EI<51) and have a slight collapse potential.

- Alluvium. Shallow alluvial soils should be expected in natural drainages crossing the site. These alluvial deposits are generally comprised of silty to clayey sand and sandy silt with varying amounts of gravel. The alluvial soils are anticipated possess very low to low expansive potential (EI<51) and have a slight collapse potential and not expected to exceed 10 feet in depth.

- Granitic Bedrock. Granitic bedrock is observed at ground surface (outcrops) along the elevated portions of the Project site and was encountered by Leighton in all of the test pits. The bedrock consists of highly to moderately weathered gabbro and granodiorite within the depth explored. Due to the foliated and relatively dense crystalline nature of the near-surface granitic bedrock, very heavy ripping or localized blasting may be required in areas of deep excavation and/or areas underlain by shallow rock. Fill generated for granitic rock excavation is expected to have a "Very Low" expansion potential (EI<21). Highly weathered portions of the bedrock may have a "low" expansion potential (EI<51).

C. Topography

As previously shown on Figure 2-7, the Project site consists of gently rolling hills. Elevations range from approximately 1,180 feet above mean sea level (amsl) near the north central portion of the Project site to 1,348 feet amsl near the southeast corner of the Project site. (Google Earth, 2024)

D. Groundwater

Groundwater was not encountered in any of the exploratory borings or test pits on the Project site. Depth to ground water at the site is anticipated to be greater than 100 feet. Although not anticipated, groundwater may be locally encountered during grading or future development. It should be noted that local perched water conditions may occur and may fluctuate seasonally, depending on rainfall conditions. No standing or surface water was observed on the Project site during the field subsurface explorations, aside from the existing drainages on site. (Leighton, 2024, p. 7)

E. Faulting and Seismicity

1. Faulting

No evidence of active or potentially active faults are known nor observed on-site or trending to the Project site. The closest active fault is the Temecula Segment of the Elsinore Fault Zone. The Project site is not included within an Earthquake Fault Zone as created by the Alquist-Priolo Earthquake Fault Zoning Act. The nearest zoned active faults are the Glen Ivy Segment of the Elsinore Fault Zone, located approximately 8.3 miles (13.3 km) southwest of the Project site and the Chino- Central Avenue Segment of the Elsinore Fault Zone, located approximately 9.0 miles (14.5 km) northwest of the Project site. The Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone or County of Riverside Fault Zone. (Leighton, 2024, p. 7)

2. Seismicity

As is common for virtually all of Southern California, strong ground shaking can be expected at the site during moderate to severe earthquakes in this general region. Intensity of ground shaking at a given location depends

primarily upon earthquake magnitude, site distance from the source, and site response (soil type) characteristics. The seismic coefficients were calculated utilizing an interactive program on current United States Geological Survey (USGS) website using ASCE 7-16 procedures, as well as USGS Unified Hazard Maps. Based on field explorations conducted by Leighton, the Project site will be underlain by relatively shallow dense fill and granitic bedrock. As such, the site is classified as a Class C site. (Leighton, 2024, pp. 7-8)

3. Liquefaction or Seismically-Induced Settlement

The potential for liquefaction or dynamic settlement due to an earthquake event to affect structures at the Project site is considered very low. It is estimated that the total settlement to be less than ½ inch and differential settlement to be ¼ inch in 40 feet horizontal distance. (Leighton, 2024, p. 8)

F. Expansive Soils

Limited laboratory testing indicates that near surface soils generally possess very low to low expansion potential (0≤EI≤51). Any silty to clay-rich expansive soil may be encountered locally within the alluvial or highly weathered bedrock portions of the Project site. (Leighton, 2024, p. 8)

G. Corrosion

Limited laboratory tests were conducted for corrosion potential (soluble sulfate, chloride, pH, and minimum resistivity) of on-site soils. Excessive sulfate or chloride in either the soil or native water may result in an adverse reaction between the cement in concrete and the soil. Laboratory tests indicate a negligible concentration of soluble sulfate and chloride in onsite soils for representative samples. Electrical resistivity testing indicates onsite soils may have a severe corrosion potential for buried metal. (Leighton, 2024, p. 9)

H. Landslide/Debris Flow and Rock Fall Hazard

No evidence of on-site landslides/debris flow was observed during the field exploration or in the review of California Geologic Survey landslide inventory maps. However, the potential for rockfall due to either erosion or seismic ground shaking is considered possible in areas where boulder outcrops are present. (Leighton, 2024, p. 9)

I. Rippability

Based on previous studies, Leighton's review of the geotechnical exploration and the seismic refraction survey conducted previously for the site, it is anticipated that the bedrock in most of the planned excavations deeper than about 10 feet will be considered marginally to non-rippable. The topsoil and upper 5 to 10 feet of bedrock are generally considered rippable with conventional heavy earth moving equipment in good operating conditions (Caterpillar D9L or D10 with single shank ripper and rock teeth). (Leighton, 2024, p. 6)

4.7.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations governing issues related to geology and soils.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2024b)

B. State Regulations

1. Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. (CA Legislative Info, n.d.)

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). (CA Legislative Info, n.d.)

2. Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. (CDC, n.d.)

Staff geologists in the Seismic Hazards Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake–induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. (CDC, n.d.)

The SHMA requires site-specific geotechnical investigations be conducted within the ZORI to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CDC, n.d.)

3. Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. (CA Legislative Info, n.d.)

The law 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. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers. (CA Legislative Info, n.d.)

4. Essential Services Buildings Seismic Safety Act

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "…designed and constructed to minimize fire hazards and to resist…the forces generated by

earthquakes, gravity, and winds." This enabling legislation can be found in the California Health and Safety Code, Chapter 2, § 16000 through 16022. In addition, the California Building Code defines how the intent of the act is to be implemented in Title 24, Part 1 of the California Building Standards Administrative Code, Chapter 4, Articles 1 through 3. (CAB, n.d.)

5. California Building Standards Code (Title 24)

California Code of Regulations (CCR) Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC). (BSC, 2022)

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the State of California. Cities and counties are required by state law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (BSC, 2022)

6. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 *et seq*.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014) The Project site is located in the Santa Ana River Watershed, which is within the purview of the Santa Ana Regional Water Quality Control Board (RWQCB). The Santa Ana River Basin Plan ("Basin Plan") is the governing water quality plan for the region.

7. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (Westlaw, n.d.)

8. California Public Resources Code

Public Resources Code § 5097.5 states that "A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands." (FindLaw, 2023a)

Public Resources Code § 30244 states that, "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required." (FindLaw, 2023d)

C. Local Regulations

1. Riverside County Ordinance No. 457 – Riverside County Building and Fire Codes

Every three years, Riverside County's Building and Fire Codes are adapted from the California Building Standards Code (CCR Title 24), which includes both building and fire codes. These codes establish site-

specific investigation requirements, construction standards and inspection procedures to ensure that development authorized by the County of Riverside does not pose a threat to the health, safety, or welfare of the public. The California Building Standards Code contains minimum baseline standards to guard against unsafe development. This ordinance also adopts, in some cases with modification to a stricter standard, a number of California State's Title 24 codes (fire, building, plumbing, electrical, etc.). The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing these codes. (Riverside County, 2015a, p. 4.12-25)

2. Riverside County Ordinance No. 547 - Implementation of the Alquist-Priolo Earthquake Fault Zoning Act

This ordinance establishes the policies and procedures used by the County of Riverside to implement the A-P Act. Among other things, it requires all projects proposed within an "earthquake fault zone," as shown on the maps prepared by the State Geologist to comply with the provisions of the A-P Act. It establishes regulations for construction, including for grading, slopes and compaction, erosion control, retaining wall design and earthquake fault zone setbacks. (Riverside County, 2015a, p. 4.12-25)

3. Riverside County Ordinance 484 – Control of Blowing Dust

This ordinance establishes requirements for the control of blowing sand within county-designated "Agricultural Dust Control Areas." It defines activities that may contribute to wind erosion, identifies restrictions on activities within these areas, establishes penalties for violation of the ordinance and identifies procedures necessary to obtain a valid permit. (Riverside County, 2015a, p. 4.12-25)

4.7.3 Basis for Determining Significance

Section VII of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to geological conditions, and includes the following threshold questions to evaluate the Project's impacts resulting from geologic or soil conditions (OPR, 2018a):

- *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? Refer to Division of Mines and Geology Special Publication 42.*
  - *Strong seismic ground shaking?*
  - *Seismic-related ground failure, including liquefaction?*
  - *Landslides?*
- *Would the project result in substantial soil erosion or the loss of topsoil?*
- *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?*

- *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 or property?*
- *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*
- *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, as modified based on the 2018 updates to Section VII of Appendix G to the State CEQA Guidelines (listed above), and indicate significant impacts would occur if the Project or any Project-related component would:

a. *Be subject to 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;*
b. *Be subject to seismic-related ground failure, including liquefaction;*
c. *Be subject to strong seismic ground shaking;*
d. *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, collapse, or rockfall hazards;*
e. *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 ground subsidence;*
f. *Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard;*
g. *Change topography or ground surface relief features;*
h. *Create cut or fill slopes greater than 2:1 or higher than 10 feet;*
i. *Result in grading that affects or negates subsurface sewage disposal systems;*
j. *Result in substantial soil erosion or the loss of topsoil;*
k. *Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial direct or indirect risks to life or property;*
l. *Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;*
m. *Be impacted by or result in an increase in wind erosion and blow sand, either on or off site.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified by the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on geology and soils. It should be noted that the Project's potential impacts to paleontological resources are addressed separately in Subsection 4.14, *Paleontological Resources*, of this EIR.

4.7.4 IMPACT ANALYSIS

Threshold a.: ***Would the Project be subject to 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?***

Threshold c.: ***Would the Project be subject to strong seismic ground shaking?***

The Project is located in a seismically-active region; however, no active or potentially active fault is known to exist at the Project site nor is the site situated within an Alquist-Priolo Earthquake Fault Zone. No faults are identified on geologic maps readily available and reviewed as part of the Project's Geotechnical Evaluation (*Technical Appendix F* to this EIR). The nearest known active fault zones are the Glen Ivy Segment of the Elsinore Fault Zone, located approximately 8.3 miles (13.3 km) southwest of the site and the Chino-Central Avenue Segment of the Elsinore Fault Zone, located approximately 9.0 miles (14.5 km) northwest of the site Therefore, impacts due to rupture of a known earthquake would be less-than-significant. (Leighton, 2024, p. 7)

As previously stated, the Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. The risk is not considered substantially different than that of other similar properties in the southern California area. The Project would be required to construct all proposed structures in accordance with the California Building Standards Code (CBSC, Title 24) and the Riverside County Building Code. The CBSC and Riverside County Building Code have been designed to preclude significant adverse effects associated with strong seismic ground shaking. Additionally, the Project's Geotechnical Evaluation (*Technical Appendix F*) includes site-specific recommendations to attenuate seismic-related hazards.

However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). The Project's Geotechnical Evaluation includes recommendations that would reduce seismic risks to an "acceptable level" as defined by the California Code of Regulations. Accordingly, prior to mitigation implementing the Geotechnical Evaluation recommendations, the proposed Project has the potential to expose people or structures to substantial adverse effects, including loss, injury, or death, as a result of strong seismic ground shaking. This is evaluated as a significant impact for which mitigation would be required.

Threshold b.: ***Would the Project be subject to seismic-related ground failure, including liquefaction?***

Seismically-induced liquefaction is a phenomenon in which cyclic stresses, produced by earthquake-induced ground motion, create excess pore pressures in soils. The soils may thereby acquire a high degree of mobility, and lead to lateral movement, sliding, sand boils, consolidation and settlement of loose sediments, and other damaging deformations. This phenomenon occurs only below the water table; but after liquefaction has developed, it can propagate upward into overlying, non-saturated soil as excess pore water dissipates. Typically, liquefaction has a relatively low potential at depths greater than 45 feet and is virtually unknown below a depth of 60 feet.

The condition of liquefaction has two principal effects. One is the consolidation of loose sediments with resultant settlement of the ground surface. The other effect is lateral sliding. Significant permanent lateral movement generally occurs only when there is significant differential loading, such as fill on natural ground slopes. Liquefaction susceptibility is related to numerous factors and the following conditions should be present for liquefaction to occur: 1) sediments must be relatively young in age and not have developed a large amount of cementation; 2) sediments generally consist of medium to fine grained, relatively cohesionless sands; 3) the sediments must have low relative density; 4) free groundwater must be present in the sediment; and 5) the site must experience a seismic event of a sufficient duration and magnitude, to induce straining of soil particles.

Based on site observations and subsurface investigations conducted by Leighton, the potential for liquefaction or dynamic settlement at the Project site due to an earthquake event is very low. It is estimated that the total settlement would be less than ½ inch and differential settlement would be ¼ inch in 40 feet horizontal distance after the recommended remedial grading is completed. However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). Accordingly, prior to mitigation implementing the Geotechnical Evaluation recommendations, the proposed Project has the potential to be subject to seismic-related ground failure, including liquefaction. This is evaluated as a significant impact for which mitigation would be required. (Leighton, 2024, p. 8)

Threshold d.: ***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, collapse, or rockfall hazards?***

❑ Landslide Hazards

No evidence of onsite landslides/debris flow was observed during Leighton's field investigation or review of California Geologic Survey landslide inventory maps. Thus, the potential for landslides is considered negligible and no impact would occur. (Leighton, 2024, p. 9)

❑ Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the low probability of liquefaction to occur on site, the potential for lateral spreading also is considered low. Nonetheless, impacts could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

Collapse Hazards

Static settlement of the site would be induced by subjecting the existing grades to design grades (adding fill) and by the proposed structural building loads. Impacts due to collapse hazards could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the Project's Geotechnical Update (*Technical Appendix F*). This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

Rockfall Hazards

A rockfall is a fragment of rock, or block of rocks, that detaches from a vertical to sub-vertical cliff or bluff in a downward motion. The potential for rockfall due to either erosion or seismic ground shaking is considered possible in areas where boulder outcrops are present. Based on Leighton's review of the Project's TTM 38927, it is anticipated that exposed boulders would remain on the natural slope above the planned slope. The Project's Geotechnical Evaluation (*Technical Appendix F*) includes specific recommendations to address rockfall hazards. As such, a significant impact due to rockfall hazards could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). (Leighton, 2024, p. 9)

Threshold e.: ***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 ground subsidence?***

According to mapping information available from Riverside County Geographic Information Systems (GIS), the Project site is not "susceptible" to ground subsidence. The nearest lands subject to subsidence hazards occurs approximately 0.4-mile southwest of the Project site. (RCIT, n.d.) Accordingly, the Project would not 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 ground subsidence, and no impact would occur.

Threshold f.: ***Would the Project be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?***

There are no volcanoes in the Project region; thus, no impacts due to volcanic hazards would occur.

A seiche is an underwater wave that oscillates through a body of water which may be triggered by earthquakes or landslides. In general, seiches are small (on the order of a few inches) and are present in larger lakes as a result of the depth, temperature, and contours of the body of water. The Project site is located approximately 0.6-mile north of Lake Mathews, and is situated at a lower elevation than the dam. However, any seiches that may occur in association with Lake Mathews would not result in inundation of the Project site, as any flows generated by seiches that would reach the Project site would be conveyed through the existing natural drainages on site, such that proposed residential structures would not be subject to inundation during such events. Thus, impacts due to seiche hazards would be less than significant.

Although the Project site and surrounding areas consist of undulating topography, due to the relatively shallow depth to bedrock that occurs across the Project site, the risk of mudflow associated with these hill forms would be low. As such, impacts due to mudflow hazards would be less than significant.

Threshold g.: ***Would the Project change topography or ground surface relief features?***

As discussed in EIR Section 3.0, the Project site would be graded in a manner that largely approximates the site's existing topographic conditions. The grading generally would follow the existing drainage patterns and the grading design boundaries for a nearly balanced rough graded condition with raw cut and fill quantities of approximately 605,038 cubic yards (cy). It is anticipated that the Project's grading concept would result in balanced earthwork on-site without no need to export excess materials or to import materials from off-site areas. Thus, the Project would not result in a substantial change in topography or ground surface relief features, and impacts would be less-than-significant.

Threshold h.: ***Would the Project create cut or fill slopes greater than 2:1 or higher than 10 feet?***

As discussed in EIR Section 3.0, all slopes proposed as part of the Project would have a maximum gradient of 2:1 (horizontal:vertical). However, the Project would require slopes measuring up to approximately 35 feet in height. Although the slopes would exceed a height of 10 feet, site-specific recommendations are provided in the Project's Geotechnical Update *(Technical Appendix F)* which would ensure that proposed slopes are grossly stable. However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Update. Accordingly, this is evaluated as a potentially significant direct impact of the Project for which mitigation would be required.

Threshold i.: ***Would the Project result in grading that affects or negates subsurface sewage disposal systems?***

Field visits conducted by McAlister as part of the Project's Phase I Environmental Site Assessment ("Phase I ESA"; EIR *Technical Appendix H*) did not identify the presence of any septic systems, and there are no existing sewer lines within the Project site (McAlister, 2024, p. 16). As such, no impact associated with subsurface sewage disposal systems would occur.

Threshold l.: ***Would the Project have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

Sewer service to the proposed Project would be provided by the Western Municipal Water District (WMWD), and no septic tanks or alternative waste disposals are proposed as part of the Project. As such, no impact associated with septic tanks or alternative waste water disposal systems would occur.

Threshold j.:	***Would the Project result in substantial soil erosion or the loss of topsoil?***
Threshold m.:	***Would the Project be impacted by or result in an increase in wind erosion and blow sand, either on or off site?***

Implementation of the Project has the potential to result in soil erosion. The analysis below summarizes the likelihood of the Project to result in substantial soil erosion during temporary construction activities and long-term operation.

❑ Construction-Related Impacts

Proposed grading and construction activities at the Project site would expose underlying soils and disturb surficial soils. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a NPDES permit for construction activities, including proposed grading. The NPDES permit is required for all projects that include construction activities such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. The County's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires the Project Applicant to prepare and submit to the County for approval a Project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify a combination of erosion control and sediment control measure (i.e., Best Management Practices [BMPs]) to reduce or eliminate sediment discharge to surface water from storm water and non-stormwater source discharges during construction.

In addition, proposed construction activities would be required to comply with South Coast Air Quality Management District (SCAQMD) Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. Rule 403 requires that certain construction practices be following that limit dust and dirt from leaving the construction site. For example, no dust is allowed to be tracked out of the site by more than 25 feet. In addition, proposed construction activities would be required to comply with applicable County ordinances (e.g., Ordinance Nos. 457 and 460) to protect and enhance the water quality of the County, which requires the Project Applicant to prepare an erosion control plan to be used during the rainy season. With mandatory compliance to the requirements noted in the Project's SWPPP, as well as mandatory compliance to applicable regulatory requirements including but not limited to SCAQMD Rule 403 and Riverside County Ordinance Nos. 457 and 460, the potential for water and/or wind erosion impacts during Project construction would be reduced to less-than-significant levels.

Long-Term Operational Impacts

Following construction, wind and water erosion on the Project site would be minimized, as the disturbed areas would be landscaped or covered with impervious surfaces, and drainage would be controlled through a storm drain system. As discussed in detail in EIR Subsection 4.10, *Hydrology and Water Quality,* the Project would reduce the rate of runoff leaving the site as compared to existing conditions. As also discussed in Subsection 4.10, construction of the proposed bioretention basins on-site would ensure that post-development rates and amounts of runoff are reduced as compared to those occurring under existing conditions. Accordingly, implementation of the Project would not increase the risk of siltation or erosion in stormwater discharged from

the Project site. In addition, and pursuant to Riverside County Ordinance No. 475 (Building Codes & Fees Ordinance), Water Quality Management Plans (WQMPs) would be required for future implementing developments within the Project site, which would identify post-construction measures to ensure on-going protection against erosion. Compliance with the WQMP would be required as a condition of approval for future implementing developments, and long-term maintenance of on-site water quality features also would be required. Based on the foregoing, implementation of the Project would not significantly increase the risk of long-term wind or water erosion on- or off-site, and impacts would be less-than-significant.

Threshold k.: ***Would the Project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial risks to life or property?***

Based on the results of limited laboratory testing by Leighton, the near surface soils are considered to have very low to low expansion potential ($0 \leq EI \leq 51$) (Leighton, 2024, p. 8). However, impacts due to expansive soils could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the Geotechnical Evaluation prepared for the Project and/or the recommendations of future geotechnical studies that will be required in association with grading and building permits. This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

4.7.5 Cumulative Impact Analysis

With exception of erosion hazards, potential geologic and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, thresholds including fault rupture, seismic ground shaking, liquefaction, landslides, expansive soils, and other geologic hazards would involve effects to (and not from) the proposed Project, and are specific to on-site conditions. Accordingly, addressing these potential hazards for the proposed development would involve using measures to conform to existing requirements, and/or site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. Cumulatively-considerable impacts would be less-than-significant.

As discussed under Thresholds j. and m., during both near-term construction and long-term operation, measures would be incorporated into the Project's design to ensure that significant erosion hazards do not occur. Other developments within the cumulative study area would be required to comply with similar requirements, such as the need to obtain an NPDES permit and mandatory compliance with the resulting SWPPPs. All projects in the cumulative study area also would be required to demonstrate that measures have been incorporated to ensure that development does not result in substantial increases in the amount or rate of runoff under long-term operating conditions, which could in turn increase soil erosion. Further, all projects in the cumulative study area also would be required to comply with Riverside County Ordinance Nos. 457 and 460 (or similar ordinances from other local jurisdictions), as well as SCAQMD Rule 403, which would preclude water- and wind-related erosion hazards during construction. Therefore, because the Project would result in less-than-significant erosion impacts, and because other projects within the cumulative study area

would be subject to similar requirements to control erosion hazards during construction and long-term operation, cumulatively-considerable impacts associated with wind and water erosion hazards are evaluated as less-than-significant.

4.7.6 Significance of Impacts Before Mitigation

Thresholds a. & c.: Significant Direct Impact. The potential for surface fault rupture to occur at the site is considered low. Impacts due to rupture of a known earthquake would therefore be less than significant. However, the Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. A significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). Therefore, impacts would be potentially significant and mitigation is required to ensure compliance with the site-specific recommendations of the Project's Geotechnical Evaluation.

Threshold b.: Significant Direct Impact. Based on site observations and subsurface investigations conducted by Leighton, the potential for liquefaction or dynamic settlement at the Project site due to an earthquake event is very low. It is estimated that the total settlement would be less than ½ inch and differential settlement would be ¼ inch in 40 feet horizontal distance after the recommended remedial grading is completed. However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation (*Technical Appendix F*). Accordingly, prior to mitigation implementing the Geotechnical Evaluation recommendations, the proposed Project has the potential to be subject to seismic-related ground failure, including liquefaction. This is evaluated as a significant impact for which mitigation would be required.

Threshold d.: Significant Direct Impact. The Project site is not susceptible to landslide hazards and impacts would be less than significant. Impacts due to lateral spreading, collapse hazards, and rockfall hazards could occur if proposed grading and development is not conducted in accordance with the site-specific recommendations of the Project's Geotechnical Update (*Technical Appendix F*). This is evaluated as a potentially significant direct impact of the proposed Project for which mitigation would be required.

Threshold e.: No Impact. According to mapping information available from Riverside County GIS, the Project site is not "susceptible" to ground subsidence. The nearest lands subject to subsidence hazards occurs approximately 0.4-mile southwest of the Project site. Accordingly, the Project would not 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 ground subsidence, and no impact would occur.

Threshold f.: Less-than-Significant Impact. The Project site is not subject to volcanic hazards. The Project site is located approximately 0.6-mile north of Lake Mathews, and is situated at a lower elevation than the dam. However, any seiches that may occur in association with Lake Mathews would not result in inundation of the Project site, as any flows generated by seiches that would reach the Project site would be conveyed through the existing natural drainages on site, such that proposed residential structures would not be subject to inundation during such events. Thus, impacts due to seiche hazards would be less than significant. Although

the Project site and surrounding areas exhibit undulating topography, due to the relatively shallow depth to bedrock that occurs across the Project site, the risk of mudflow associated with these hill forms would be low. As such, impacts due to mudflow hazards would be less than significant.

Threshold g.: Less-than-Significant-Impact. The Project site would be graded in a manner that largely approximates the site's existing topographic conditions. The Project would require a total of approximately 605,038 cy of cut and fill. Earthwork activities are expected to balance on site and no import or export of soils would be required. Thus, the Project would not result in a substantial change in topography or ground surface relief features, and impacts would be less than significant.

Threshold h.: Significant Direct Impact. All proposed slopes on site would be constructed at a gradient of 2:1. Although proposed manufactured slopes would measure up to 35 feet in in height, site-specific recommendations are provided in the Project's Geotechnical Evaluation (*Technical Appendix F*) which would minimize impacts. However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's Geotechnical Evaluation. Accordingly, prior to mitigation implementing the Geotechnical Evaluation recommendations, the Project has the potential to cause significant impacts as a result of creating slopes higher than 10 feet. This is evaluated as a potentially significant impact for which mitigation would be required.

Threshold i.: No Impact. Field visits conducted by McAlister as part of the Project's Phase I ESA did not identify the presence of any septic systems, and there are no existing sewer lines within the Project site. As such, no impact associated with subsurface sewage disposal systems would occur.

Threshold l.: No Impact. Sewer service to the proposed Project would be provided by the WMWD, and no septic tanks or alternative wastewater disposal systems are proposed as part of the Project. Accordingly, no impact would occur.

Thresholds j. and m.: Less-than-Significant Impacts. The Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain an NPDES permit for construction activities and adhere to a Stormwater Pollution Prevention Plan (SWPPP) as well as SCAQMD Rule 403 and Riverside County Ordinance Nos. 457 and 460. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Furthermore, the Project is required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term. Accordingly, impacts would be less-than-significant.

Threshold k.: Significant Direct Impact. Impacts due to expansive soils could occur if proposed grading activities are not conducted in accordance with the site-specific recommendations of the of the Project's Geotechnical Evaluation (*Technical Appendix F*). This is evaluated as a potentially significant impact for which mitigation would be required.

4.7.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project is required to comply with the provisions of County Ordinance Nos. 457 and 460. Ordinance No. 457 requires that all projects comply with California Building Codes and the International Building Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public, and includes requirements related to erosion. Ordinance No. 460 sets forth soil erosion control requirements and requires preparation and implementation of a wind erosion control plan.

- The Project is required to comply with the provisions of SCAQMD Rule 403, by addressing blowing dust from the Project's construction activities.

- The Project is required to comply with the provisions of the County's National Pollution Discharge Elimination System (NPDES) permit, and the future-required Storm Water Pollution Prevention Plan (SWPPP). Compliance with the NPDES permit and the future-required SWPPPs would ensure an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) are implemented to reduce or eliminate sediment discharge to surface water from stormwater and non-stormwater discharges.

Mitigation

MM 4.7-1 Prior to issuance of grading or building permits, the Riverside County Building and Safety Department shall verify that all of the recommendations given in the Project's November 17, 2023 "Geotechnical Due Diligence Evaluation, Proposed Highland Grove IV Lake Matthews Area, Riverside County, California," prepared by Leighton and Associates, Inc., and included as *Technical Appendix F* to the Project's EIR, are incorporated into the construction and grading plans. Alternatively, the Project shall comply with the findings and recommendations of any geotechnical studies that may be required in association with future grading and/or building permits.

4.7.8 Significance of Impacts After Mitigation

Thresholds a. & c.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address seismic-related hazards in conformance with the CBSC and the Riverside County Building Code. With implementation of the required mitigation, impacts due to strong seismic ground shaking would be reduced to less-than-significant levels.

Threshold b.: Significant Direct Impact. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address liquefaction and dynamic settlement hazards, including measures related to remedial grading. With implementation of the required mitigation, impacts due to strong seismic ground shaking would be reduced to less-than-significant levels.

Threshold d.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address the potential for lateral spreading and collapse hazards. With implementation of the required mitigation, impacts due to lateral spreading and collapse would be reduced to less-than-significant levels.

Threshold h.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to ensure that any slopes higher than 10 feet would be grossly stable. With implementation of the required mitigation, impacts associated with unstable slopes would be reduced to less-than-significant levels.

Threshold k.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.7-1 would ensure that appropriate measures are incorporated into future grading and/or building permit applications to address expansive soils on site. With implementation of the required mitigation, impacts associated with expansive soils would be reduced to less-than-significant levels.

4.8 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection primarily is based in part on a Greenhouse Gas Analysis (GHGA) prepared by Urban Crossroads, Inc., which is entitled, "Highland Grove Vistas 4 TTM No. 38927 Greenhouse Gas Analysis," is dated December 11, 2025, and is included as *Technical Appendix G* to this EIR (Urban Crossroads, 2025c). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.8.1 EXISTING CONDITIONS

A. Introduction to Global Climate Change

Global Climate Chane (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years. (Urban Crossroads, 2025c, p. 8)

An individual project, like the proposed Project evaluated in this EIR, cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. (Urban Crossroads, 2025c, p. 8)

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. (Urban Crossroads, 2025c, p. 8)

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature. (Urban Crossroads, 2025c, p. 8)

B. Greenhouse Gases

1. Greenhouse Gases and Health Effects

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties as discussed below. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GCC from development

projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases. (Urban Crossroads, 2025c, pp. 8-9)

❑ Water

Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration primarily are considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. (Urban Crossroads, 2025c, Table 2-1)

As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up). (Urban Crossroads, 2025c, Table 2-1)

The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves. (Urban Crossroads, 2025c, Table 2-1)

There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor. (Urban Crossroads, 2025c, Table 2-1)

❑ Carbon Dioxide (CO_2)

Carbon Dioxide (CO_2) is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. Prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by the year 2100 as a direct result of anthropogenic sources. (Urban Crossroads, 2025c, Table 2-1)

CO_2 is emitted from natural and man-made sources. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing.

Anthropogenic sources include the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks. (Urban Crossroads, 2025c, Table 2-1)

Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH), high concentrations of CO_2 can result in health effects such as headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. While current concentrations of CO_2 in the Earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour work week and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period. (Urban Crossroads, 2025c, Table 2-1)

❑ Methane (CH_4)

Methane (CH_4) is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. CH_4 has both natural and anthropogenic sources. It is released as part of animal digestion and the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH_4. Other anthropocentric sources include fossil-fuel combustion and biomass burning. (Urban Crossroads, 2025c, Table 2-1)

CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of CH_4 can cause asphyxiation, loss of consciousness, headache, dizziness, nausea, vomiting, weakness, loss of coordination, and an increased breathing rate. (Urban Crossroads, 2025c, Table 2-1)

❑ Nitrous Oxide (N_2O)

Nitrous oxide (N_2O), also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant (i.e., in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and race cars. N_2O can be transported into the stratosphere, be deposited on Earth's surface, or be converted to other compounds by chemical reaction. (Urban Crossroads, 2025c, Table 2-1)

N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage). (Urban Crossroads, 2025c, Table 2-1)

❑ Chlorofluorocarbons (CFCs)

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at Earth's surface). CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of CFCs will remain in the atmosphere for over 100 years. (Urban Crossroads, 2025c, Table 2-1)

In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation. (Urban Crossroads, 2025c, Table 2-1)

❑ Hydrofluorocarbons (HFCs)

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential ("GWP," described below). The HFCs with the largest measured atmospheric abundances are (in order), fluoroform (CHF_3), 1,1,1,2-tetrafluoroethane (CH_2FCF), and 1,1-difluoroethane (CH_3CF_2). Prior to 1990, the only significant emissions were of CHF_3. CH_2FCF emissions are increasing due to its use as a refrigerant. HFCs are man-made for applications such as automobile air conditioners and refrigerants. No health effects are known to result from exposure to HFCs. (Urban Crossroads, 2025c, Table 2-1)

❑ Perfluorocarbons (PFCs)

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above Earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The United States Environmental Protection Agency (EPA) estimates that concentrations of CF_4 in the atmosphere are over 70 parts per trillion (ppt). The two main sources of PFCs are primary aluminum production and semiconductor manufacture. No health effects are known to result from exposure to PFCs. (Urban Crossroads, 2025c, Table 2-1)

❑ Sulfur Hexafluoride (SF_6)

Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The EPA indicates that concentrations in the 1990s were about 4 ppt. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. (Urban Crossroads, 2025c, Table 2-1)

❑ **Nitrogen Trifluoride (NF_3)**

Nitrogen Trifluoride (NF_3) is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200. NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers. Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis. (Urban Crossroads, 2025c, Table 2-1)

2. Potential Global Warming Effects

The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects, such as the Project, are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. Figure 4.8-1, *Summary of Project Global Warming Impact 2070-2099 (As Compared with 1961-1990)*, presents the potential impacts of global warming. (Urban Crossroads, 2025c, p. 14)

3. Global Warming Potential (GWP)

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP. (Urban Crossroads, 2025c, p. 15)

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. IPCC Assessment Reports cover the full scientific, technical and socio-economic assessment of climate change. The atmospheric lifetime and GWP of selected GHGs are summarized in

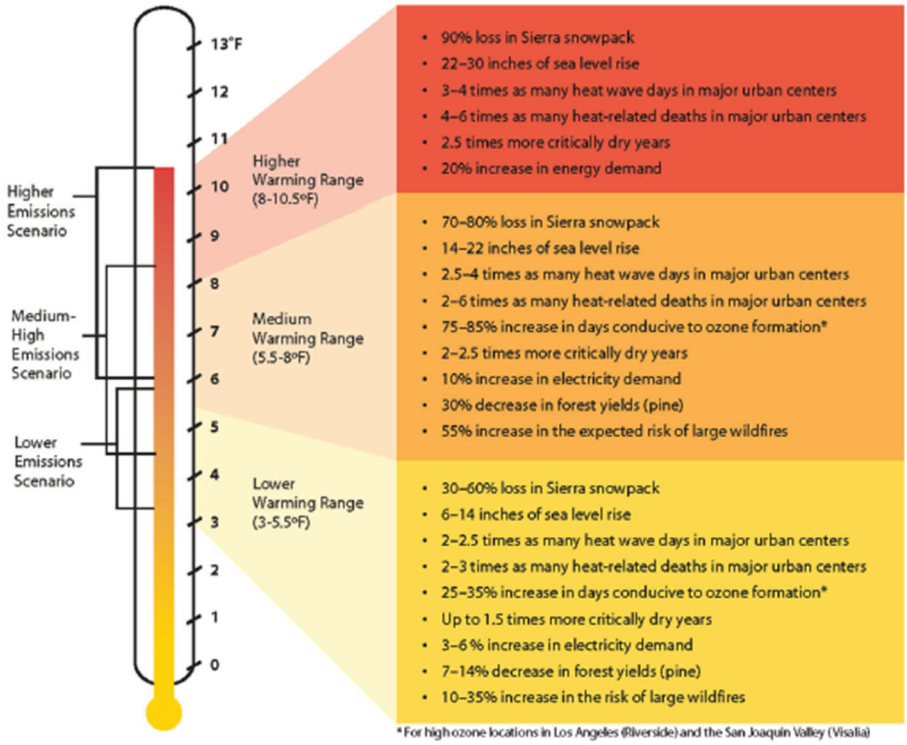
Table 4.8-1, *GWP and Atmospheric Lifetime of Select GHGs*. As shown, the GWP for the 2nd Assessment Report range from 1 for CO_2 to 23,900 for SF_6 and GWP for the 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6. (Urban Crossroads, 2025c, p. 15)

C. Greenhouse Gas Inventories

1. Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately28,272,940 gigagram (Gg) CO_2e as summarized on Table 4.8-2, Top GHG Producing Countries and the European Union. (Urban Crossroads, 2025c, p. 15)

Figure 4.8-1 Summary of Project Global Warming Impact 2070-2099 (As Compared with 1961-1990)



(Urban Crossroads, 2025c, Exhibit 2-A)

Table 4.8-1 GWP and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2023
(Urban Crossroads, 2025c, Table 2-2)

2. United States

As noted in Table 4.8-2, the United States, as a single country, was the number two producer of GHG emissions in 2021. (Urban Crossroads, 2025c, p. 16)

Table 4.8-2 Top GHG Producing Countries and the European Union

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	**28,272,940**

(Urban Crossroads, 2025c, Table 2-3)

3. State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States emissions inventory total. The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2023 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2021 GHG emissions period, California emitted an average 381.3 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 381,300 Gg CO_2e (6.01% of the total United States GHG emissions). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average. (Urban Crossroads, 2025c, p. 16)

D. Effects of Climate Change in California

1. Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on Our Changing Climate Assessing the Risks to California by the California Climate Change Center, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced. (Urban Crossroads, 2025c, p. 16)

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90ºF in Los Angeles and 95ºF in Sacramento by 2100. This is a significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat. (Urban Crossroads, 2025c, pp. 16-17)

2. Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. (Urban Crossroads, 2025c, p. 17)

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding. (Urban Crossroads, 2025c, p. 17)

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply. (Urban Crossroads, 2025c, p. 17)

3. Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth. (Urban Crossroads, 2025c, p. 17)

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts. In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates. (Urban Crossroads, 2025c, pp. 17-18)

4. Forest and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation. (Urban Crossroads, 2025c, p. 18)

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC. (Urban Crossroads, 2025c, p. 18)

5. Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches. (Urban Crossroads, 2025c, p. 18)

4.8.2 Applicable Environmental Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to GHG emissions.

A. International Regulations

1. Kyoto Protocol

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities." (UNFCCC, n.d.)

The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. The detailed rules for the implementation of the Protocol were adopted at Conference of the Parties (COP) 7 in Marrakesh, Morocco, in 2001, and are referred to as the "Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012. (UNFCCC, n.d.)

In Doha, Qatar, on December 8, 2012, the "Doha Amendment to the Kyoto Protocol" was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from January 1, 2013 to December 31, 2020;
- A revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and
- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period. (UNFCCC, n.d.)

On December 21, 2012, the amendment was circulated by the Secretary-General of the United Nations, acting in his capacity as Depositary, to all Parties to the Kyoto Protocol in accordance with Articles 20 and 21 of the Protocol. During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first. (UNFCCC, n.d.)

2. The Paris Agreement

The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort. (UNFCCC, n.d.)

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework. (UNFCCC, n.d.)

The Paris Agreement requires all Parties to put forward their best efforts through "nationally determined contributions" (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. (UNFCCC, n.d.)

In 2018, Parties will take stock of the collective efforts in relation to progress towards the goal set in the Paris Agreement and to inform the preparation of NDCs. There will also be a global stock-taking every five years to assess the collective progress towards achieving the purpose of the Agreement and to inform further individual actions by Parties. (UNFCCC, n.d.)

The Paris Agreement entered into force on November 4, 2016, thirty days after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55% of the total global greenhouse gas

emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary. (UNFCCC, n.d.)

B. Federal Regulations

1. Clean Air Act

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under § 202(a) of the Clean Air Act (CAA), opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them. (EPA, 2023a)

Previously the EPA had not regulated GHGs under the CAA because it asserted that the Act did not authorize it to issue mandatory regulations to address GCC and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 [2007]); however, the U.S. Supreme Court held that GHGs are pollutants under the CAA and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress. (EPA, 2023a)

C. State Regulations

1. Title 24 Building Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The latest revisions (2022 Building Energy Efficiency Standards) were adopted and became effective on January 1, 2023. The 2022 Building Energy Efficiency Standards focuses on four key areas in newly constructed homes and businesses: (1) encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units; (2) establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies; (3) expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid; and strengthening ventilation standards to improve indoor air quality. The 2019 Building Energy Efficiency Standards already were seven (7) percent more efficient than the previous (2016) Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous Standards for non-residential construction. The

2016 Building Energy Efficiency Standards also already were 28 percent more efficient for residential construction and five (5) percent more efficient for nonresidential construction than the 2013 Building Energy Efficiency Standards they replaced. (CEC, n.d.)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

2. California Assembly Bill No. 1493 (AB 1493)

On September 24, 2009, CARB adopted amendments to the "Pavley" regulations that reduce greenhouse gas (GHG) emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to harmonize its rules with the federal rules for passenger vehicles. (CARB, n.d.)

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005, and was denied by the EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the CAA requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions." (CARB, n.d.)

CARB's Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, n.d.)

The regulations had been threatened by automaker lawsuits and were stalled by the EPA's delay in reviewing and then initially denying California's waiver request. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. (CARB, n.d.)

The CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of

standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, n.d.)

3. Executive Order S-3-05

Executive Order (EO) S-3-05 establishes GHG emission reduction targets, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts with meeting the targets with the heads of other state agencies. The EO requires the Secretary to report back to the Governor and Legislature biannually on progress toward meeting the GHG targets, GHG impacts to California, Mitigation, and Adaptation Plans. EO S-3-05 requires that by 2010, GHG emissions must be reduced to 2000 levels; by 2020, GHG emissions must be reduced to 1990 levels; and by 2050, GHG emissions must be reduced to 80 percent below 1990 levels. (CA State Library, 2005)

4. California Assembly Bill 32 – Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 required California to reduce its GHG emissions to 1990 levels by 2020, which represented a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario (CARB, 2018). Among other items, AB 32 specifically required that CARB prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020 and update the Scoping Plan every five years.

In December 2008, CARB approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions. In May 2014, CARB approved the First Update to the Scoping Plan (Update), which built upon the initial Scoping Plan with new strategies and recommendations. The Update highlighted California's progress toward meeting the near-term 2020 GHG emission reduction goals, highlighted the latest climate change science and provided direction on how to achieve long-term emission reduction goal described in Executive Order S-3-05. In December 2017, CARB adopted the Second Update to the Scoping Plan, which identified the State's post-2020 reduction strategy. The Second Update reflected the 2030 target of a 40 percent GHG emissions reduction below 1990 levels set by SB 32. The Second Update built upon the Cap- and-Trade Regulation; the Low Carbon Fuel Standard; much cleaner cars, trucks and freight movement; cleaner, renewable energy; and strategies to reduce methane emissions from agricultural and other wastes to reduce GHG emissions. (CARB, 2017)

In December 2022, CARB released the *Final 2022 Scoping Plan Update* (*2022 Scoping Plan*), which identifies the State's strategies to reduce GHG emissions by 85% and achieve carbon neutrality by 2045. The *2022 Scoping Plan* reflects an accelerated target of an 85% reduction in GHG emissions compared to 1990 levels by 2045 (33). This third update relies on key programs in place, including the Cap-and-Trade Regulation and the LCFS, while stressing the need to increase their pace and scale.

In order to meet these targets, the *2022 Scoping Plan* would require contributions from all sectors of the economy and includes an enhanced focus on reducing fossil fuel demand by 94% by 2045 compared to 2022 consumption. Major elements of the *2022 Scoping Plan* framework include:

- Maintaining progress on meeting SB 32 GHG reduction targets of at least 40% below 1990 emissions by 2030.
- Implementation of strategies for reducing California's dependence on petroleum by providing consumers with clean energy options.
- Integrating equity and protecting California's most impacted communities.
- Incorporation of natural and working lands to the state's GHG emissions, as well as their role in achieving carbon neutrality.
- Use of all viable tools to address climate change, including carbon capture and sequestration, as well as direct air capture.
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2022 Scoping Plan also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the previous 2017 Scoping Plan, CARB recommended that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. However, because the state is now pursuing carbon neutrality no later than 2045, CARB now recommends that local governments instead focus on developing locally appropriate, plan-level targets that align with the goal of carbon neutrality rather than focusing on a 2050 target. CARB identifies several "priority areas," including transportation electrification, VMT reduction, and building decarbonization, as these are the GHG reduction opportunities over which local governments have the most authority and the highest GHG reduction potential. (CARB, 2022)

5. California Senate Bill No. 1368 (SB 1368)

In 2006, the State Legislature adopted Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006), which directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed specified emissions criteria. Accordingly, SB 1368 effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand. (CEC, n.d.)

6. Executive Order S-01-07

Executive Order (EO) S-01-07 is effectively known as the Low Carbon Fuel Standard (LCFS). The Executive Order seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10 percent by 2020. The LCFS requires fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO2e grams per unit of fuel energy sold. (CA State Library, 2007)

7. Senate Bill 1078

Senate Bill (SB) 1078 establishes the California Renewables Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20% of their renewable power by December 31, 2017 for the purposes of increasing the diversity, reliability, public health, and environmental benefits of the energy mix. (CA Legislative Info, 2018)

8. Senate Bill 107

SB 107 directed California Public Utilities Commission's Renewable Energy Resources Program to increase the amount of renewable electricity (Renewable Portfolio Standard) generated per year, from 17% to an amount that equals at least 20% of the total electricity sold to retail customers in California per year by December 31, 2010. (CA Legislative Info, 2006)

9. Executive Order S-14-08

On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, revising California's existing Renewable Portfolio Standard (RPS) upward to require all retail sellers of electricity to serve 33% of their load from renewable energy sources by 2020. In order to meet this new goal, a substantial increase in the development of wind, solar, geothermal, and other "RPS eligible" energy projects would be needed. Executive Order S-14-08 sought to accelerate such development by streamlining the siting, permitting, and procurement processes for renewable energy generation facilities. To this end, S-14-08 issued two directives: (1) the existing Renewable Energy Transmission Initiative will identify renewable energy zones that can be developed as such with little environmental impact, and (2) the California Energy Commission (CEC) and the California Department of Fish and Wildlife (CDFW) will collaborate to expedite the review, permitting, and licensing process for proposed RPS-eligible renewable energy projects. (CA State Library, 2008)

10. Senate Bill 97

Senate Bill 97 (SB 97) was enacted in in 2007 to recognize the need to analyze GHGs as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHGs. As part of the administrative rulemaking process, the Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. Of note, the CEQA Guidelines state that a lead agency has discretion to determine whether to use a

quantitative model or methodology, or rely on a qualitative analysis or performance-based standards to evaluate GHGs. (CA Legislative Info, 2007)

CEQA emphasizes that GHG effects are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See CEQA Guidelines § 15130(f)). CEQ Guidelines § 15064.4(b) provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

11. Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, CARB set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB periodically reviews and updates the targets, as needed. (CARB, n.d.)

Each of California's MPOs must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional

GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate "alternative planning strategy" (APS) to meet the targets. (CARB, n.d.)

12. Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which sets a goal to reduce GHG emissions in California to 40 percent below 1990 levels by 2030. The 2030 target serves as a benchmark goal on the way to achieving the GHG reductions goal set by former Governor Schwarzenegger via Executive Order S-3-05 (i.e., 80 percent below 1990 greenhouse gas emissions levels by 2050). (CA State Library, 2015)

13. Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. (CA Legislative Info, 2016b)

At this time, no further analysis is necessary or required by CEQA as it pertains to Executive Order B-30-15 and SB 32 because the Project's horizon (buildout) year would occur in 2028. Pursuant to guidance from the Association of Environmental Professionals (AEP), GHG emissions "…should be identified for the project horizon year and lead agencies should consider the project horizon year when applying a threshold of significance" (AEP, 2016, p. 32). Because the Project's opening year would be 2028, the Project's GHG emissions are instead evaluated against California Assembly Bill 32 (AB 32), which identifies a target to reduce GHG emissions statewide to 1990 levels by 2020. Demonstrating compliance with AB 32's target for 2020 also would show that the Project would not inhibit Riverside County's ability to achieve the 2030 target established by SB 32, as the bulk of the GHG reductions needed by 2030 would occur at the state and regional levels and compliance with the AB 32 threshold would demonstrate that the Project is on trajectory to meet the 2030 SB 32 target.

14. California Climate Crisis Act (AB 1279)

AB 1279, also known as the California Climate Crisis Act, declares that it is the policy of the State to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045; to achieve and maintain net negative greenhouse gas emissions thereafter; and to ensure that by 2045, Statewide anthropogenic greenhouse gas emissions are reduced to at least 85% below the 1990 levels. The bill requires the California Air Resources Board (CARB) to work with relevant State agencies to ensure that updates to the CARB Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California. AB 1279 also requires CARB to submit an annual report evaluating progress towards these policies. (CA Legislative Info, 2022b)

15. Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020)

SB 1020, also known as the Clean Energy, Jobs, and Affordability Act of 2022, revised State policy to include interim targets requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035. SB 1020 also requires each State agency to ensure that zero-carbon resources and eligible renewable energy resources supply 100 percent of electricity procured to serve their agency by December 31, 2035. In addition, SB 1020 requires the State Water Project (SWP) to procure eligible renewable energy and zero-carbon resources as necessary to meet the clean energy requirements specified for all State agencies. Finally, SB 1020 requires the California Public Utilities Commission (CPUC) to develop utility affordability metrics for both electricity and gas service. (CA Legislative Info, 2022c)

16. Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program (Senate Bill 905)

SB 905 requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage (CCRUS) Program and adopt regulations for a model unified permit program for the construction and operation of CCRUS projects. SB 905 is intended to accelerate the deployment of carbon management technologies and ensuring they are deployed in a safe and equitable way. SB 905 requires the CCRUS Program to ensure that carbon dioxide capture, removal, and sequestration projects include specified components including, among others, certain monitoring activities. In addition, SB 905 requires that by January 1, 2025, CARB shall adopt regulations for a unified permit application for the construction and operation of carbon dioxide capture, removal, or sequestration projects to expedite the issuance of permits or other authorizations for the construction and operation of those projects. SB 905 also requires the establishment of a centralized public database to track the deployment of carbon capture, utilization, or storage (CCUS) technologies and carbon dioxide removal (CDR) technologies. (CA Legislative Info, 2022d)

17. Assembly Bill 1757

AB 1757 directs the California Natural Resources Agency (CNRA) to determine an ambitious range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions for 2030, 2038, and 2045 to support State goals to achieve carbon neutrality and foster climate adaptation and resilience. Additionally, AB 1757 requires these targets to be integrated into the CARB Scoping Plan and other State policies. It also includes provisions to avoid double counting emission reductions, updates the Natural and Working Lands Climate Smart Strategy, develops GHG tracking protocols, and biennially post progress made in achieving the targets on CNRA's internet website. In addition, AB 1757 requires CARB to develop standard methods for State agencies to consistently track greenhouse gas emissions and reductions, carbon sequestration, and, where feasible, additional benefits from natural and working lands over time. (CA Legislative Info, 2022e)

D. Regional Regulations

1. Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles.

SCAG's *2024-2050 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS)*, also referred to as *Connect SoCal*, develops long-range regional transportation plans including a sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. The RTP/SCS provides objectives for meeting air pollution emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided in direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The Subregional Sustainable Communities Strategies identifies the Project site as being located in an area with a "Standard Suburban" land use pattern, which is defined as auto-oriented development with a minimal mix of land uses.

E. Local Regulations

1. Riverside County Climate Action Plan (CAP)

The County of Riverside Climate Action Plan (CAP), which was adopted in December 2015 and most recently updated in November 2019 ("CAP Update"), was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. The 2019 CAP Update establishes GHG emission reduction programs and regulations that correlate with and support evolving state GHG emissions reduction goals and strategies. The CAP Update includes reduction targets for year 2030 and year 2050. These reduction targets require the County to reduce emissions by at least 525,511 $MTCO_2e$/yr below the Adjusted Business As Usual (ABAU) scenario by 2030 and at least 2,982,948 $MTCO_2e$/yr below the ABAU scenario by 2050. To evaluate consistency with the CAP Update, the County has implemented CAP Update Screening Tables (Screening Tables) to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated in development projects. To this end, the Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively "features") are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County's GHG Technical Report and support the GHG emissions reduction targets established under the CAP Update. The potential for such projects to generate

direct or indirect GHG emissions that would result in a significant impact on the environment; or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG would be considered less than significant. (Riverside County, 2019)

4.8.3 Basis for Determining Significance

A. Significance Thresholds

While estimated Project-related GHG emissions can be quantified, the direct impacts of such emissions on GCC and global warming cannot be determined on the basis of available science. There is no evidence at this time that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.

AB 32 states, in part, that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would have no potential to result in a direct impact to global warming; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively-considerable way.

Section VIII of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to GHGs, and includes the following threshold questions (OPR, 2018a):

- Would the project generate GHGs, either directly or indirectly, that may have a significant impact on the environment?

- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." (Urban Crossroads, 2025c, p. 43)

CEQA Guidelines Section 15064.4(a) further states, "…A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use…; or (2) Rely on a qualitative analysis or performance-based standards." (Urban Crossroads, 2025c, p. 43)

The following thresholds are derived directly from Section VIII of Appendix G to the State CEQA Guidelines and the County's Environmental Assessment form, and address typical adverse effects associated with GHG

emissions. The proposed Project would have a significant impact on GHG emissions if the Project or any Project-related component would:

a. *Generate GHGs, 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.*

The above-listed thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, State CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The State CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment: (Urban Crossroads, 2025c, pp. 43-44)

- Consideration #1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

In addition, Section 15064.7(c) of the State CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The State CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements

for cumulative impact analyses. As a note, the State CEQA Guidelines were amended in response to SB 97. In particular, the State CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per State CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans, [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, State CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

The County of Riverside CAP Update provides a menu of options for energy efficiency, renewable energy, water conservation measures, and additional measures that provide predictable GHG reductions. Each option within the CAP screening tables includes point values based upon the GHG reduction that each measure can achieve relative to a development project. Projects that achieve at least 100 points from the screening tables are determined to have provided a fair-share contribution of GHG reductions and, therefore, are considered consistent with the County of Riverside CAP Update. Because the County of Riverside CAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, Projects that comply with the CAP Update would have a less-than-significant GHG impact. (Urban Crossroads, 2025c, p. 44)

B. Methodology

1. California Emissions Estimator Model

In August 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including the SCAQMD, released the latest version of CalEEMod, version 2022.1.1.23. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendix 3.1 of the Project's GHGA (*Technical Appendix G*). CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants. (Urban Crossroads, 2025c, p. 44)

2. Construction and Operational Life-Cycle Analysis Not Required

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time. Life-cycle analysis (i.e., assessing economy-

wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared. (Urban Crossroads, 2025c, p. 44)

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate. Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, the SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis. (Urban Crossroads, 2025c, p. 44)

4.8.4 Impact Analysis

Threshold a.: ***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

❑ Construction Emissions

Project construction activities would generate CO_2 and CH_4 emissions. The Project's Air Quality Impact Analysis ("AQIA"; *Technical Appendix B*) contains detailed information regarding Project construction activities. As discussed in the AQIA and as summarized in EIR subsection 3.6.1, construction-related emissions are expected from the following activities: site preparation, grading, building construction, paving, and architectural coating. Refer to EIR subsection 3.6.1 for a discussion of construction durations and anticipated construction equipment needed to implement the Project. (Urban Crossroads, 2025c, p. 45)

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.8-3, *Amortized Annual Construction Emissions*. (Urban Crossroads, 2025c, p. 47)

❑ Operational Emissions

Operational activities associated with the Project would result in emissions of CO_2, CH_4, N_2O, and refrigerant emissions from the following primary sources: area source emissions, energy source emissions, mobile source emissions water supply, treatment, and distribution, solid waste, and refrigerants. (Urban Crossroads, 2025c, pp. 47-48)

Area Source Emissions

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers,

Table 4.8-3 Amortized Annual Construction Emissions

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e[1]
2025	754.00	0.03	0.01	0.06	758.00
2026	1,189.00	0.04	0.02	0.26	1,198.00
2027	813.00	0.03	0.02	0.28	819.00
2028	412.00	0.01	0.01	0.13	416.00
Total GHG Emissions	3,168.00	0.11	0.06	0.73	3,191.00
Amortized Construction Emissions	**105.60**	**3.67E-03**	**2.00E-03**	**0.02**	**106.37**

[1] CalEEMod reports the most common GHGs emitted which include CO2, CH4, and N2O. These GHGs are then converted into the CO2e by multiplying the individual GHG by the GWP.
(Urban Crossroads, 2025c, Table 3-3)

chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024, which is now effective. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. (Urban Crossroads, 2025c, p. 48)

Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting.[1] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Natural gas and electricity usage associated with the Project was calculated by CalEEMod using default parameters. (Urban Crossroads, 2025c, p. 48)

Mobile Source Emissions

The Project related GHG emissions derive primarily from vehicle trips generated by the Project, including residential trips to and from the site associated with the proposed uses. Trip characteristics available from the Project's Traffic Analysis ("TA"; EIR *Technical Appendix K*) were utilized in this analysis. (Urban Crossroads, 2025c, p. 48)

Water Supply, Treatment and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume

[1] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used. (Urban Crossroads, 2025c, p. 48)

Solid Waste

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters. (Urban Crossroads, 2025c, p. 49)

Refrigerants

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters. (Urban Crossroads, 2025c, p. 49)

❑ Emissions Summary

The estimated Project-related GHG emissions are summarized in Table 4.8-4, *Project GHG Emissions*. Detailed operation model outputs for the Project are presented in Appendix 3.1 of the Project's GHGA (*Technical Appendix G*). As shown, construction and operation of the Project would generate approximately 3,875.85 $MTCO_2e$/yr. (Urban Crossroads, 2025c, p. 49)

❑ Evaluation of Project Impacts due to GHGs

The purpose of the CAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the County. To address the State's requirement to reduced GHG emissions, the County prepared its CAP Update with the goal of reducing GHG emissions within the County by 49% below "existing" 2008 levels by the year 2030. The County's target is consistent with the AB 32 target and ensures that the County will be providing GHG reductions locally that will complement state efforts to reduce GHG emissions. The County's target also is consistent with the SB 32 target that expands on AB 32 to reduce GHG emissions to 40% below the 1990 levels by 2030. Because the County's CAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines. (Urban Crossroads, 2025c, p. 50)

Table 4.8-4 Project GHG Emissions

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	105.60	3.67E-03	2.00E-03	0.02	106.37
Mobile Source	2,990.00	0.12	0.14	4.30	3,039.00
Area Source	53.00	0.00	0.00	0.00	53.00
Energy Source	556.00	0.05	0.00	0.00	558.00
Water Usage	51.00	0.28	0.01	0.00	60.00
Waste	17.00	1.70	0.00	0.00	59.00
Refrigerants	0.00	0.00	0.00	0.48	0.48
Total CO_2e (All Sources)	**3,875.85**				

(Urban Crossroads, 2025c, Table 3-4)

The CAP identifies a two-step approach in evaluating GHG emissions. First, a screening threshold of 3,000 $MTCO_2e$/yr is used to determine if additional analysis is required. Projects that exceed the 3,000 $MTCO_2e$/yr will be required to demonstrate and achieve a 25% reduction minimum of GHG emissions from a 2011-year level of efficiency compared to the mitigated Project buildout year or demonstrate at least 100 points (equivalent to an approximate 15% reduction in GHG emissions) through the CAP Screening Tables. (Urban Crossroads, 2025c, p. 50)

As shown on Table 4.8-4, at buildout the Project would result in approximately 3,875.85 $MTCO_2e$/yr; thus, the proposed Project would exceed the County's screening threshold of 3,000 $MTCO_2e$/yr. Although the Project would be required to achieve 100 points pursuant to the CAP Screening Tables, and in order to provide a conservative analysis of the Project's impacts due to GHGs, it is concluded that the Project's cumulatively-considerable impacts due to GHG emissions would be potentially significant prior to mitigation. (Urban Crossroads, 2025c, p. 50)

Threshold b: ***Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

Pursuant to Section 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project's consistency with AB 32, SB 32, and the County's CAP are discussed below. It should be noted that the Project's consistency with the SB 32 (as identified through compliance with the 2022 Scoping Plan) also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32. Project consistency with the 2022 Scoping Plan and County's CAP is evaluated in the following discussion.

❑ Project Consistency with the 2022 CARB Scoping Plan

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Project would comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced

Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, Off-Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the Low Carbon Fuel Standard. As noted below, the Project also would be consistent with the Riverside County CAP (following mitigation). As such, the Project would not be inconsistent with the 2022 Scoping Plan, and impacts would be less than significant. (Urban Crossroads, 2025c, p. 51)

❑ **Project Consistency with Riverside County CAP Update**

The County of Riverside approved the CAP Update on December 17, 2019. The CAP Update was designed under the premise that the County, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner.

In order to evaluate consistency with the CAP, the County provided Screening Tables to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The County's CAP currently evaluates and quantifies reductions out to Year 2030. The CAP states that "[t]hrough 2050, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG emissions from new development. Additionally, it is assumed that the State measures would keep being updated and reinforced to further reduce emissions. With these assumptions, Riverside County's emissions would decrease to a level below the reduction target by 2050." Thus, compliance with the CAP would serve to meet and support the reduction targets established Senate Bill 32 and the CARB 2022 Scoping Plan.

Pursuant to the CAP Update and associated Screening Tables, projects that garner at least 100 points (equivalent to an approximate 49% reduction in GHG emissions below 2008 baseline levels) are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP. Absent implementation of Screening Table Measures, the Project could be considered inconsistent with the County CAP. This is a potentially significant impact for which mitigation is required.

4.8.5 Cumulative Impact Analysis

As discussed in subsection 4.8.1, there is no evidence at this time that would indicate that the emissions from a project the size of the Project would directly or indirectly affect the global climate. As such, Project impacts due to GHG emissions are inherently cumulative in nature.

As discussed under the analysis of Threshold a., construction and long-term operation of the Project would result in the emissions of 3,875.85 $MTCO_2e$ per year, which would exceed the CAP screening threshold of 3,000 MT CO_2e per year. Other cumulative developments within the region similarly have the potential to exceed the County's screening threshold of 3,000 $MTCO_2e$/yr. Accordingly, GHG emissions associated with construction and long-term operation of the Project represents a cumulatively-considerable impact for which mitigation would be required.

As discussed under the analysis of Threshold b., the Project would be consistent with or otherwise would not conflict with the CARB 2022 Scoping Plan. However, the Project has the potential to conflict with the Riverside County CAP Update if the Project were unable to achieve 100 points pursuant to the CAP Screening Tables. This is evaluated as a cumulatively-considerable impact of the proposed Project for which mitigation would be required.

4.8.6 Significance of Impacts Before Mitigation

Threshold a: Significant Cumulatively-Considerable Impact. The annual GHG emissions associated with construction and long-term operation of the proposed Project are estimated to be approximately 3,875.85 $MTCO_2e$ per year; therefore, the proposed Project would exceed the County's screening threshold of 3,000 $MTCO_2e$/yr. Although the Project would be required to achieve 100 points pursuant to the CAP Screening Tables, and in order to provide a conservative analysis of the Project's impacts due to GHGs, it is concluded that the Project's cumulatively-considerable impacts due to GHG emissions would be potentially significant prior to mitigation.

Threshold b.: Significant Cumulatively-Considerable Impact. The Project would be consistent with or otherwise would not conflict with the CARB 2022 Scoping Plan. However, the Project has the potential to conflict with the Riverside County CAP Update if the Project were unable to achieve 100 points pursuant to the CAP Screening Tables. This is evaluated as a cumulatively-considerable impact of the proposed Project.

4.8.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The Project would be required to comply with all mandates imposed by the State of California and SCAQMD aimed at the reduction of GHG emissions. Those that are applicable to the Project and that would assist in the reduction of greenhouse gas emissions are listed below:

- Global Warming Solutions Act of 2006 (AB32).
- Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
- Renewable Portfolio Standards (SB 100). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to achieve a target of 50% renewable resources by December 31, 2026, and to achieve a 60% target by December 31, 2030.. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030.

- Senate Bill 32 (SB 32). Requires the state to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.

Mitigation

MM 4.8-1 Prior to issuance of building permits, the Project Applicant shall demonstrate that appropriate building construction measures shall apply to achieve a minimum of 100 points per Appendix D to the Riverside County 2019 Climate Action Plan (CAP) Update. The conceptual measures anticipated for the Project are listed in Appendix 3.2 to the Project's Greenhouse Gas Analysis (GHGA) technical report (appended to the Project's EIR as *Technical Appendix G*). The conceptual measures may be replaced with other measures as listed in Appendix D to the 2019 Riverside County CAP Update, as long as they are replaced at the same time with other measures that in total achieve a minimum of 100 points per Appendix D to the 2019 Riverside County CAP Update. The County shall verify implementation of the identified measures prior to final building inspection.

MM 4.8-2 Prior to issuance of building permits, and in accordance with measure R2-CE1 of the County's Climate Action Plan (CAP) Update, future implementing building permits that involve more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development shall be required to offset the energy demand through renewable energy production. Renewable energy production shall be onsite generation of at least 20% of energy demand for commercial, office, industrial or manufacturing development, meet or exceed 20% of energy demand for multi-family residential development, and meet or exceed 30% of energy demand for single-family residential development.

4.8.8 Significance of Impacts After Mitigation

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. The Riverside County CAP Update (November 2019) qualifies as a "Plan for the Reduction of Greenhouse Gas Emissions," pursuant to State CEQA Guidelines Section 15183.5(b). Pursuant to State CEQA Guidelines Sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously-adopted plan or mitigation program. Additionally, Tier 2 of the SCAQMD interim thresholds for GHG emissions indicates that if a project is consistent with a qualifying local GHG reduction plan, it would not result in a significant impact due to GHG emissions. Implementation of Mitigation Measure MM 4.8-1 would ensure that the proposed Project is fully consistent with the Riverside County CAP Update (November 2019) by requiring the Project Applicant to demonstrate that implementing building permit applications have incorporated measures to achieve a minimum of 100 points pursuant to the CAP Update Screening Tables. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County's GHG Technical Report and support the GHG emissions reduction targets established under the CAP Update. Implementation of Mitigation Measure MM 4.8-2 would ensure that the Project accommodates onsite renewable energy production as needed to meet 30% of the Project's overall energy demand. With implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2, the Project would not generate greenhouse

gas emissions, either directly or indirectly, that may have a significant impact on the environment, and the Project's cumulatively-considerable impact due to GHG emissions would be reduced to less-than-significant levels.

Threshold b.: Less-than-Significant Impact with Mitigation Incorporated. Projects that garner at least 100 points through application of the CAP Update Screening Table measures are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP Update. Pursuant to Mitigation Measure MM 4.8-1, the Project Applicant would be required to implement Screening Table Measures that would provide a minimum of 100 points pursuant to the CAP Update Screening Tables (Appendix D to the CAP Update). Implementation of Mitigation Measure MM 4.8-2 would ensure that the Project accommodates onsite renewable energy production as needed to meet 30% of the Project's overall energy demand. With implementation of Mitigation Measures MM 4.8-1 and MM 4.8-2, the Project would be fully consistent with the 2019 CAP Update. The CAP Update evaluates and quantifies reductions out to Year 2030. The CAP Update states that "Through 2050, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG missions from new development. Additionally, it is assumed that the State measures would keep being updated and reinforced to further reduce emissions. With these assumptions, Riverside County's emissions would decrease to a level below the reduction target by 2050." Thus, compliance with the CAP Update would serve to meet and support the reduction targets established Senate Bill 32 and the CARB 2022 Scoping Plan. As such, with implementation of the required mitigation, Project impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would be reduced to less-than-significant levels.

4.9 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis presented in this Subsection is based in part on a technical study that was prepared to determine the presence or absence of hazardous materials on the Project site under existing conditions. This report, entitled, "Phase I Environmental Site Assessment Update Report, Highland Grove 4, Riverside County, California" (herein referred to as "Phase I ESA"), prepared by McAlister GeoScience (herein, "McAlister"), dated March 29, 2024, and included as *Technical Appendix H* to this EIR (McAlister, 2024). Refer to Section 7.0*, References*, for a complete list of reference sources.

4.9.1 EXISTING CONDITIONS

A. Definition of Toxic Substances and Hazardous Waste

For purposes of this EIR, the term "toxic substance" is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include: chemical, biological, flammable, explosive, and radioactive substances.

"Hazardous material" is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness.

Hazardous waste is defined in the California Code of Regulations, Title 22, § 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency [USEPA] as capable of inducing systemic damage to humans or animals).

Certain wastes are called "Listed Wastes" and are found in the California Code of Regulations, Title 22, §§ 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

A Recognized Environmental Condition (REC) means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

B. Historical Review, Regulatory Review, and Field Reconnaissance

As part of the Project's Phase I ESA (*Technical Appendix H*), McAlister conducted a site visit to document the current conditions of the Project site and neighboring facilities; a review of previous reports prepared for

the Project site; a review of a regulatory databases and records; questionnaires to the current property owner; a review of historical references including aerial photographs, city directories, and topographic maps; a review of records maintained by local regulatory agencies; and a review of building records maintained by Riverside County. The results of the assessment are summarized below.

1. Site Reconnaissance

McAlister conducted a site reconnaissance on March 24, 2024. At the time of the site reconnaissance, the Project site consisted of undeveloped land with native grasses and dirt roads. Several areas of discarded household trash and debris were observed. What appeared to bags of soil were observed in the central portion of the Project site. Two white 55-gallon drums of unknown contents were observed on the western portion of the Project site. Similar drums were observed on the boundary of the nearest western adjoining property. (McAlister, 2024, p. 14)

Two groundwater wells are located on the western portion of the Project site. One groundwater well is located on the northwest portion of the site and one is located on the central-west portion of the site. The central-west well appeared to be constructed with an approximately five-foot diameter concrete casing and a vertical turbine pump. The north-west well appeared to be constructed with a four-inch casing and a down-hole submersible electric pump in a well house. (McAlister, 2024, p. 16)

For properties with a history of agriculture use, such as the Project site, many underground irrigation or drainage pipes may exist. Some pipes may be constructed of asbestos-containing material such as "Transite" brand asbestos concrete pipe. At least one of these pipes was observed during the site reconnaissance. (McAlister, 2024, p. 15)

No above ground storage tanks (AST) or indications of underground storage tanks was observed. There were no noxious odors, pools of liquid, or pits, ponds, or lagoons observed. No transformers or PCB-suspect hydraulic systems were observed on the Project site. The previous pole-mounted transformer adjoining the water well was no longer present. No leaking or staining was observed in the area of the previous transformer. No stained soil or pavement, or stressed vegetation was observed. No leach fields, septic tanks, or cesspools were observed. (McAlister, 2024, pp. 15-16)

2. Property Owner Questionnaire

Five previous owners of the Project site completed a "User Questionnaire" in accordance with Code of Federal Regulations (CFR) 40 CFR § 312.30. Copies of the completed questionnaires are included in Appendix D to the Project's Phase I ESA (*Technical Appendix H*). The results of the questionnaires did not identify any environmental clean-up liens, activity/use limitations, specialized knowledge, commonly known information, or obvious indicators of contamination. (McAlister, 2024, pp. 12-13)

3. Regulatory Review

McAlister retained Environmental Data Resources, Inc. (EDR) to provide federal, state, and local regulatory agency databases for sites, including the Project site, listed within the search distances described in the ASTM

Standard Practice for Environmental Site Assessments E 1527-21. These databases provide lists of facilities that use, store or dispose of hazardous substances, as well as sites with known or suspected contaminated soil or groundwater. (McAlister, 2024, p. 17)

The regulatory agency review consisted of acquisition and review of a regulatory agency database search report of regulatory agency files for sites of interest. Selection of sites considered to have a potential to impact the Project site was based on the location of a reported release site with respect to its distance from the Project site and the reported groundwater flow direction. Generally, reported release sites within one-fourth of a mile up-gradient, or one-eighth of a mile cross-gradient or downgradient of the Project site are selected for follow-up file review. Sites listed in the database search report but not identified as a release site (for example, a site listed as a hazardous waste generator but not as having had a release) are not considered to have a potential to impact the soil and/or groundwater at the Project site. Refer to Appendix C of the Project's Phase I ESA (*Technical Appendix H*) for a copy of the EDR database report. (McAlister, 2024, p. 17)

The Victoria Grove Specific Plan, which was not approved but includes the Project site, was listed on the CIWQS and CERS databases, with a CERS description of, "Wetlands- Fill and Dredge Material." Based on no environmental hazard identified, this listing is not considered a threat to the Project site. (McAlister, 2024, p. 17)

One adjoining property was listed on the databases reviewed: K-Ranch-Lake Mathews, located 14480 Blackburn Rd, approximately 427 feet northeast and cross-gradient from the Project site, was listed on the HIST UST database for containing an active gasoline UST (500-gallon deisel). Based on no indications of spills or releases and the down-gradient location, the property is not considered a threat to the Project site. (McAlister, 2024, p. 17)

No other related releases likely to impact the Project site have been identified on the remaining listings in the surrounding area. As a result, these properties do not present a threat to groundwater and/or soil at the Project site. (McAlister, 2024, p. 17)

4. Historical Review

Aerial Photograph Review

In order to determine the history of the Project site and the surrounding area, McAlister reviewed reasonably ascertainable public documents, including aerial photographs, topographic maps, city directories, fire insurance maps, and previous environmental reports.

The 1938 through 1953 aerial photographs show the Project site as undeveloped land. The Project site appears in the aerial photographs to be completely developed with orchards from the late-1960s through the mid-1990s. The orchards on the Project site appear to have been cleared in the 2006 aerial photograph. From 2006 to 2020, the Project site appears to have been undeveloped land. (McAlister, 2024, p. 7)

The review of historic aerial photographs revealed prior to the mid-1960s, the area surrounding the Project site was undeveloped and became increasingly developed as orchards with the development of Lake Matthews to

the south in the late-1930s / early-1940s. The area surrounding the Project site appears as fully developed as orchards from the mid-1960s through the early-2000s when the surrounding area began redevelopment for residential purposes. By 2006, the northeast adjoining properties appear to have been developed with residential homes. (McAlister, 2024, p. 7)

Topographic Map Review

The review of historic topographic maps revealed the surrounding properties were not depicted until 1925 and no notable features or structures were identified. By 1943, the current surrounding roads in the area were shaded, indicating dense urbanization. The 1947, 1965, 1972, and 1981 topographic maps show the surrounding properties in a shaded region, representing dense urban development. The 2012 topographic maps do not depict any notable structures or features on the surrounding properties. (McAlister, 2024, p. 8)

City Directory Review

A search was conducted for city directories which included coverage of the Project site area using the EDR City Directory Collection and other sources, if needed. No listings for directories for the Project site area were identified. (McAlister, 2024, p. 8)

Sanborn Map Review

A search for historical aerial photographs, historical fire insurance maps and historical topographic maps depicting the Project site and vicinity were conducted by Environmental Data Resources, Inc. (EDR). The EDR Report indicated that fire insurance map coverage for the vicinity of the Project site was not available. (McAlister, 2024, p. 8)

Previous Environmental Reports

The following environmental reports were provided and reviewed for the Project site:

- Phase I/II Environmental Site Assessment by McAlister, dated June 17, 2015: McAlister performed a previous Phase I ESA and following Phase II for Victoria Heights (the Project site) in June 2015. The subject site was larger than the current Project site boundaries and included areas to the north, south, east, and west, totaling approximately 350 acres of land across 15 parcels. At the time of the previous Phase I ESA, the Project site was primarily undeveloped. A single gated residence occupied the site and was inaccessible at the time of the report. Areas of unauthorized dumping of household debris were observed. Two water wells were observed in the western portion of the site. Two ASTs were observed in the eastern portion of the site. (McAlister, 2024, p. 8)

  McAlister performed a follow up Phase II on the Project site. Soil samples were collected throughout the site, including near the debris piles and ASTs, and throughout the agricultural areas. The concentration of metals detected in the soil samples were within the range of natural occurring metals in California soils. Concentrations of pesticides in soil were detected. However, concentrations were below their respective screening limits. McAlister issued the findings of the Phase I and Phase II ESAs

in a singular report. McAlister concluded no Recognized Environmental Conditions were present on the property. However, the following actions were recommended: (McAlister, 2024, pp. 8-9)

- A Storm Water Pollution Prevention Plan (SWPPP) for the Project site should be prepared and implemented in accordance with applicable regulations prior to any grading activities;
- In the event of any future construction and/or excavation activities at the Project site, dust suppression may be necessary during construction activities; and
- Abandonment or removal of irrigation piping located onsite, following sampling and analysis for asbestos containing materials potentially present in the irrigation piping.

The current Project site is only the western portion (111.6 acres) of the previous 345.1 acres of land assessed. (McAlister, 2024, p. 9)

- Soil Sampling Report by McAlister, dated October 9, 2018: McAlister issued a Soil Sampling Report in October 2018. The study area contained the Project site and additional parcels to the north, south, east, and west. Following the 2015 McAlister report, the Riverside County Planning Department and the Riverside County Department of Environmental Health requested further sampling during the EIR period in accordance with California Department of Toxic Substances Control (DTSC) *Interim Guidance for Sampling Agricultural Properties (Third Revision)* dated August 7, 2008. (McAlister, 2024, p. 9)

  A total of 115 samples were submitted for analysis of Organochloride Pesticides (OCPs) by EPA Method 8081. A total of 117 samples were submitted for analysis of arsenic by EPA Method 6010. The results indicate DDD was detected above its respective laboratory reporting limit in 64 of the samples. Concentrations of DDE were detected above its respective laboratory reporting limit in one sample. Concentrations of DDT was detected above its respective laboratory reporting limit in 34 samples. Dieldrin was detected above its respective laboratory reporting limit in three (3) samples. All concentrations of detected OCPs were below their respective Environmental Screening Limits. (McAlister, 2024, p. 9)

  Arsenic was detected above its laboratory reporting limit in 19 of the samples. Concentrations of Arsenic were detected above the ESL, however; the reported arsenic values were below the naturally occurring level of arsenic in California soils, with the exception of three samples. Two of the samples were measured at the level of naturally arsenic, and one was measured above the level of naturally occurring arsenic. None of these three samples are located within the current Project site boundaries. (McAlister, 2024, p. 9)

  Given only one of the collected samples was above the level of naturally occurring arsenic in California soils, and the low concentrations of OCPs, McAlister concluded the planed excavation and grading can be conducted without further investigation or remediation activities. (McAlister, 2024, p. 9)

- Phase I Environmental Assessment by McAlister, dated June 9, 2023: McAlister performed a previous Phase I ESA update for the now southwest adjoining property in June 9, 2023. The subject site (four

contiguous parcels of land of 95.9 acres) was previously a part of the "subject property" which encompassed approximately 350 acres of land across 15 parcels in 2015. At the time of the Phase I ESA, the property was undeveloped land. No RECs, Controlled RECs (CRECs), or Historical RECs (HRECs), *de minimis* conditions or Business Environmental Risk (BER) were identified. (McAlister, 2024, p. 9)

The 2023 Phase I ESA recommended following actions: (McAlister, 2024, p. 10)

- A Storm Water Pollution Prevention Plan (SWPPP) for the Project site should be prepared and implemented in accordance with applicable regulations prior to any grading activities;
- In the event of any future construction and/or excavation activities at the Project site, dust suppression may be necessary during construction activities; and
- Abandonment or removal of irrigation piping located onsite, following sampling and analysis for asbestos containing materials potentially present in the irrigation piping.

C. *Vapor Encroachment*

McAlister performed a Tier 1 vapor encroachment assessment at the Project site in accordance with ASTM Standard E 2600-08, *Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions.* The purpose of the vapor encroachment assessment was to evaluate the potential for migration of vapors into existing or planned structures on the Project site due to contaminated soil and/or groundwater on the site or within close proximity to the Project site. (McAlister, 2024, p. 18)

The objective of a Tier 1 vapor encroachment assessment is to conduct an initial screen to determine if a potential vapor intrusion condition (pVIC) exists in connection with the Project site. When used as a screening tool, a Tier 1 vapor encroachment assessment uses non-numerical information designed to identify conditions and/or physical settings where a pVIC is unlikely to occur. A pVIC is defined as the potential for the presence or likely presence of any compound of concern (COC) in the indoor air environment of existing or planned structures on a property caused by the release of vapor from contaminated soil or groundwater either on the property or within close proximity to the property at a concentration that presents or may present an unacceptable health risk to occupants. A pVIC exists when the screening defined by the vapor encroachment assessment indicates the potential for a Vapor Intrusion Condition but where there is insufficient data to ascertain the presence or likely presence of COC in the indoor air environment of existing or planned structures on a target property. A condition determined to be *de minimis* is not a pVIC. (McAlister, 2024, p. 18)

A vapor intrusion condition (VIC) is defined as the presence or likely presence of a COC in the indoor air environment of existing or planned structures on a property caused by the release of vapor from contaminated soil or groundwater either on the property or within close proximity to the property at a concentration that presents or may present an unacceptable health risk to occupants. (McAlister, 2024, p. 18)

The Project site is listed on CIWQS and CERS databases. None of the database listings nor operations on the Project site are likely to produce a vapor encroachment condition. There are no database listings or operations

conducted at the Project site or surrounding properties considered an environmental concern and is therefore not likely to present a pVIC for the Project site.

D. Airport Hazards

The Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport to the Project site is the Riverside Municipal Airport, which is located approximately 5.4 miles north of the Project site. The Project site is located outside of the compatibility zones for the Riverside Municipal Airport. (RCIT, n.d.) Additionally, there are no private airports or heliports within two miles of the Project site (Google Earth, 2024).

4.9.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations related to hazards and hazardous materials.

A. Hazardous Materials Regulations and Plans

1. Federal Regulations

- ❑ Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed. (EPA, 2023e)

EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. (EPA, 2023e)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). (EPA, 2023e)

❑ Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. (EPA, 2023f)

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. (EPA, 2023f)

❑ Hazardous Materials Transportation Act (HMTA)

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property." (OSHA, n.d.)

Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 CFR Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177 (OSHA, n.d.)

The HMTA is enforced by use of compliance orders [49 U.S.C. 1808(a)], civil penalties [49 U.S.C. 1809(b)], and injunctive relief (49 U.S.C. 1810). The HMTA (Section 112, 40 U.S.C. 1811) preempts state and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. (OSHA, n.d.)

❑ Hazardous Materials Transportation Uniform Safety Act of 1990

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. (OSHA, n.d.)

The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials. (OSHA, n.d.)

❑ Occupational Safety and Health Act (OSHA)

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. (EPA, 2023g)

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. (EPA, 2023g)

❑ Toxic Substances Control Act

The Toxic Substances Control Act of 1976 provides 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, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint. (EPA, 2023h)

Various sections of TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.
- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform EPA, except where EPA has been adequately informed of such information. EPA screens all TSCA b§8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law, but are submitted by industry and public interest groups for a variety of reasons. (EPA, 2023h)

2. State Regulations

❑ Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards, and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace. (OSHA, n.d.)

Pursuant to 29 CFR 1952.172, the California State Plan applies to all public and private sector places of employment in the state, with the exception of federal employees, the United States Postal Service, private sector employers on Native American lands, maritime activities on the navigable waterways of the United States, private contractors working on land designated as exclusively under federal jurisdiction and employers that require federal security clearances. Cal/OSHA is the only agency in the state authorized to adopt, amend, or repeal occupational safety and health standards or orders. In addition, the Standards Board maintains standards for certain things not covered by federal standards or enforcement, including: elevators, aerial passenger tramways, amusement rides, pressure vessels and mine safety training. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries or illnesses. (OSHA, n.d.)

❑ California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the state. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law (RCRA). (CA Legislative Info, n.d.)

❑ California Code of Regulations (CCR), Titles 22 and 26

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of state and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also

regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as "Title 22." (DTSC, n.d.; DTSC, 2019)

❑ Safe Drinking Water and Toxic Enforcement Act

Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986 (Health and Safety Code, Division 20, Chapter 6.6, Section 25249.5, et seq), protects the state's drinking water sources from being contaminated with chemicals known to cause cancer, birth defects, or other reproductive harm, and requires businesses to inform Californians about exposures to such chemicals. Proposition 65 requires the state to maintain and update a list of chemicals known to the state to cause cancer or reproductive toxicity. (CA Legislative Info, n.d.)

❑ California Water Code

The California Water Code is the principal state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW. (CA Legislative Info, n.d.)

Surface water quality is the responsibility of the Regional Water Quality Control Board (RWQCB), water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water. (CA Legislative Info, n.d.)

❑ Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

California's Unified Program, overseen but the California Environmental Protection Agency (CalEPA), protect Californians from hazardous waste and hazardous materials by ensuring local regulatory agencies consistently apply statewide standards when they issue permits, conduct inspections, and engage in enforcement activities. The Unified Program is a consolidation of multiple environmental and emergency management programs, including the following:

- Aboveground Petroleum Storage Act (APSA) Program;
- Area Plans for Hazardous Materials Emergencies;
- California Accidental Release Prevention (CalARP) Program;
- Hazardous Materials Release Response Plans and Inventories (Business Plans);
- Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statements (HMIS) (California Code)
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and
- Underground Storage Tank Program.

State agency partners involved in the implementation of the Unified Program are responsible for setting program element standards, working with CalEPA to ensure program consistency, and providing technical assistance to the California Unified Program Agencies (CUPAs) and Program Agencies (PAs). The state agencies involved with the Unified Program include CalEPA, Department of Toxic Substances Control (DTSC), the Governor's Office of Emergency Services (Cal OES), CAL FIRE – Office of the State Fire Marshall (CAL FIRE-OSFM), and the State Water Resources Control Board (State Water Board). (CalEPA, n.d.)

❑ Uniform Fire Code

The Uniform Fire Code, Article 80 (Section 80.103 of the Uniform Fire Code as adopted by the State Fire Marshal pursuant to HSC Section 13143.9), includes specific requirements for the safe storage and handling of hazardous materials. These requirements are intended to reduce the potential for a release of hazardous materials and for mixing of incompatible chemicals, and specify the following specific design features to reduce the potential for a release of hazardous materials that could affect public health or the environment:

a. Separation of incompatible materials with a noncombustible partition;
b. Spill control in all storage, handling, and dispensing areas; and
c. Separate secondary containment for each chemical storage system. The secondary containment must hold the entire contents of the tank, plus the volume of water needed to supply the fire suppression system for a period of 20 minutes in the event of catastrophic spill. (FindLaw, 2023b)

❑ License to Transport Hazardous Materials

Caltrans regulates hazardous materials transportation on all interstate roads (California Vehicle Code, Section 32000.5, et seq). Within California, the State agencies with primary responsibility for enforcing federal and State regulations and for responding to transportation emergencies are the California Highway Patrol and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications for vehicles transporting hazardous materials. (FindLaw, 2023c)

❑ California Hazardous Materials Release Response Plan and Inventory Law of 1985

The Business Plan Act requires preparation of Hazardous Materials Business Plans and disclosure of hazardous materials inventories, including an inventory of hazardous materials handled, plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and

emergency response procedures for businesses that handle, store, or transport hazardous materials in amounts exceeding specified minimums (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State. Local agencies are responsible for administering these regulations.

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including CalEPA and the California Emergency Management Agency. The California Highway Patrol and California Department of Transportation (Caltrans) enforce regulations specifically related to the transport of hazardous materials. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roadways. (CA Legislative Info, n.d.)

❑ Senate Bill 1137 (SB 1137)

SB 1137 is intended to protect the public health of California's communities by creating a minimum health and safety distance of 3,200-feet between sensitive receptors, such as a residence, school, childcare facility, playground, hospital, or nursing home and an oil and gas production well. Specifically, the bill prohibits the California Geological Energy Management Division (CalGEM) from approving the drilling, re-drilling, or significant alteration of any oil and gas well within this "health protection zone." SB 1137 also requires oil and gas facility operators in these protection zones to implement strict pollution controls, and to develop response plans to protect the health of Californians currently living within 3,200 feet of an existing oil well. SB 1137 also requires operators of wells/facilities to provide an individual indemnity bond sufficient to pay the full cost of properly plugging and abandoning the well and decommissioning the facility in order to prevent operators from failing to properly decommission. (CDC, n.d.)

B. Airport and Aircraft Hazards Regulations and Plans

1. State Regulations

❑ State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics ("Division"), and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. The Aeronautics Act is divided into six chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature's intent for a State aviation program. Chapter two explains Caltrans' role in administering the Division, and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from Federal Aviation Administration (FAA) regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of Airport Land Use Commissions (ALUC). Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Finally, Chapter six introduces airport planning and

specifically introduces the intent of the CASP and how it can be used to support California aviation. (CA Legislative Info, n.d.)

❑ California Environmental Quality Act

The operation of airports and aircraft is the responsibility of the Federal Aviation Administration (FAA), but the requirement to document potential hazards related to airports and air activities when a new project is proposed is contained in CEQA, specifically PRC Section 21096, which states: (CA Legislative Info, n.d.)

> *"(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.*
>
> *(b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area."*

C. *Local Regulations*

❑ Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan

In April 2023 the County of Riverside Emergency Management Department (EMD) published a Multi-Jurisdictional LHMP for the purposes of identifying the County's hazards, reviewing and assessing past disaster occurrences, estimating the probability of future occurrences, and setting goals to reduce or eliminate potential risks to people and property from natural and human-caused hazards. The LHMP addresses a variety of hazard types including but not limited to wildland fire, electrical outages, extreme weather, pipeline disruptions, and hazardous materials incidents. (Riverside EMD, 2023)

❑ Riverside County Ordinance No. 457

Every three years, Riverside County's Building and Fire Codes are adapted from the California Building Standards Code (CCR Title 24), which includes both building and fire codes. These codes establish site-specific investigation requirements, construction standards and inspection procedures to ensure that development authorized by the County of Riverside does not pose a threat to the health, safety or welfare of the public. The California Building Standards Code contains minimum baseline standards to guard against unsafe development. This ordinance also adopts, in some cases with modification to a stricter standard, a number of California State's Title 24 codes (fire, building, plumbing, electrical, etc.). The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing these codes. Riverside County Ordinance No. 457 (Building Codes and Fees Ordinance) regulates grading, buildings and structures within Riverside County. (Riverside County, 2015a, p. 4.12-35)

❑ Riverside County Ordinance No. 615

Riverside County Ordinance No. 615 (Hazardous Waste Generation, Storage, Handling and Disposal) was promulgated for the purpose of monitoring establishments where hazardous waste is generated, stored, handled, disposed, treated or recycled and to regulate the issuance of permits and the activities of establishments where hazardous waste is generated. This ordinance designates RCDEH to enforce the provisions of HSC Division 20, Chapter 6.5, § 25100, et seq., and the "Environmental Health Standards for the Management of Hazardous Waste," as specified in CCR Title 22, Division 4.5, pertaining to the generation, storage, handling, disposal, treatment and recycling of hazardous waste. (Riverside County, 2015a, p. 4.13-57)

❑ Riverside County Ordinance No. 617

Riverside County Ordinance No. 617 (Underground Storage Tanks Containing Hazardous Substances) implements § 25280 et seq. of the California HSC to ensure that hazardous substances stored in underground tanks are done so safely and in a manner that prevents contamination. It does so by establishing appropriate construction standards for new underground storage tanks and requiring maintenance, monitoring and inspection of existing tanks. The ordinance also establishes a Local Oversight Program for "unauthorized releases of petroleum and petroleum-related materials from leaking underground tanks systems which require remedial action...to prevent long-term threats to the public health, water quality and environment." The RCDEH manages these programs. (Riverside County, 2015a, p. 4.13-57)

❑ Riverside County Ordinance No. 651

Riverside County Ordinance No. 651 (Disclosure of Hazardous Materials and Business Emergency Plans) implements the State of California's "Hazardous Materials Release Response Plans and Inventory Law" (HSC, Chapter 6.95), to establish a system for permitting businesses handling hazardous materials. It serves to enforce minimum material standards and designates the Riverside County Community Health Agency as the agency responsible for administering and enforcing HSC Chapter 6.95. The RCDEH may require compliance with the applicable articles of the most-current Fire Codes. Pursuant to HSC § 25500, the Riverside County Board of Supervisors may also impose additional, more stringent requirements on businesses that handle hazardous materials. (Riverside County, 2015a, p. 4.13-57)

4.9.3 Basis for Determining Significance

Section IX of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to hazards and hazardous materials, and includes the following threshold questions to evaluate a project's impacts due to hazards and hazardous materials (OPR, 2018a).

- *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- *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?*

- *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*
- *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 it create a significant hazard to the public or the environment?*
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*
- *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*
- *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section IX of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact from hazards and hazardous materials if construction and/or operation of 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. *Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan;*

d. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*

e. *Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public, or the environment;*

f. *Result in an inconsistency with an Airport Master Plan;*

g. *Require review by the Airport Land Use Commission;*

h. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; or*

i. For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area.

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts due to hazards and hazardous materials. It should be noted that the issue of loss, injury, or death involving wildland fires is addressed separately in EIR Subsection 4.21, *Wildfire*.

4.9.4 Impact Analysis

Threshold a.:	***Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***
Threshold b.:	***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?***

Implementation of the Project would result in the construction and long-term operation of 206 single-family residential homes, three water quality basins, one park, and 13 open space lots. The analysis below evaluates the potential for the Project to result in a substantial hazard to people or the environment due to existing site conditions, site demolition activities, construction activities, and long-term operation.

Impact Analysis for Existing Site Conditions

As indicated above under subsection 4.9.1, based on a review of historical documents and regulatory records, and based on the site reconnaissance, McAlister concluded that there are no indications of RECs, CRECs, or HRECs in association with the Project site. Based on these findings, there are no conditions associated with the Project site's existing condition or surroundings that would create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. Accordingly, no impact would occur associated with the Project site's existing conditions.

Impact Analysis for Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the Project site during construction of the Project. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be used on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the Environmental Protection Agency (EPA) and DTSC, as well as the Santa Ana Regional Water Quality Control Board

(RWQCB) pertaining to water quality as discussed in EIR Subsection 4.10, *Hydrology and Water Quality*. With mandatory compliance with applicable hazardous materials regulations, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. A less-than-significant impact would occur.

Impact Analysis for Long-Term Operation

The Project would entail the future development of 206 single-family residential homes, two water quality basins, one park, and 37 open space lots. None of the proposed uses are associated with the transport, use, or disposal of significant quantities of hazardous materials. Household and other goods used by residential homes and retail uses that contain toxic substances are usually low in concentration and small in amount; therefore, there is no significant risk to humans or the environment from the use of such household goods. Residents are required to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility. Also, as of February 2006, fluorescent lamps, batteries, and mercury thermostats can no longer be disposed in the trash. Furthermore, the transport, use, and disposal of hazardous materials are fully regulated by the EPA, State, and/or the County of Riverside. With mandatory regulatory compliance, potential hazardous materials impacts associated with the Project's proposed uses under long-term operational conditions would be less than significant.

Threshold c.: ***Would the Project impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?***

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. In April 2023, the Riverside County Emergency Management Department (EMD) published a Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). The purpose of the LHMP is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and human-caused hazards. The LHMP describes the County's plans for a variety of potential hazards, ranging from wildfires to tornados. However, the LHMP does not identify any emergency management facilities on the Project site, does not identify any specific evacuation routes within the Project area, and does not identify any policies or requirements specific to the Project site or surrounding areas. Rather, the LHMP provides a series of policies to be enacted by the various agencies and jurisdictions within the County in the event of emergency situations. As noted by the LHMP, "[t]here has been no development within Riverside County unincorporated areas that have increased hazard risk or vulnerability since the previous plan was adopted in 2018" (Riverside EMD, 2023, p. 49) Therefore, it can be concluded that developments within Riverside County that adhere to the applicable provisions of County ordinances, including design measures related to emergency access, would not result in a conflict with the LHMP. The proposed Project would be required to comply with all applicable provisions of County policies and ordinances related to public safety, including but not limited to Ordinance No. 457, which establishes the County's building and fire protection regulations and includes measures requiring the provision of adequate emergency access and other measures to address fire hazard safety. During construction and long-term operation of the Project, adequate emergency access for emergency vehicles would be required to be maintained along public streets that abut the Project site. Furthermore, improvements planned as part of the Project are not anticipated to adversely affect traffic

operations in the local area. As part of the County's discretionary review process, Riverside County reviewed the Project's application materials to ensure that appropriate emergency ingress and egress would be available to and from each portion of the Project site and that circulation on each portion of the Project site was adequate for emergency vehicles. There are no components of the proposed Project with the potential to conflict with the County's LHMP. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.

Threshold d.:	***Would the Project 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 one-quarter mile of the Project site. The nearest public school to the Project site is the Lake Matthews Elementary School, located approximately 0.6-mile west of the Project site. As described above under the analysis for Thresholds a. and b., the use of and transport of hazardous substances or materials to and from the Project site during construction and long-term operational activities would be required to comply with applicable federal, State, and local regulations that would preclude substantial public safety hazards. Furthermore, the residential, park, detention basin, and open space land uses proposed as part of the Project are not associated with the generation, handling, or use of hazardous or acutely hazardous materials. Accordingly, there would be no potential for existing or proposed schools located within one-quarter mile of the Project site to be exposed to substantial safety hazards associated with emission, handling, or the routine transport of hazardous substances or materials to-and-from the Project site, and impacts would be less than significant.

Threshold e.:	***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 it create a significant hazard to the public or the environment?***

The Phase I ESA prepared for the Project site (*Technical Appendix H*) included a review of regulatory databases, and determined that the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (McAlister, 2024, p. 17). As such, the Project would not create a significant hazard to the public or the environment due to the Project site's inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and no impact would occur.

Threshold f:	***Would the Project result in an inconsistency with an Airport Master Plan?***
Threshold g:	***Would the Project require review by the Airport Land Use Commission?***
Threshold h:	***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?***

The Project site and the Project's off-site improvement areas are not located within the boundaries of any Airport Master Plans, and no impact due to an inconsistency with an Airport Master Plan would occur. As previously indicated, the closest public airport is the Riverside Municipal Airport, which is located approximately 5.4 miles north of the Project site. The Project site is located outside of the compatibility zones

for the Riverside Municipal Airport. (RCIT, n.d.) The Project site also is not located within the Airport Influence Area (AIA) or compatibility zones for any other airports. As such, the Project would not require review by the Airport Land Use Commission (ALUC). Additionally, due to the distance between the Project site and the Riverside Municipal Airport, the Project would not result in a safety hazard for people residing or working in the Project area. Accordingly, impacts due to public airport-related hazards would be less than significant.

Threshold i.: ***For a project within the vicinity of a private airstrip, or heliport, would the Project result in a safety hazard for people residing or working in the project area?***

There are no private airstrips or heliports within a 10-mile radius of the Project site, and the Project does not include any airport-related components (Google Earth, 2024). Accordingly, the Project would not result in a safety hazard for people residing or working in the Project area due to private airstrips or heliports, and no impact would occur.

4.9.5 Cumulative Impact Analysis

Because the issue of hazards and hazardous materials tends to be site-specific in nature, the cumulative study area includes existing and planned developments within a one-mile radius of each Project site. A one-mile radius is appropriate because that is the standard distance used in regulatory database searches of properties that may generate or store toxic materials.

As discussed under the analysis of Thresholds a. and b., under existing conditions the Project site does not contain any RECs, CRECs, or HRECs that could create a significant hazard to the public or the environment. There are no conditions associated with the Project's construction or operations that would result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or conditions that could 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. Accordingly, cumulatively-considerable impacts would be less than significant.

The areas to be physically impacted by the Project do not contain any emergency facilities nor would the Project impact an emergency evacuation route. Other cumulative developments would be reviewed by the County of Riverside to ensure no interference with emergency access and evacuation routes would occur. Accordingly, the Project has no potential to result in cumulatively-considerable impacts associated with emergency evacuation plans or evacuation routes, and impacts would be less than significant.

The Project site is located approximately 0.6-mile from the nearest school. Additionally, as discussed under Threshold d., the use of and transport of hazardous substances or materials to and from the Project site during construction and long-term operational activities would be required to comply with applicable federal, State, and local regulations that would preclude substantial public safety hazards. As such, cumulatively-considerable hazardous materials impacts to nearby schools would be less than significant.

The Project site is located outside of the compatibility zones for the Riverside Municipal Airport, indicating that the Project site is not subject to airport-related hazards and has no potential to conflict with an Airport Master Plan. Accordingly, cumulatively-considerable impacts due to an inconsistency with an Airport Master Plan would not occur. Additionally, impacts due to a conflict with an ALUCP would be less-than-cumulatively considerable.

There are no private airports or heliports within a 10-mile radius of the Project site; thus, cumulatively-considerable impacts would not occur.

4.9.6 Significance of Impacts Before Mitigation

Threshold a. and b.: Less-than-Significant Impact. There are known hazardous materials located within areas that would be physically impacted by the Project. During Project construction and operation, mandatory compliance with federal, State, and local regulations would ensure that the Project as proposed would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.

Threshold c: No Impact. The proposed Project would be required to comply with all applicable provisions of County policies and ordinances related to public safety, including but not limited to Ordinance No. 457, which establishes the County's building and fire protection regulations and includes measures requiring the provision of adequate emergency access and other measures to address fire hazard safety. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. There are no components of the proposed Project with the potential to conflict with the County's LHMP. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.

Threshold d: Less-than-Significant Impact. There are no existing or planned schools within one-quarter mile of the Project site. The nearest school the Project site is the Lake Matthews Elementary School, located approximately 0.6-mile west of the Project site. With mandatory regulatory compliance, 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, and impacts would be less than significant.

Threshold e: No Impact. The analysis conducted by McAlister included a review of regulatory databases, and determined that the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, the Project would not create a significant hazard to the public or the environment due to the Project site's inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and no impact would occur.

Thresholds f., g., and h.: Less-than-Significant Impact. The Project site is not located within two miles of a public airport or within an airport land use plan, and there are no components of the proposed Project that would affect airport operations. The closest airport is the Riverside Municipal Airport located roughly 5.4 miles north of the Project site. The Project site is located outside of the compatibility zones for the Riverside Municipal Airport, indicating that the Project site is not subject to airport-related hazards. Therefore, the

Project would not result in an inconsistency with an Airport Master Plan, would not require review by the Airport Land Use Commission, and would not result in a safety hazard for people residing or working in the Project area. Impacts would be less than significant.

Threshold i: No Impact. There are no active private airstrips or heliports within a 10-mile radius of the Project site. Accordingly, the Project would not result in a safety hazard for people residing or working in the Project area due to private airstrips or heliports, and no impact would occur.

4.9.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- All future contracts with construction contractors shall comply with all applicable regulations and requirements promulgated by the federal Occupational Safety and Health Administration (OSHA).

- The Project shall comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility.

- The Project shall comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.

Mitigation

The Project would not result in any impacts due to hazards and hazardous materials; therefore, mitigation measures are not required.

4.10 HYDROLOGY AND WATER QUALITY

The following analysis is based on several technical studies prepared by Adkan Engineers (herein, "Adkan"). The first report addresses the Project's proposed drainage system, and is entitled, *Preliminary Hydrology Study, Tentative Tract Map No. 38927*, is dated December 10, 2025, and is included as EIR *Technical Appendix I1* (Adkan, 2025a). The second report addresses the Project's potential impacts to water quality, is entitled, *Project Specific Water Quality Management Plan, Highland Grove IV Tract 38927*, is dated September 10, 2025, and is included as EIR *Technical Appendix I2* (Adkan, 2025b). The third report addresses the Project's potential to result in flood hazards to downstream properties, is entitled, *Preliminary HEC-RAS Analysis, Tentative Tract Map No. 38927*, is dated September 16, 2025, and is included as EIR *Technical Appendix I3* (Adkan, 2025c). Refer to Section 7.0*, References*, for a complete list of these and other reference sources.

4.10.1 EXISTING CONDITIONS

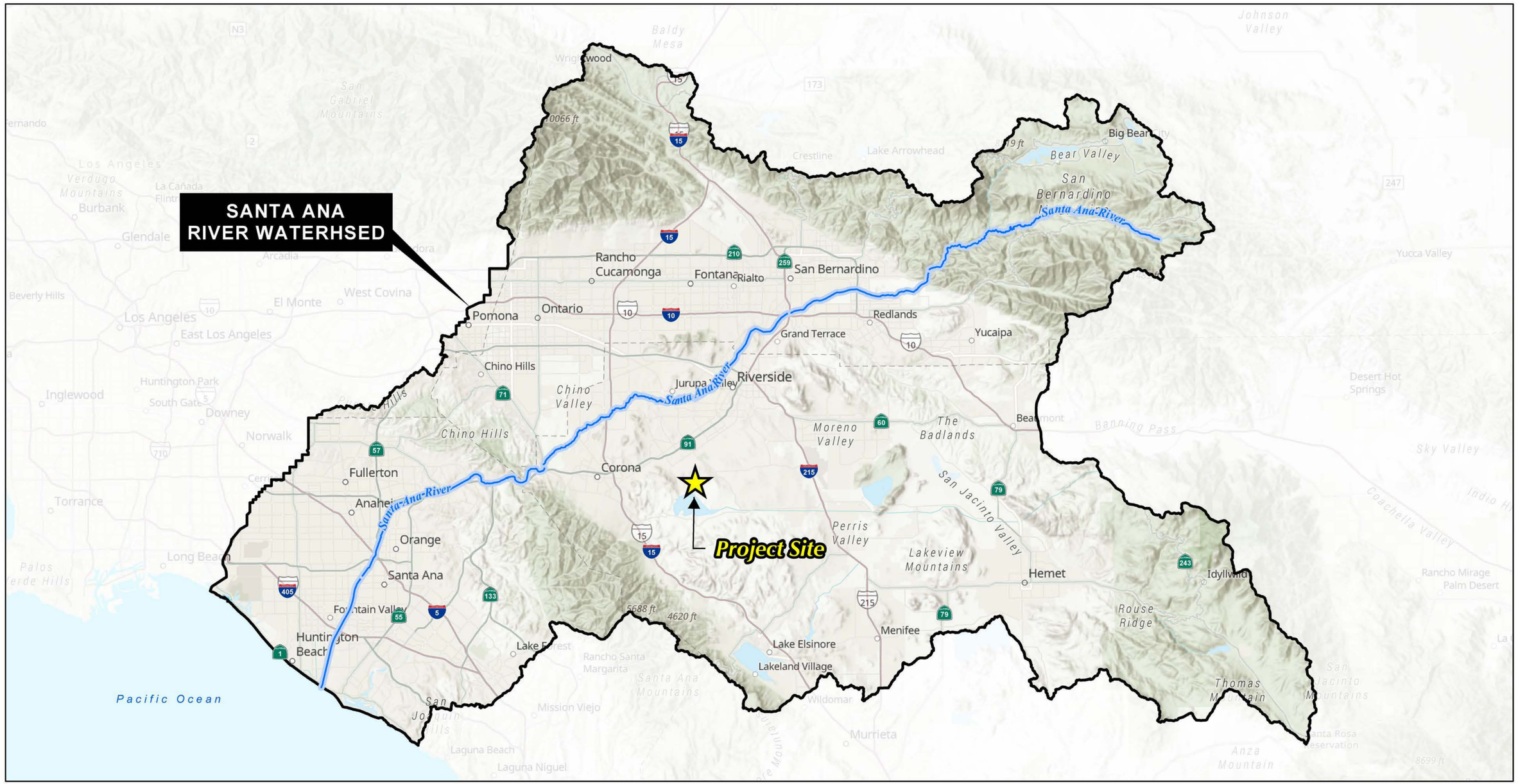
A. Regional Hydrology

The Project site is located within the Santa Ana River Watershed, which drains a 2,840 square-mile area and is the principal surface flow water body within the region. The Santa Ana River flows over 100 miles and drains the largest coastal stream system in Southern California. It discharges into the Pacific Ocean at the City of Huntington Beach. The total stream length of the Santa Ana River and its major tributaries is about 700 miles. (SAWPA, 2019, p. 4-1). The Project site's location within the Santa Ana River Watershed is depicted on Figure 4.10-1, *Santa Ana River Watershed Map*. The Project site is located within the Arlington Hydrologic Subarea of the Middle Santa Ana Hydrologic Area Split of the Santa Ana River Hydrologic Unit (RWQCB, 2025, p. 4-33).

B. Site Hydrology

The Project site comprises an irregular shaped property consisting of rolling hills previously utilized for the cultivation of citrus fruit. Under existing conditions, the Project site is bisected by a ridgeline running from east to west close to the center of the property assemblage. The ridgeline can also be defined by an unpaved road seen within aerial imagery providing a means of maintenance access for an existing reservoir owned by Western Municipal Water District (WMWD) to the east of the Project site. From the ridge line the existing flows travel north and south into two natural drainage courses that bound the north and south edges of the Project site. The northerly tributary flows from east to west along the northerly project boundary, the southerly tributary flows from east to west along the westerly Project boundary and then bisects a small portion of the project site flowing from the south to the northeast corner of the site. The existing drainage courses have been deeply incised and defined throughout time, and in many locations exhibit exposed bedrock limiting the potential for future erosion. Each of these two natural drainage courses ultimately convey flows northwesterly to a point of confluence at the most northwest corner of the project site before being conveyed northerly beyond the Project site through a development to the north of the Project site, known as Tramonte, and finally into the Harrison Dam facility. (Adkan, 2025a, p. 6)

The Harrison Dam, a Riverside County Flood Control and Water Conservation District (RCFCWCD) maintained facility, was constructed based on the development of the upstream tributaries to protect the downstream properties located in the City of Riverside. The Dam was designed to detain the watershed of the



Source(s): Esri, SAWPA (2023)

0 2 4 8 Miles

Figure 4.10-1

Santa Ana River Watershed Map

Project site, including the upstream properties. (Adkan, 2025a, p. 6)

From the Harrison Dam facility existing storm flows are conveyed through the City of Riverside and ultimately into the Arlington Channel owned and maintained by the RCFCWCD. The Arlington Channel is part of a drainage system funded by Area Drainage Plan fees known at the Southwest Area Drainage Plan.

The results of the existing synthetic unit method hydrology at the confluence of the two drainage courses at the boundary outfall is shown in Table 4.10-1, *Existing Synthetic Unit Hydrograph Method Flow Rates*. The node locations within the analysis were placed in manner that direct compares to the proposed unit method hydrology. Existing synthetic unit method hydrology calculations can be found in Appendix "A" of the Project's Hydrology Study (*Technical Appendix I1*).

Table 4.10-1 Existing Synthetic Unit Hydrograph Method Flow Rates

Drainage Area	Node No.	100 Year 3 Hour Flow Rate	100-Year 6 Hour Flow Rate
Culvert 1	15	459.2 CFS	478.6 CFS
Culvert 2	16	590.7 CFS	632.5 CFS
Culvert 3	30	373.8 CFS	372.4 CFS
Boundary Outfall	31	1017.2 CFS	1079.5 CFS

(Adkan, 2025a, Table 2-1)

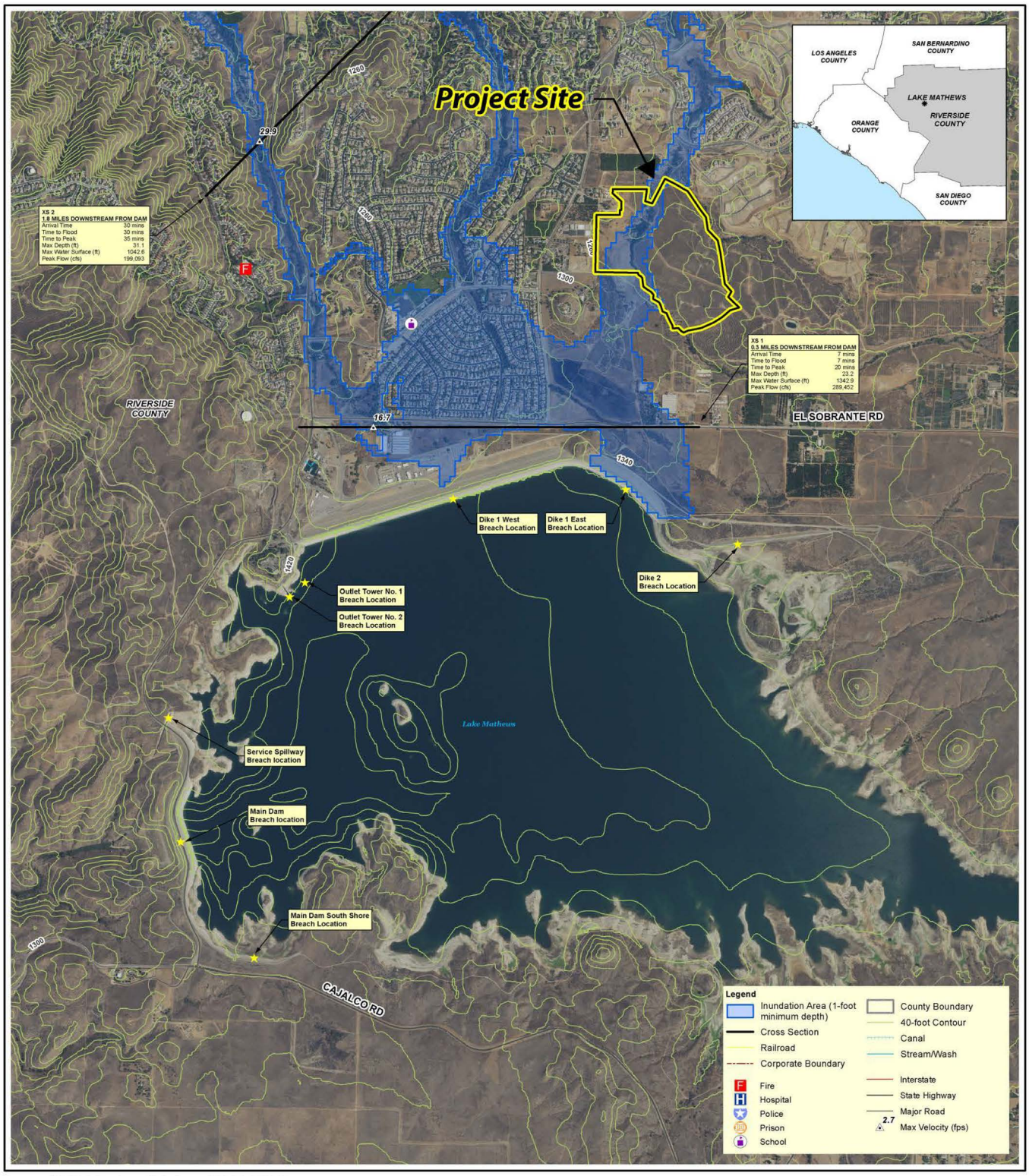
C. *Flood Hazards and Dam Inundation*

According to mapping information available from the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06065C1385G, the Project site is identified within Flood Zone X (unshaded), which includes "Areas determined to be outside the 0.2% annual chance floodplain." As such, the Project site is not subject to flood hazards under existing conditions. (FEMA, 2008)

Although the Project site is not subject to flood hazards, the Project site is located within the dam inundation zone for the Lake Mathews Dam. Specifically, according to the Dam Breach Inundation Map Web Publisher produced by the California Division of Safety of Dams (DSOD), the westernmost portions of the Project site could be subject to inundation in the event that Dike 1 (Saddle Dam 1) were to fail, as depicted on Figure 4.10-2, *DWR Dam Breach Inundation Map – Saddle Dam 1 (Dike 1)*. It should be noted that the Project site only would be subject to inundation in the event of a failure at Dike 1 (Saddle Dam 1); mapping information available from DSOD shows that any other breaches at the dam, such as at the main dam (i.e., along the western side of the lake), Saddle Dam 2, Saddle Dam 3, Spillway 1, Outlet 1, and Outlet 2, would not result in inundation of the Project site. (DSOD, n.d.)

D. *Water Quality*

The Project site is located within the jurisdiction of the Santa Ana Basin Regional Water Quality Control Board (RWQCB). As indicated in Table 4.10-2, *Identification of Receiving Waters*, the receiving waters of flows from the Project site include Temescal Creek – Reach 1 (via Arlington Channel), Santa Ana River – Reach 3, and Prado Basin. Of these waters, Temescal Creek – Reach 1 is not listed as "impaired" in accordance with



Source(s): First Carbon Solutions (08-21-2024)

Figure 4.10-2

DWR Dam Breach Inundation Map – Saddle Dam 1 (Dike 1)

Not to Scale

the Clean Water Act (CWA) 303(d) list regulations. Santa Ana River – Reach 3 is impaired by copper, lead, and indicator bacteria. The Prado Basin is impaired due to Ph levels. (Adkan, 2025b, Table A.1)

Table 4.10-2 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
On-site Storm Drain System	N/A	N/A	Start
Temescal Creek – Reach 1 Via Arlington Channel	N/A	N/A	7.0 mi
Santa Ana River – Reach 3	Copper, Lead, Indicator Bacteria	Warm Fresh Water Habitat, Water Contact Recreation	RARE
Prado Basin	Ph	Warm Fresh Water Habitat	RARE

Additional Downstream Reaches to Pacific Ocean (outside of "proximate" project influence)
*Note: Project drains to Temescal Creek Reach 1B to Temescal Creek Reach 1A.
(Adkan, 2025b, Table A.1)

E. Groundwater

According to mapping information available from the California Department of Water Resources (DWR), the Project site is not underlain by a groundwater basin, although runoff from the Project site is conveyed northerly downstream where it ultimately does infiltrate into the Upper Santa Ana Valley – Riverside-Arlington Groundwater Basin (RAGB). In January 2019, DWR released the Sustainable Groundwater Management Act 2018 Basin Prioritization report. This report outlines the process involved with reassessing the priority of the groundwater basins in California following the 2016 basin boundary modifications. Through this process, the Arlington Basin was designated as very low-priority, and therefore not requiring a Groundwater Sustainability Plan (GSP). Although the Western Municipal Water District (WMWD) is currently working on preparing the Arlington Basin Groundwater Sustainability Plan, under existing conditions there is no adopted GSP for the RAGB. (WMWD, n.d.)

As documented by the Project's geotechnical investigation (EIR *Technical Appendix F*), groundwater was not encountered in any of the exploratory borings or test pits during the current or prior geotechnical investigations of the Project site. Depth to ground water at the site is anticipated to be greater than 100 feet below ground surface (bgs). (Leighton, 2023, p. 7)

4.10.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations related to hydrology and water quality.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2024b)

2. Federal Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration (FIMA) within the Federal Emergency Management Agency (FEMA) is responsible for administering the NFIP and administering programs that provide assistance for mitigating future damages from natural hazards. (FEMA, 2023)

3. Executive Order 11988 – Floodplain Management

Executive Order 11988 requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions:

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements; and
- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. (FEMA, 2021)

B. State Regulations

1. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management. (SWRCB, 2014)

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014)

2. California Water Code

The California Water Code is the principle state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW.

Surface water quality is the responsibility of the Regional Water Quality Control Board (RWQCB); water supply and wastewater treatment agencies; and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water.

3. California Toxics Rule (CTR)

The California Toxics Rule (CTR) fills gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR criteria are similar to those published in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016, pp. 14-15)

4. CDFG Code Section 1600 et seq. (Lake- or Streambed Alteration Agreement Program)

Fish and Game Code § 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream, or lake. (CDFW, n.d)

It should be noted that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. (CDFW, n.d)

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, n.d)

5. Watershed Management Initiative (WMI)

The State and Regional Water Boards are currently focused on looking at entire watersheds when addressing water pollution. The Water Boards adopted the Watershed Management Initiative (WMI) to further their goals. The WMI establishes a broad framework overlying the numerous federal and state mandated priorities. As such, the WMI helps the Water Boards achieve water resource protection, enhancement and restoration while balancing economic and environmental impacts. (SWRCB, 2013) The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds. Involve stakeholders to develop solutions.
- Better coordinate point source and nonpoint source regulatory efforts. Establish working relationships between staff from different programs.
- Better coordinate local, state, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups. (SWRCB, 2013)

6. Sustainable Groundwater Management Act (SGMA)

The 2014 Sustainable Groundwater Management Act (SGMA) 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. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. The DWR categorizes the priority of groundwater basins. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. (DWR, n.d.) (DWR, n.d.)

7. SWRCB Trash Amendments

On April 7, 2015, the SWRCB adopted an amendment to control trash that applies to the Water Quality Control Plan for Ocean Waters of California and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. They are collectively referred to as the “Trash Amendments.” The Trash

Amendments do the following: (a) establish a narrative water quality objective for trash, (b) corresponding applicability, (c) establish a prohibition on the discharge of trash, (d) provide implementation requirements for permitted storm water and other discharges, (e) set a time schedule for compliance, and (f) provide a framework for monitoring and reporting requirements. The Trash Amendments apply to all surface waters of California and include a land-use-based compliance approach to focus trash controls on areas with high trash-generation rates. Areas such as high density residential, industrial, commercial, mixed urban, and public transportation stations are considered priority land uses. The Santa Ana RWQCB implements the statewide Trash Amendments through Water Code Section 13383 Orders that contain region specific requirements. There are two compliance tracks:

- Track 1. Permittees must install, operate, and maintain a network of certified full capture systems in storm drains that capture runoff from priority land uses.

- Track 2. Permittees must implement a plan with a combination of full capture systems, multi-benefit projects, institutional controls, and/or other treatment methods that have the same effectiveness as Track 1 methods. (SWRCB, 2022)

The Project would be required to comply with the latest State Trash Amendments and the MS4 Permit by installing the appropriate Full Capture System or equivalent.

4.10.3 Basis for Determining Significance

Section IX of Appendix G to the CEQA Guidelines addresses typical adverse effects to hydrology and water quality, and includes the following threshold questions to evaluate the Project's impacts on hydrology and water quality (OPR, 2018a):

- Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

- Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

- 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 through the addition of impervious surfaces, in a manner which would:
  - Result in substantial erosion or siltation on or off site?
  - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site? or
  - 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?

- In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

- Would the project conflict with or otherwise obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section X of Appendix G to the CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact to hydrology and water quality if construction and/or operation of the Project would:

a. *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;*

b. *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such 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 or through the addition of impervious surfaces;*

d. *Result in substantial erosion or siltation on-site or off-site;*

e. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site;*

f. *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;*

g. *Impede or redirect flood flows;*

h. *In flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation; or*

i. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts on hydrology and water quality.

4.10.4 IMPACT ANALYSIS

Threshold a.:	***Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***
Threshold b.:	***Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***
Threshold i.:	***Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

Potable water service to the Project site would be provided by the WMWD and the Project would not involve direct groundwater extraction via existing or proposed groundwater wells. Additionally, although the Project would result in an increase in impervious surfaces on the site, the total amount of runoff from the site would be similar to existing conditions, and all runoff would be conveyed to downstream facilities where groundwater infiltration would continue to occur (e.g., at the Harrison Dam). Although the WMWD relies in part on groundwater extracted from the RAGB, the analysis of Threshold b. in EIR Subsection 4.20, *Utilities and Service Systems*, demonstrates that the WMWD would have adequate water supplies to serve the Project and other cumulative developments through at least 2045 during various drought conditions, including water supplies from groundwater resources. Thus, the Project would not substantially decrease 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.

As previously noted, there is no adopted sustainable groundwater management plan in effect for the RAGB. As such, the Project has no potential to conflict with or obstruct implementation of a sustainable groundwater management plan, and no impact would occur (WMWD, n.d.).

The Project site is located within the jurisdiction of the Santa Ana RWQCB. Water quality information for the Santa Ana River watershed is contained in the Santa Ana Region Basin Plan ("Basin Plan"), as most recently updated in April 2025 (RWQCB, 2025). Provided below is an analysis of the Project's consistency with the Basin Plan.

Santa Ana Region Basin Plan

The California Porter-Cologne Water Quality Control Act (§ 13000 "Water Quality") et seq., of the California Water Code), and the CWA require that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is located within the jurisdiction of the Santa Ana RWQCB. Water quality information for the Santa Ana River Watershed is contained in the Santa Ana Region Basin Plan (as most recently updated in April 2025). This document is herein incorporated by reference and is available for public review at the Santa Ana RWQCB office located at 3737 Main Street, Suite 500, Riverside, CA 92501-3348. (RWQCB, 2025)

The CWA requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards are

placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Project site resides within the Santa Ana Watershed and receiving waters for the property's drainage are Temescal Creek – Reach 1 (via Arlington Channel), Santa Ana River – Reach 3, and Prado Basin. Of these waters, Temescal Creek – Reach 1 is not listed as "impaired" in accordance with the Clean Water Act (CWA) 303(d) list regulations. Santa Ana River – Reach 3 is impaired by copper, lead, and indicator bacteria. The Prado Basin is impaired due to Ph levels.

Specific provision of the CWA applicable to the proposed Project is CWA Section 402, which authorizes the NPDES permit program that covers point sources of pollution discharging to a water body. The NPDES program also requires operators of construction sites one acre or larger to prepare a Stormwater Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit.

Provided below is a discussion of the Project's potential to conflict with the Santa Ana Region Basin Plan during both construction and long-term operation.

Construction-Related Water Quality

Construction of the proposed Project would involve clearing, grading, paving, utility installation, building construction, and landscaping activities, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Santa Ana RWQCB and Riverside County, the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area. In addition, the Project would be required to comply with the RWQCB's Basin Plan. Compliance with the NPDES permit and the Basin Plan involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the proposed Project does not violate any water quality standards or waste discharge requirements during construction activities. Therefore, with mandatory adherence to the future required SWPPP, runoff associated with Project-related construction activities would not conflict with the Santa Ana Region Basin Plan requirements, and impacts would be less than significant.

Operational Water Quality Impacts

As noted above, receiving waters for the property's drainage are Temescal Creek – Reach 1 (via Arlington Channel), Santa Ana River – Reach 3, and Prado Basin. Of these waters, Temescal Creek – Reach 1 is not listed as "impaired" in accordance with the Clean Water Act (CWA) 303(d) list regulations. Santa Ana River – Reach 3 is impaired by copper, lead, and indicator bacteria. The Prado Basin is impaired due to Ph levels. In

order to assess the Project's potential for water quality impacts, Project-specific Hydrology and Water Quality Technical Appendices were prepared for the Project and are included as *Technical Appendices I1* and *I2*, respectively.

To meet NPDES requirements, the Project's proposed storm drain system would be designed to route first flush runoff to one of two extended detention basins proposed in the western and northeastern portions of the Project site. The Project has been designed to mimic the pre-development hydrograph with the post-development hydrograph. The Project site is divided into two distinct drainage tributaries separated into a westerly and easterly drainage area. The portion of the Project site lying westerly of the existing tributary bisecting the Project site from the south to the north would be conveyed into one extended detention basin on the west side of the Project which then would be conveyed northerly to a point of confluence at the northwest corner of the project boundary. The portion of the Project site lying easterly of the same bisecting tributary would conveyed into another extended detention basin located at near the northeast corner of the Project site which then would be conveyed northerly to a point of confluence at the same northeast corner of the Project site. This northeast location is the Project's single point of flows leaving from the Project site. (Adkan, 2025a, p. 7; Adkan, 2025b, Table E.1)

The Project site exhibits dense soil conditions and contains large areas of granitic bedrock, which inhibits the Project site's feasibility for infiltration. As such, excess volume generated by the additional impervious area that would result from the Project would be released downstream, as these flows cannot be contained onsite. Storm flows from the developed areas would be detained within the proposed Extended Detention Basins (EDBs), which would reduce peak runoff to a rate that would not exceed the pre-development flow rate for the 2-,5-,10-, and 100-year storm events for the 1-,3-,6- and 24-year hour durations. Furthermore, downstream facilities such as the Harrison Dam and Arlington Channel have adequate capacity to convey the attenuated flows without resulting in off-site flooding. (Adkan, 2025b, pp. 12, 16)

It should be noted that biotreatment is being utilized in lieu of bioretention because of the overall acreage of the Project site. Bioretention typically would be utilized in areas where infiltration is not feasible, such as the Project site; however, bioretention Drainage Management Areas (DMAs) are limited to 10 acres for their effectivity. Additionally, the Project's Hydrologic Conditions of Concern (HCOCs) require mitigation of the 100 year storm events (1, 3, 6, and 24 hour) as required by the RCFCWCD to eliminate any potential impacts to the downstream Harrison Dam. Utilizing a bioretention system as a detention facility for a project with a large tributary drainage acreage requires ponding in excess of 6" and results in increased maintenance and concerns of damage to the bioretention facilities given the large storm volumes and flow rates expected. Accordingly, EDBs utilizing biotreatment are being proposed for this Project as the most effective Best Management Practice (BMP) available for treatment given the inability to infiltrate, having DMA's in excess of 10 acres, being able to utilize the BMP to mitigate the HCOC's, and to reduce the overall number of BMP's in turn reducing overall maintenance and repair costs burdened by Community Facilities District (CFD) for the perpetuity of the Project. The proposed drainage improvements and biotreatment have been designed to detain runoff and provide water quality treatment, and would reduce pollutants of concern in runoff leaving the Project site, such as bacterial indicators, metals, nutrients, pesticides, toxic organic compounds, sediments, trash/debris, and oil/grease (Adkan, 2025b, Table E.1 and p. 12)

Because all runoff generated on site would be appropriately treated prior to ultimate discharge into local area drainages, the proposed Project would not conflict with the Santa Ana Region Basin Plan, and impacts would therefore be less than significant.

Threshold c.:	***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 through the addition of impervious surfaces?***
Threshold f.:	***Would the Project 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?***

Please refer to the analysis of Thresholds a., b, and i. As indicated in the analysis, with implementation of the Project's proposed drainage system, the Project would not generate substantial additional sources of polluted runoff. Accordingly, impacts associated with water quality would be less than significant.

As previously shown on EIR Figure 3-4 (Tentative Tract Map No. 38927 Grading Plan), grading proposed as part of the Project would not substantially alter the existing topography of the Project site. Grading activities associated with the Project largely would be limited to the establishment of the on-site roadways and grading of proposed residential lots and the park site. Runoff generated within the developed portions of the Project site would be collected via a series of on-site catch basins and storm drain lines, which would convey runoff towards one of two proposed EDBs proposed in the northern portions of the Project site. Following biotreatment, all flows generated on the developed portions of the Project site, as well as runoff that is tributary to the developed portions of the Project site, would be discharged to the north towards an off-site tributary that conveys flows towards the Harrison Dam.

As part of the Project grading for Extended Detention Basin "B," a retaining wall is proposed to be constructed at the southeast corner of the embankment. As shown previously in the EIR, figure 3-10 depicts the location of the retaining wall. At this location the existing flows from Line "K" (Tract 36730) confluence with the on-site flows. Line "K" is a run-on location where existing flows are conveyed into the Project site as a result existing storm drain constructed as part of Tract 36730. As part of the flood plain analysis, there were backwater effects observed from the existing location of the run-on tributary which resulted in the retaining wall being within the flood plain limits. The existing flows from Line "K" would be collected by the proposed Project and diverted into Culvert No. 1, and there would no longer be flows tributary to the Project site at this location; however, backwater effects still would occur. Therefore, the retaining wall was placed as far as possible from the effective flow area established for Flood Plain Reach No. 1 and a ten-foot-wide grouted quarter ton rip-rap berm has also been proposed at the base of the retaining wall to further protect the retaining wall from experiencing any erosive velocities during storm events. The extra width on the rip rap berm will also allow the rip-rap to launch should there be any additional scour experienced at this location. It was noted by the soils engineer that granitic bedrock was observed in a majority of the watercourses and was not susceptible to further erosion.

There are three culvert crossings being proposed on site as part of the Project, as depicted on Figure 3-9. One of these culvert crossings would be located in the northerly existing drainage course and two of the culvert

crossings would be located where the southerly existing drainage bisects the westerly portion of the Project site from south to north. The northerly water course crossing is proposed as a single 72" (Culvert 3) reinforced concrete pipe (RCP) culvert. The two other culvert crossing are proposed as dual 72" reinforced concrete pipe culverts (Culvert 1 and 2). These culvert crossings would allow the Project to provide access and utilities over the existing drainage courses. The culverts have been designed in accordance with the California Department of Fish and Wildlife (CDFW) requirements to have a minimum size of 72" for the purposes of providing a downstream and upstream connection for habitat and wildlife within the drainage corridor. This results in culverts larger than necessary to convey the actual flow experience by a 100-year storm event. The culverts also would contain the necessary headwalls, cutoff walls, and rip-rap energy dissipaters to reduce the storm flow velocities to a non-erosive level protecting the downstream drainage courses.

Table 4.10-3, Synthetic Unit Method Flow Rates – Proposed Conditions (without Attenuation), presents a summary of the runoff volumes for the Project site at the northwest corner where flows would confluence before being discharged off site without consideration of the Project's proposed stormwater attenuation measures. It should be noted that the proposed synthetic method flow rates do not include the mitigation of the increased storm water provided by the on-site detention basins, which are further discussed below. (Adkan, 2025a, p. 9)

Table 4.10-3 Synthetic Unit Method Flow Rates – Proposed Conditions (without Attenuation)

Drainage Area	Node No.	100-Year 3-Hour Flow Rate	100-Year 6-Hour Flow Rate
Culvert 1	13	793.3 cfs	757.7 cfs
Culvert 2	15	764.5 cfs	785.1
Culvert 3	30	446.0 cfs	444.1
Boundary Outfall	31	1,227.6 cfs	1,245.2 cfs

(Adkan, 2025a, Table 2-2)

However, the proposed Project has been designed to include two extended detention basins (Extended Detention Basins A and B). The proposed EDBs have been designed with the capacity to mitigate the 100-year storm events to the approximate equivalent of the pre-development flow rates at the outlets of the EDBs. As shown in Table 4.10-4, *Extended Detention Basin A Storm Event Summary*, and Table 4.10-5, *Extended Detention Basin B Storm Event Summary*, the proposed EDBs would attenuate peak storm flows to below existing peak storm flows for all storm event types, including the 2-, 5-, 10-, and 100-year storm events for all storm durations. As such, implementation of the proposed Project would not result in a substantial increase in peak runoff from the Project site and therefore the Project would not result in the alteration of any downstream receiving waters. Additionally, because existing drainage facilities downstream are adequately sized to accommodate peak runoff from the Project site and surrounding areas under existing conditions, and because peak runoff from the Project site would be reduced with development of the Project site as proposed, the Project would not contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant.

Table 4.10-4 Extended Detention Basin A Storm Event Summary

Storm Event	Existing		Proposed		Routed			Ex (cfs) +10% Difference Max
	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Depth (ft)	
2yr1hr	1.673	68.2	2.115	52.2	2.101	1.3	6.24	-98.1%
2yr3hr	1.509	32.1	2.826	31.0	2.812	1.7	7.39	-94.7%
2yr6hr	1.612	26.7	3.692	27.3	3.686	2.0	8.62	-92.5%
2yr24hr	1.158	2.4	5.686	9.1	5.673	2.3	9.69	-4.2%
5yr1hr	2.785	100.7	3.140	76.4	3.127	1.9	8.04	-98.1%
5yr3hr	2.723	50.1	4.060	46.3	4.047	2.2	9.34	-95.6%
5yr6hr	3.193	44.8	5.513	43.7	5.500	2.6	11.10	-94.2%
5yr24hr	2.427	9.9	8.054	12.8	8.041	9.6	11.44	-3.0%
10yr1hr	4.496	135.2	3.970	95.0	3.957	2.2	9.32	-98.4%
10yr3hr	5.972	73.5	5.096	58.3	5.082	2.5	10.80	-96.6%
10yr6hr	7.537	68.6	5.513	43.7	7.037	48.1	11.65	-29.9%
10yr24hr	8.791	24.3	9.953	17.9	9.940	16.6	11.48	-31.7%
100yr1hr	7.470	217.1	6.914	157.4	6.900	50.3	11.66	-76.8%
100yr3hr	10.416	118.5	8.967	98.6	8.954	95.9	11.91	-19.1%
100yr6hr	14.554	114.6	12.673	99.3	12.660	94.5	11.90	-17.5%
100yr24hr	18.056	43.7	17.988	36.7	17.974	36.5	11.59	-16.5%

(Adkan, 2025a, Table 3-1)

Table 4.10-5 Extended Detention Basin B Storm Event Summary

Storm Event	Existing		Proposed		Routed			Ex (cfs) +10% Difference Max
	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Volume (ac.ft.)	cfs	Depth (ft)	
2yr1hr	0.422	20.3	0.534	15.6	0.497	0.4	2.79	-98.0%
2yr3hr	0.381	9.3	0.713	8.5	0.677	0.5	3.19	-94.6%
2yr6hr	0.407	8.1	0.933	7.4	0.897	0.5	3.62	-93.8%
2yr24hr	0.292	0.6	1.434	2.3	1.398	0.6	3.97	0.0%
5yr1hr	0.703	29.7	0.792	22.7	0.757	0.5	3.46	-98.3%
5yr3hr	0.687	14.2	1.024	12.7	0.988	0.6	3.95	-95.8%
5yr6hr	0.805	13.4	1.390	11.8	1.354	0.6	4.64	-95.5%
5yr24hr	0.612	2.6	2.031	3.3	1.995	0.7	5.01	-73.1%
10yr1hr	1.134	39.3	1.002	28.2	0.966	0.6	3.97	-98.5%
10yr3hr	1.506	20.4	1.285	16.0	1.249	0.6	4.54	-97.1%
10yr6hr	1.901	19.8	1.778	15.2	1.742	0.7	5.41	-96.5%
10yr24hr	2.217	6.2	2.510	4.6	2.474	0.8	5.79	-87.1%
100yr1hr	1.885	62.9	1.744	46.4	1.709	0.7	5.58	-98.9%
100yr3hr	2.627	32.8	2.262	26.8	2.226	1.5	6.39	-95.4%
100yr6hr	3.671	32.9	3.196	26.5	3.160	2.4	7.69	-92.7%
100yr24hr	4.553	11.2	4.536	9.4	4.500	6.2	7.76	-44.6%

(Adkan, 2025a, Table 3-2)

Threshold d.: ***Would the Project result in substantial erosion or siltation on-site or off-site?***

A. Construction-Related Erosion Impacts

As shown on EIR Figure 3-4 (Tentative Tract Map No. 38927 Grading Plan), the Project has been designed to generally maintain the existing topography of the site, with minor modifications as necessary to accommodate site development and proposed drainage conditions. Nonetheless, construction of the proposed Project would

involve substantial ground disturbance during clearing and grading of the site. In addition, on-site erosion could occur if graded slopes are not stabilized prior to ultimate development and/or landscaping. The proposed grading activities would generate fair amounts of silt which could be carried off-site during a heavy rainfall event. Should such an event occur in the absence of any preventative measures to contain silt and other soils on-site, erosion and/or siltation downstream could result.

However, pursuant to requirements of the SWRCB and the Santa Ana River Basin Plan, the Project Applicant would be required to obtain a NPDES permit for construction activities on-site. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction related activities. The SWPPP would specify BMPs to minimize the potential for erosion and siltation to occur and would include specific Project site measures to address the potential for the caving in of temporary excavations. Typical BMPs that are implemented at construction sites to protect water quality include the implementation of straw bale barriers, plastic sheeting/erosion control blankets, and outlet protection measures. With mandatory adherence to the SWPPP requirements, effects associated with construction-related erosion, siltation, water quality, and flooding on downstream water sources and flood control systems would be maintained at a level below significance.

B. Post-Development Erosion Impacts

Implementation of the proposed Project would result in the conversion of the site from undeveloped land to that of a large-lot residential community. With development of the Project site, portions of the Project site, including proposed roadways and residential building pads, would consist of impervious surfaces, with large portions of the Project site, including proposed open space areas and the portions of individual lots that would not be developed with residential homes, consisting of pervious surfaces. Specifically, approximately 29.9 acres of the Project site would consist of impervious surfaces, with the remaining 81.7 acres of the Project site consisting of pervious surfaces (including pervious surfaces on undeveloped portions of individual residential lots). Thus, as compared to existing conditions, the potential for erosion hazards on site would be decreased due to the introduction of impervious surface areas. The remaining areas on site containing pervious surfaces either would be landscaped as part of the Project, would continue to contain natural vegetation, or would not be subject to erosion due to the presence of bedrock, all of which would serve to preclude erosion hazards on site. As such, long-term erosion impacts on site would be less than significant.

However, due to the increase in impervious surfaces on site, runoff from the site following development has the potential to contribute to erosion hazards downstream. As previously discussed under Thresholds c. and f., peak flows from the Project site would be attenuated by the Project's proposed extended detention basins, which would ensure that peak storm flows from the site do not substantially exceed existing peak flows such that downstream erosion could occur or be exacerbated. Therefore, the Project would not result in a substantial increase in peak runoff from the site, and therefore runoff from the Project site would not cause or contribute to any increased erosion hazards downstream. Impacts would be less than significant.

Threshold e.: ***Would the Project substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?***

Threshold g.: ***Would the Project impede or redirect flood flows?***

According to mapping information available from FEMA's FIRM No. 06065C1385G, the Project site is identified within Flood Zone X (unshaded), which includes "Areas determined to be outside the 0.2% annual chance floodplain." As such, the Project site is not subject to flood hazards under existing conditions, and the Project would have no potential to impede or redirect flood plains. No impact would occur. (FEMA, 2008)

The Project's proposed drainage system has been designed to preclude the potential for flooding hazards on site, in accordance with standard County requirements. As previously indicated under the analysis of Thresholds c. and f., and as shown in Table 4.10-3, with implementation of the Project's proposed drainage system the peak runoff from the Project site would be reduced in comparison to the peak rate of runoff that occurs under existing conditions. As such, the Project would not substantially increase the rate of surface runoff in a manner which would result in flooding on-site or off-site, and impacts would be less than significant.

Threshold h.: ***In flood hazard, tsunami, or seiche zones, would the Project risk the release of pollutants due to Project inundation?***

According to mapping information available from the FEMA's FIRM No. 06065C1385G, the Project site is identified within Flood Zone X (unshaded), which includes "Areas determined to be outside the 0.2% annual chance floodplain." As such, the Project site is not subject to flood hazards under existing conditions, and the Project would have no potential to risk the release of pollutants due to site inundation. No impact would occur. (FEMA, 2008)

The Project site is located approximately 30 miles northeast of the Pacific Ocean, and as such there is no potential for the Project site to be inundated with tsunamis (Google Earth, 2024). No impact would occur.

A seiche is a standing wave that forms in an enclosed or partially enclosed body of water. The creation of seiche have been observed on lakes, reservoirs, swimming pools, harbors and seas. The effect is caused by resonances in the (at least partially) confined body of water. Most often these disturbances are caused by wind and are imperceptible. However, in the event of an earthquake, the ground movement (lateral and/or vertical) can be enough to create a large standing wave (seiche) that causes the "slosh" of the waterbody onto its shores at levels higher than expected. (Riverside County, 2015a, p. 4.11-3) The only potential water body in the local area that is capable of producing a seiche is Lake Mathews, located approximately 0.6-mile southwest of the Project site and to the south of El Sobrante Road. However, any seiche events that could result at Lake Mathews are unlikely to result in site inundation. Furthermore, any such potential site inundation that could occur most likely would be restricted to the existing drainage located along the west side of proposed Street A and would be highly unlikely to result in the inundation of any proposed residential lots. Furthermore, CEQA requires evaluation of a project's impact on the environment, and not the environment's impact on a project. Accordingly, impacts due to site inundation from seiches would be less than significant.

However, the Project site is located within the dam inundation zone for the Lake Mathews Dam. Specifically, according to the Dam Breach Inundation Map Web Publisher produced by the DSOD, the westernmost portions of the Project site could be subject to inundation in the event that Dike 1 (Saddle Dam 1) were to fail, as previously depicted on Figure 4.10-2. It should be noted that the Project site only would be subject to inundation in the event of a failure at Dike 1 (Saddle Dam 1); mapping information available from DSOD shows that any other breaches at the dam, such as at the main dam (i.e., along the western side of the lake), Saddle Dam 2, Saddle Dam 3, Spillway 1, Outlet 1, and Outlet 2, would not result in inundation of the Project site. (DSOD, n.d.)

The Lake Mathews Dam is owned and operated by the Metropolitan Water District of Southern California (MWD). MWD's comprehensive dam safety strategy is comprised of six key elements: 1) regular detailed inspections; 2) surveillance monitoring and performance reporting; 3) cyclical facility assessments; 4) emergency preparedness; 5) inundation map preparation; and 6) execution of capital projects. All MWD dams are regularly inspected by MWD staff at specific intervals using a formal, multilayered process, that includes daily or weekly observations; monthly inspections of dam and reservoir facilities with the highest DSOD designated hazard classification, with at least semi-annual inspections of all other facilities; and detailed mandatory annual inspections conducted in the presence of DSOD staff. Upon completion of the annual DSOD inspections, DSOD prepares and provides a summary inspection report that summarizes their findings and may identify recommended remedial work, which is cataloged as action items that are corrected promptly. (MWD, 2018. p. 4-8)

All Metropolitan dams and reservoirs incorporate instrumentation that measures specific performance parameters such as dam or structural movement, water levels, and seepage, as well as other parameters such as shaking due to earthquakes. Collected data are retained as part of the required annual DSOD inspection report. In terms of seismic resilience, data from surveillance monitoring and performance reporting contribute to the Cyclic Facility Assessments described below by identifying changes in specific parameters, such as dam or reservoir movement or increased seepage, that may indicate a condition that could affect the ability of the dam or reservoir to withstand an earthquake. (MWD, 2018. pp. 4-8 and 4-9)

Cyclic facility assessments were initiated at Metropolitan in 2004 and generally are repeated about every 10 years. These assessments use the most up-to-date data and evaluation criteria to identify potential vulnerabilities in dam embankments, dam structures, foundations, outlet facilities and spillways and develop mitigation options, if necessary. If a potential vulnerability or deficiency is identified, a rehabilitation or remediation project may be included in Metropolitan's Capital Improvement Program (CIP). (MWD, 2018. p. 4-9)

An example of a facility assessment that evolved into a project under MWD's CIP is the Lake Mathews Outlet Tower. The outlet tower, which is critical for water deliveries to a large portion of MWD's service area, was constructed in 1938 and modified in 1961 to increase its height by 30 feet. A facility assessment conducted in 1994 determined that the modified tower was vulnerable to significant damage from ground shaking. A project was authorized to evaluate and address this vulnerability, resulting in a new seismically resilient Outlet Tower being constructed in 2005. (MWD, 2018. p. 4-9)

MWD has a comprehensive Emergency Action Plan (EAP) for each of its dam and reservoir facilities. The EAP identifies potential emergency conditions that could occur at a dam or reservoir facility and describes procedures to be implemented to minimize loss of life and property damage. EAPs serve to provide guidance to responders, local agencies, and stakeholders in evaluating potential hazards, determining the severity of the emergency, and establishing communication protocols. Required content of dam EAPs are provided in the Federal Emergency Management Agency's (FEMA) Federal Guidelines for Dam Safety, Emergency Action Planning for Dams (FEMA 64, July 2013). (MWD, 2018. p. 4-10)

Accordingly, because the Lake Mathews Dam is subject to regular inspection and maintenance by the MWD, and because the MWD has an EAP in place for the Lake Mathews Dam, the likelihood that there would be a failure of the Lake Mathews Dam is highly remote. The inundation maps available from the DSOD show that if the Dike 1 (Saddle Dam 1) at the Lake Mathews Dam were to fail, any such flood flows would be limited to the westernmost portions of the Project site, west of proposed Street A. The majority of these flood flows would be conveyed through the existing drainage that is proposed to be conserved on site to the west of Street A. Any flows that are not conveyed by the existing drainage could result in minor inundation to proposed residential that abut the drainage. The remaining mapped inundation areas would occur within the existing drainage, the one proposed park site, and areas planned for open space/slopes. The residential lots occur at a higher elevation and would be at the fringe of the areas that could be subject to inundation. Furthermore, all of the affected lots occur upstream of the Project's proposed EDBs. The Project's EDBs have been designed to include biotreatment facilities to treat runoff prior to discharge from the Project site. Therefore, the Project would not result in the release of substantial water quality pollutants even in the unlikely event that the Project site is subject to inundation due to failure of Dike 1 (Saddle Dam 1) at the Lake Mathews Dam, and impacts would therefore be less than significant.

4.10.5 Cumulative Impact Analysis

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full buildout of the Riverside County General Plan and the general plans of other local jurisdictions that are located within the Santa Ana River watershed.

As discussed under the analysis of Thresholds a., b., and i., the Project would result in less-than-significant impacts to surface and groundwater quality during construction because the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. Compliance with the NPDES permit and the Santa Ana River Basin Plan involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify BMPs that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Other cumulative developments within the cumulative study area also would be required to comply with the NPDES Municipal Stormwater Permit and would be required to implement BMPs during construction activities to preclude water quality impacts that could impair downstream waters or groundwater. As such, construction-related surface and groundwater quality impacts, as well as impacts due to a conflict with the Santa Ana River Basin Plan, would be less-than-cumulatively considerable during construction. With respect to long-term

impacts to water quality, the Project's proposed storm drain system is designed to route first flush runoff to one of two proposed EDBs on site. The EDBs have been designed to detain runoff and would include biotreatment facilities that would treat runoff and would reduce pollutants of concern in runoff leaving the Project site. Other cumulative developments would similarly be required to incorporate BMPs to treat water quality pollutants of concern. Accordingly, the Project's impacts would be less than significant on a cumulatively-considerable basis.

As indicated under the analysis of Thresholds c. and f., although grading would be required to implement the proposed Project, grading proposed as part of the Project generally would maintain the site's existing drainage patterns. As such, the Project would not substantially alter the existing drainage pattern of the Project site or surrounding areas, and impacts would be less than significant on a cumulatively-considerable basis. Additionally, implementation of the proposed Project, including the Project's proposed EDBs, would ensure that peak runoff from the Project site during storm events generally is equal to or reduced in comparison to existing conditions, and therefore the Project would not result in the alteration of any downstream receiving waters on either a direct or cumulatively-considerable basis. Additionally, because the Project would not substantially increase peak runoff beyond the capacity of downstream drainage facilities, the Project would not contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems, and cumulatively-considerable impacts would not occur.

As discussed under the analysis of Threshold d., during construction the Project would be subject to compliance with the applicable NPDES permit, which requires the preparation and implementation of a SWPPP to address erosion hazards associated with construction activities. Other cumulative developments similarly would be required to prepare and implement a SWPPP. As such, erosion-related hazards during construction activities would be less-than-cumulatively considerable. With development of the Project site, portions of the Project site, including proposed roadways and residential building pads, would consist of impervious surfaces, with large portions of the Project site, including proposed open space areas and the portions of individual lots that would not be developed with residential homes, consisting of pervious surfaces. Thus, the potential for erosion hazards on site would be decreased as compared to existing conditions with buildout of the Project site. Areas that would consist of pervious surfaces either would be landscaped as part of the Project, or would continue to contain natural vegetation, either of which would serve to preclude erosion hazards on site. Additionally, because peak runoff from the Project site largely would not increase as compared to existing conditions, the Project has no potential to cause or cumulatively contribute to erosion hazards downstream. As such, long-term erosion impacts would be less than significant on a cumulatively-considerable basis.

The Project site is not subject to inundation during the 1% annual chance flood. As such, the Project would not impede or redirect flood flows, and cumulatively-considerable impacts would not occur.

Areas planned for development on site are not subject to inundation due to floods, tsunamis, or seiche zones. Although the Project site is located within the inundation area in the event of a failure of Dike 1 (Saddle Dam 1) at the Lake Mathews Dam, any such inundation would be limited to the western portions of the Project site, and any flows from such inundated areas would be conveyed to the Project's proposed EDBs, which have been designed to include biotreatment facilities to treat runoff prior to discharge from the Project site. As such,

cumulatively-considerable impacts associated with the release of pollutants due to Project site inundation would not occur.

4.10.6 Significance of Impacts Before Mitigation

Thresholds a., b., and i.: Less-than-Significant Impact. The Project would be served potable water by the WMWD, and no groundwater wells are proposed on site; thus, Project direct impacts to groundwater supplies would be less than significant. Additionally, Project-related runoff would be conveyed to downstream facilities where groundwater recharge would continue to occur. Additionally, water quality impacts during construction, including potential impacts due to a conflict with the Santa Ana River Basin Plan and potential impacts to groundwater quality, would be less than significant. In addition, with implementation of the proposed Project, all runoff generated on site would be appropriately treated by the Project's EDBs and biotreatment facilities prior to ultimate discharge into the Santa Ana River watershed. Thus, the Project would not adversely affect surface or groundwater quality. Accordingly, the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge; and would not conflict with the Santa Ana River Basin Plan or result in adverse groundwater quality impacts. Impacts would be less than significant.

Thresholds c. and f.: Less-than-Significant Impact. Grading proposed as part of the Project generally would maintain the site's existing drainage patterns, with runoff continuing to confluence near the northwest Project boundary and conveyed off-site to existing drainages to the north. In addition, the Project improvements, including the proposed EDBs, would ensure that runoff from the Project site largely is the same or reduced in comparison to the total peak flows from the Project site under existing conditions; therefore, the Project would not result in the alteration of the existing alignment of any downstream receiving waters. Additionally, because existing drainage facilities downstream are adequately sized to accommodate peak runoff from the Project site and surrounding areas under existing conditions, and because peak runoff from the Project site would decreased in comparison to existing conditions with development of the Project site as proposed, the Project would not contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant.

Threshold d.: Less-than-Significant Impact. With mandatory adherence to the SWPPP requirements, effects associated with construction-related erosion, siltation, water quality, and flooding on downstream water sources and flood control systems would be maintained at a level below significance. With development of the Project site, portions of the Project site, including proposed roadways and residential building pads, would consist of impervious surfaces, with large portions of the Project site, including proposed open space areas and the portions of individual lots that would not be developed with residential homes, consisting of pervious surfaces. Thus, the potential for erosion hazards on site would be substantially decreased as compared to existing conditions with buildout of the Project site. Additionally, implementation of the Project's proposed drainage system, including the Project's proposed EDBs, would ensure that peak flows from the Project site do not substantially increase in comparison to existing conditions, indicating that the Project would not result in increased erosion hazards in areas tributary to the Project site. As such, long-term erosion impacts would be less than significant.

Thresholds e. and g.: Less-than-Significant Impact. The Project site is located outside of mapped floodplains and is not subject to inundation due to flood hazards. The Project's proposed drainage system has been designed to preclude the potential for flooding hazards on site, in accordance with standard County requirements. With implementation of the Project's proposed drainage system, the peak runoff from the Project site would not substantially increase as compared to existing conditions. As such, the Project would not substantially increase the rate of surface runoff in a manner which would result in flooding on-site or off-site and would not impede or redirect flood flows, and impacts would be less than significant.

Threshold h. Less-than-Significant Impact: The Project site is located approximately 30 miles northeast of the Pacific Ocean, and as such there is no potential for the Project site to be inundated with tsunamis. Additionally, and as discussed more fully under the analysis of Threshold g., areas planned for development on site are not located in areas subject to inundation during the 1% annual chance flood. Any seiche events that could result at Lake Mathews are unlikely to result in site inundation. Furthermore, any such potential site inundation that could occur most likely would be restricted to the existing drainage located along the west side of proposed Street A and would be highly unlikely to result in the inundation of any proposed residential lots. Accordingly, impacts due to site inundation from seiches would be less than significant. Although the Project site is located within the inundation zone in the event of a failure of Dike 1 (Saddle Dam 1) at the Lake Mathews Dam, because the Lake Mathews Dam is subject to regular inspection and maintenance by the MWD, and because the MWD has an EAP in place for the Lake Mathews Dam, the likelihood that there would be a failure of the Lake Mathews Dam is highly remote. Furthermore, only the westernmost portions of the Project site are subject to inundation from dam failure, and all potentially affected residential lots occur upstream of the Project's proposed EDBs. The Project's EDBs have been designed to include biotreatment facilities to treat runoff prior to discharge from the Project site. Therefore, the Project would not result in the release of substantial water quality pollutants even in the unlikely event that the Project site is subject to inundation due to failure of Dike 1 (Saddle Dam 1) at the Lake Mathews Dam, and impacts would therefore be less than significant.

4.10.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- The Project Applicant is required to comply with the provisions of the Project's NPDES permit, and the Project's SWPPP. Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-stormwater discharges during construction activities.

Mitigation

Impacts to hydrology and water quality would be less than significant; therefore, mitigation measures are not required.

4.11 LAND USE AND PLANNING

This Subsection 4.11 discusses consistency of the proposed Project with applicable land use and planning policies adopted by Riverside County and other governing agencies for the purpose of reducing adverse effects on the physical environment. This subsection also addresses present and future land uses, zoning, and the physical arrangement of uses on the land. Information used to support the analysis in this subsection was also obtained in part from the Riverside County General Plan (Riverside County, 2021a), the Lake Mathews/Woodcrest Area Plan (LMWAP) (Riverside County, 2021b), and the Riverside County GIS database (RCIT, n.d.).

4.11.1 EXISTING CONDITIONS

A. *Existing On-Site and Adjacent Land Uses*

Under existing conditions, the 111.6-acre Project site consists of vacant and undeveloped lands that are routinely disced for fire abatement purposes. Historically, the Project site was used for agricultural uses (orchards), although agricultural activities on site ceased in the mid-1990s and the orchards were cleared from the site in approximately 2005 and 2006 (McAlister GeoScience, 2024, p. 1). Two large drainages occur on or abutting the Project site, including one large drainage that traverses the northwestern portion of the Project site and along the site's southwestern boundary, and an additional drainage occurring along the eastern boundary of the site. Several dirt roads also currently occur throughout the property.

Land uses in the immediate vicinity of the Project site previously were depicted on EIR Figure 2-3. As shown, to the north of the Project site are undeveloped vacant lands, open space, and agricultural uses, beyond which are rural residential uses. To the northeast of the Project site is an existing medium-density single-family residential community. To the southeast of the Project site are undeveloped vacant land, a freshwater pond, and agricultural uses. To the south of the Project site are undeveloped vacant land and agricultural uses, with large-lot single-family homes and commercial businesses along El Sobrante Road. Lake Mathews also occurs approximately 0.6-mile southwest of the Project site and to the south of El Sobrante Road. Land uses to the west and southwest of the Project site include a medium-density residential tract that is currently under construction and several existing large-lot rural residential uses, with medium-density and rural residential uses and agricultural uses occurring to the west of McCallister Street.

B. *Existing On-Site and Surrounding Land Use Designations*

The prevailing planning document for the Project site and its surrounding area is the Riverside County General Plan. The Project site is located within the LMWAP portion of the Riverside County General Plan. As previously depicted on EIR Figure 2-4, the County's General Plan and LMWAP designate the 111.6-acre Project site for "Rural Community – Very Low Density Residential (RC-VLDR)" on approximately 6.7 acres and "Rural Community – Low Density Residential (RC-LDR)" land uses on approximately 104.9 acres. The RC-VLDR land use designation is intended to allow for single-family detached residences on large parcels of 1 to 2 acres, while limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. The RC-LDR land use designation is intended to allow for single-family detached residences on large parcels of 0.5 to 1 acre, while limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. (Riverside County, 2021b, Figure 3 and Table 1)

As also previously depicted on EIR Figure 2-4, lands immediately to the north of the Project site are designated for Open Space - Conservation (OS-C) and RC-LDR. Lands further to the north are designated for RC-VLDR. Lands immediately to the east, south, and west are designated for RC-LDR. Lands to the southwest are designated for Medium Density Residential (MDR). Further west lands are designated for Rural Residential (RR), Rural Community – Estate Density Residential (RC-EDR), and Low Density Residential (LDR). The OS-C land use designation is intended to provide for the protection of open space for natural hazard protection, cultural preservation, and natural and scenic resource preservation, and allows for continued agricultural production on sites already used for such purposes. The MDR land use designation is intended to accommodate single-family detached and attached residences with a density range of 2 to 5 dwelling units per acre, and allows for limited agriculture and animal keeping. The RR land use designation is intended to accommodate single-family residences with a minimum lot size of 5-acres, and allows for limited animal keeping and agricultural uses, recreational uses, compatible resource development and associated uses, and governmental uses. The RC-EDR land use designation is intended to accommodate single-family detached residences on large parcels of 2 to 5 acres, and allows for limited agriculture, intensive equestrian and animal keeping uses. The LDR land use designation is intended to accommodate single-family detached residences on large parcels of 1 to 2 acres, and allows for limited agriculture and animal keeping; however, intensive animal keeping is discouraged. (Riverside County, 2021a, Table LU-4)

C. *Existing On-Site and Surrounding Zoning Classifications*

The Riverside County Land Use Ordinance (Ordinance No. 348) is intended to implement the Riverside County General Plan's land use plan. As previously shown on EIR Figure 2-6, *Existing Zoning Classifications*, the Project site is zoned "Light Agriculture, 10-Acre Minimum Lot Size (A-1-10)." The A-1-10 zoning classification allows for single-family dwellings, and also allows for a range of agricultural and equestrian uses. (RCIT, n.d.; Riverside County, 2023)

Lands immediately to the north, south, and west of the Project site are also zoned for A-1-10. Further north, lands are zoned for Residential Agricultural, 1-acre Minimum Lot Size (R-A-1) and Citrus Heights Specific Plan Zone (SP Zone). East of the Project site, lands are zoned for One-Family Dwellings (R-1). South west of the Project site, lands are zoned for Residential Agricultural, 5-acre Minimum Lot Size (R-A-5), and further northwest of the Project site, lands are zoned the Sierra Collection SP Zone. The R-1 zoning classification is intended to allow for one-family dwellings along with limited agricultural uses. The R-A zoning classification is intended to allow for one-family dwellings, agricultural uses, noncommercial animal keeping, and wholesale nurseries and greenhouses. (Riverside County, 2023)

D. *Applicable Land Use and Planning Policies*

1. *Riverside County General Plan*

The Riverside County General Plan is a policy document that reflects the Riverside County's vision for the future. The General Plan was comprehensively revised in 2003 and most recently updated in 2021. The General Plan is organized into nine separate elements, including Land Use, Circulation, Multipurpose Open Space, Safety, Noise, Housing, Air Quality, Healthy Communities (including Environmental Justice), and

Administration. Each General Plan Element is instrumental to achieving the County's long-term development goals. Each element contains a series of policies that guide the course of action the County must take to achieve the County's vision for future development. (Riverside County, 2021a)

In addition, the General Plan divides the County into 19 Area Plans. The purpose of these Area Plans is to provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas. The Project site is located within the LMWAP of the General Plan. The LMWAP was most recently updated on September 18, 2021. The following subsection provides a summary of each General Plan Element, while the LMWAP is discussed below in subsection 4.11.1.D.2. (Riverside County, 2021b)

Land Use Element

The General Plan Land Use Element functions as a guide to planners, the general public, and decision makers as to the ultimate pattern of development. The Land Use Element designates the general distribution, general location, and extent of land uses, such as housing, business, industry, open space, agriculture, natural resources, recreation, and public/quasi-public uses. These designations are reflected on the General Plan Land Use Map, which categorizes individual parcels of land into five basic categories known as "Foundation Components": Rural, Rural Community, Community Development, Agriculture, and Open Space. As reflected on the General Plan Land Use Map, the Land Use Element provides for a balanced mixture of land uses, including commercial, office, industrial, agriculture, and open space. For each of the various land use designations, the General Plan provides standards for residential density and non-residential intensity, and provides specific policies intended to ensure that product types, densities, and intensities respond to a multitude of market segments. The Land Use Element governs how land is to be utilized; therefore, many of the issues and policies contained in other plan elements are linked in some degree to this element. The Project site is designated by the General Plan Land Use Plan for RC-VLDR and RC-LDR land uses. (Riverside County, 2021a, p. LU-1)

Circulation Element

The purpose of the Circulation Element is to provide for the movement of goods and people, including pedestrians, bicycles, transit, train, air, and automobile traffic flows within and through the community. Efficient traffic circulation is important to economic viability and the creation and preservation of a quality living environment (Riverside County, 2021a, p. C-1). The Circulation Element designates future road improvements and extensions; addresses non-motorized transportation alternatives; and identifies funding options. The various roadway improvements and extensions contemplated by the Circulation Element are reflected on the General Plan Circulation Plan. The various roadway classifications depicted on the Circulation Plan correspond to specific roadway cross-sections, which provide specific standards for right-of-way (ROW) widths, lane configurations, medians, and landscaping requirements. As shown on LMWAP Figure 7 (Lake Mathews/Woodcrest Area Plan Circulation), the Riverside County General Plan and LMWAP classify El Sobrante Road as an "Arterial (128-foot Right-of-Way [ROW])" and McAllister Street as a "Collector (74-foot ROW)." (Riverside County, 2021b, Figure 7) As shown on LMWAP Figure 8 (LMWAP Trails and Bikeway

System), the General Plan and LMWAP identify El Sobrante Road as a planned "Combination Tail (Regional Trail/Class I Bike Path)" and McAllister Street as a planned "Regional Trail: Urban/Suburban." A "Community Trail" is planned along the existing drainage that extends through the western portions of the Project site. (Riverside County, 2021b, Figure 8)

Multipurpose Open Space Element

The Multipurpose Open Space Element addresses forms of open space in the County, including scenic, habitat, and recreation. This element has the purpose of addressing the protection and preservation of natural resources, agriculture, and open space areas; managing mineral resources; preserving and enhancing cultural resources; and providing recreational opportunities for the residents of Riverside County. The Multipurpose Open Space Element also contains figures that detail the locations of water resources, vegetation communities, parks, forests, recreation areas, mineral resources, and cultural resources within the County. Together with the MSHCP, the Multipurpose Open Space Element seeks to preserve and protect identified open space areas in order to maintain or improve environmental quality. (Riverside County, 2021a, p. OS-1)

Safety Element

The Safety Element has the primary objective of reducing death, injuries, property damage, and economic and social impact of potential hazards within the County. The Safety Element serves to develop a framework by which safety considerations are introduced into the land use planning process; facilitate the identification and mitigation of hazards for new development; strengthen existing codes, project review, and permitting processes; present policies directed at identifying and reducing hazards in existing development; and strengthen earthquake, flood, inundation, and wildland fire preparedness planning and post-disaster reconstruction policies. Within the Safety Element, policies are presented which pertain to seismic, slope and soil instability; flood and inundation; fire safety; hazardous waste and materials; and disaster preparedness, response, and recovery hazards. The Safety Element was last updated in September 2021 to address California Senate Bill 379, which required the County to include climate adaptation and resiliency strategies in its Safety Element. (Riverside County, 2021a, pp. S-1 - S-2)

Noise Element

The purpose of the Noise Element is to identify sources of noise generation in the County and provide policies to ensure development does not expose people to unacceptable noise levels. The establishment of desirable maximum noise levels and implementation of noise regulations are also included as part of the Noise Element. The Noise Element provides a systematic approach to identifying and managing noise problems in the community; quantifies existing and projected noise levels; addresses excessive noise exposure; and directs community planning for regulation of noise. The Noise Element includes policies, standards, criteria, programs, diagrams, a reference to action items, and maps related to the protection of public health and welfare with respect to noise. (Riverside County, 2021a, p. N-3)

Housing Element

The 2021-2029 Housing Element identifies and establishes County policies intended to fulfill the housing needs of existing and future residents in Riverside County. It establishes policies that guide County decision-making and sets forth an action plan to implement its housing goals. The Housing Element includes a review of previous housing goals, an assessment of the effectiveness of those goals, and an assessment of housing needs. Additionally, the Housing Element includes an inventory of resources and constraints related to meeting housing needs in the County; an analysis of affordable housing developments and programs intended to preserve such housing; community goals for the maintenance, preservation, improvement, and development of housing; and a program which sets forth a five-year schedule of actions that the County is undertaking or intends to undertake in implementing the polices set forth in the Housing Element. (Riverside County, 2021c, p. H-3)

Air Quality Element

The intent of the Air Quality Element is to provide background information on the physical and regulatory environment affecting air quality in the County. This element also identifies goals, policies, and programs that are meant to balance the County's actions regarding land use, circulation, and other issues potentially affecting air quality. This element works in conjunction with local and regional air quality planning efforts to address ambient air quality standards set forth by the United States (U.S.) Environmental Protection Agency (EPA) and the California Air Resources Board (CARB). The Air Quality Element sets ambient air quality standards for various air pollutants based on State and federal standards. The Element also contains policies regarding sensitive receptors, mobile and stationary pollution sources, energy efficiency and conservation, jobs and housing, and transportation. (Riverside County, 2021a, pp. AQ-3 - AQ-31)

Healthy Communities Element

The Healthy Communities Element provides a framework for translating the General Plan vision for a healthy Riverside County into reality by identifying policies aimed at achieving that vision. The Element addresses areas where public health and planning intersect, including transportation and active living; access to nutritious foods; access to health care; mental health; quality of life; and environmental health. This Element addresses overall health; land uses and community design; transportation system (with an emphasis on non-motorized transportation); arts and culture; social capital; complete communities; parks, trails, and open space; access to healthy foods and nutrition; healthcare and mental healthcare; schools, recreational centers, and daycare centers; and environmental health. The County of Riverside incorporated environmental justice polices into the General Plan Healthy Communities Element in September 2021. The environmental justice policies apply to the Environmental Justice Communities identified in Land Use Element Figure LU-4.1. The Project site is not within an Environmental Justice Community boundary. (Riverside County, 2021a, pp. HC-1 - HC-12)

Administration Element

The Administration Element focuses on the administration of the General Plan, which is the sole responsibility of Riverside County, under the authority of the Board of Supervisors. Administration of

the General Plan policies includes establishing, maintaining, and applying tools and procedures for interpreting the intent of the General Plan and applying the interpretation to a variety of circumstances. This Element details the vision for Riverside County, General Planning Principles, Countywide Elements and Planning Policies/Area Plan, Appendices of the General Plan, and other administrative topics. (Riverside County, 2021a, pp. AQ-1 - AQ-20)

2. Lake Mathews/Woodcrest Area Plan (LMWAP)

As noted above, the Project site is located within the LMWAP portion of the Riverside County General Plan. The LMWAP guides the evolving character of the area, and uses the Riverside County General Plan vision to establish policies for development and conservation within the specific area of Riverside County. The LMWAP provides a description of the location, physical characteristic, and special features, in addition to a Land Use Plan, policies, and exhibits to better understand the physical, environmental, and regulatory characteristics that comprise the area. Each section of the LMWAP addresses critical issues facing the Lake Mathews/Woodcrest community. The LMWAP includes sections detailing the features, policy areas, land use, circulation, multipurpose open space, and hazards. (Riverside County, 2021b)

As shown on LMWAP Figure 4 (Lake Mathews/Woodcrest Area Plan Overlays and Policy Areas), the Project site is located within the El Sobrante Policy Area (ESPA), but is not located within any other LMWAP Policy Areas. Projects within the ESPA are subject to compliance with LMWAP Policies 1.1 through 1.10, which are cited below:

- *LMWAP 1.1 Require the provision of adequate and available infrastructure to support development. To sustain the rural lifestyle found within the area, while still providing an acceptable level of service on local roadways, the total number of dwelling units within the Policy Area shall not exceed an additional 1,500 dwelling units. The circulation system, which would support the development of these additional dwelling units and which would, in part, be funded by their development, includes the following roadway improvements: the McAllister Street/Dufferin Avenue Loop and the construction of a new connection (A Street) between McAllister Street/Dufferin Avenue Loop and Van Buren Boulevard, south of Dufferin Avenue. In addition to these improvements, other circulation connections between the Policy Area and the adjacent City of Riverside would be closed. These closures would direct high traffic volumes away from rural residential and green belt streets and toward more appropriate thoroughfares. Limiting the number of dwelling units within the Policy Area will help to maintain acceptable levels of service on local roadways both within the County of Riverside and adjacent green belt areas of the City of Riverside. Limiting the number of dwelling units will also contribute to the continuation of the rural lifestyle enjoyed by area residents.*
- *LMWAP 1.2 Within the area depicted as Medium Density Residential, overall density shall not exceed three dwelling units per acre.*
- *LMWAP 1.3 Coordinate with local agencies to ensure adequate service provision for all development within the Policy Area.*
- *LMWAP 1.4 Coordinate development strategies with the City of Riverside.*

- *LMWAP 1.5 Encourage the use of Specific Plans to implement the land use designations identified within the Policy Area.*
- *LMWAP 1.6 Encourage clustering of dwelling units when it would avoid the development of areas constrained by physical features or sensitive resources. Encourage clustering in areas designated for Low Density Residential uses (½ acre minimum lot size) rather than areas designated for Very Low Density Residential uses (1 acre minimum lot size) or Estate Density Residential uses (2 acre minimum lot size), except where Very Low Density Residential-designated properties consisting of at least 300 acres and processed through a Specific Plan offer significant public recreational and/or areawide circulation benefits. Where clustering is allowed, minimum pad size shall not be less than 8,000 square feet. However, for projects featuring public golf courses, a minimum pad size of 7,200 square feet will be allowed on a minimum lot size of 8,500 square feet. This pad size exception may only occur adjacent to golf courses.*
- *LMWAP 1.7 Development shall be sensitive to and retain the unique topographical features within and adjacent to the planning area.*
- *LMWAP 1.8 Require that development on hillsides blend with the natural surroundings through architecture, the use of appropriate construction materials and colors, and the retention of natural vegetation.*
- *LMWAP 1.9 Restrict hillside development and grading in accordance with policies found in the Open Space, Habitat and Natural Resource Preservation, and Hillside Development and Slope sections of the Land Use Element and the Scenic Resources section of the Multipurpose Open Space Element.*
- *LMWAP 1.10 Encourage open space and recreational amenities.*

Additionally, LMWAP Figure 6 (LMWAP Mt. Palomar Night Time Lighting Policy Area) shows that the Project site is not located within the Mount Palomar Night Time Lighting Policy Area and is therefore not subject to compliance with Riverside County Ordinance No. 655 (Regulating Light Pollution). (Riverside County, 2021b, Figure 6)

3. Riverside County Land Use Ordinance

The Riverside County Land Use Ordinance is intended to implement the Riverside County General Plan's Land Use Plan. Under existing conditions, the Project site is zoned "Light Agriculture, 10-Acre Minimum Lot Size (A-1-10)." Refer to Subsection 4.11.1.C for a more thorough discussion of the site's existing zoning classification.

4. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Riverside County has adopted a MSHCP, which is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP). The MSHCP promotes conservation of species and their associated habitats in Riverside County through implementation of several HCPs that affect lands within the County. The Western Riverside County MSHCP and the Coachella Valley MSHCP are the two dominant plans that impact the largest portions of the County. These plans coordinate multi-jurisdictional habitat-planning and conservation efforts in the region to

promote biological and ecological diversity while accommodating the appropriate construction of new development and infrastructure projects. Riverside County catalogs acquisitions and conservation of lands with respect to the HCPs, and periodically updates the General Plan Land Use maps accordingly. (Riverside County, 2015a, p. 4.2-27)

The Project site is located within the Western Riverside County MSHCP. The Project site is not located within any MSHCP Criteria Cells or Cell Groups, indicating that the Project site is not targeted for conservation under the MSHCP. In addition to conservation criteria within areas designated to be included within the MSHCP Reserve System, the MSHCP also identifies a number of additional survey and conservation requirements that apply to the Project area. Refer to EIR Subsection 4.4, *Biological Resources*, for a more thorough discussion of the MSHCP and the Project site's relationship thereto.

5. Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP)

The Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) was prepared under the direction of the Riverside County Habitat Conservation Agency (RCHCA) Board of Directors, in consultation with U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). Riverside County is a member agency of the RCHCA. The 30-year SKR HCP was designed to acquire and permanently conserve, maintain, and fund the conservation, preservation, restoration, and enhancement of Stephens' kangaroo rat-occupied habitat. The SKR HCP covers approximately 534,000 acres within the member jurisdictions and includes an estimated 30,000 acres of occupied Stephens' kangaroo rat habitat. The SKR HCP requires members to preserve and manage 15,000 acres of occupied habitat in seven core reserves encompassing over 41,000 acres. (Riverside County, 2015a, p. 4.8-52)

On May 3, 1996, the USFWS issued a permit to the Riverside County Habitat Conservation Agency to incidentally take the federally endangered Stephens' kangaroo rat ("SKR"; *Dipodomys stephensi*). Similarly, the CDFW issued a California Endangered Species Act Management Authorization for Implementation of the SKR HCP on May 6, 1996. To date, more than $50 million has been dedicated to the establishment and management of a system of regional preserves designed to ensure the survival of SKR in the plan area. This effort resulted in the permanent conservation of approximately 50% of the SKR-occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. Core reserves were deemed complete in December of 2003. (Riverside County, 2015a, p. 4.8-52)

Although the Project site is not targeted for conservation as part of the SKR HCP, the Project site is located within the SKR HCP fee area. Thus, the Project Applicant would be required to contribute fee payments pursuant to Riverside County Ordinance No. 663.

6. Southern California Association of Governments (SCAG)

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of

Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. (SCAG, n.d.)

As an MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. In April 2024, SCAG's Regional Council adopted *Connect SoCal (2024-2050 Regional Transportations Plan/Sustainable Communities Strategy* (herein, "RTP/SCS"). The RTP/SCS includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. The RTP/SCS also provides objectives for meeting emissions reduction targets set forth by CARB; these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. (SCAG, 2024b) The RTP/SCS is updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

7. South Coast Air Quality Management District Air Quality Management Plan (SCAQMD AQMP)

California Health & Safety Code § 40702 et seq., the California Clean Air Act (CCAA), requires that an Air Quality Management Plan (AQMP) be developed and then updated every three years for air basins with non-attainment status. As discussed in EIR Section 4.3, *Air Quality*, the Project site is located in the South Coast Air Basin (SCAB). The SCAB is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SCAB into conformity with federal and State air quality standards. Air quality within the SCAB is regulated by the SCAQMD and standards for air quality are documented in the SCAQMD's 2022 AQMP. Although air quality in the SCAB has improved over the past several decades, according to the SCAQMD, the SCAB currently does not meet National Ambient Air Quality Standards (NAAQS) attainment status for ozone (O_3) and particulate matter less than 2.5 microns ($PM_{2.5}$). The SCAB currently is considered non-attainment under the California Ambient Air Quality Standards (CAAQS) due to levels of ozone (O_3), $PM_{2.5}$, and particulate matter less than 10 microns (PM_{10}). (SCAQMD, 2017)

The SCAQMD 2022 AQMP is a plan for the regional improvement of air quality. Projects such as the proposed Project relate to the air quality planning process through the growth forecasts that were used as inputs into the regional transportation model. If a proposed project is consistent with these growth forecasts, and if all available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the project is consistent with the AQMP. Refer to EIR Subsection 4.3, *Air Quality*, for additional discussion of the SCAQMD 2022 AQMP and for a discussion of the Project's consistency with the 2022 AQMP.

4.11.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations related to land use and planning.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2024b)

2. Federal Aviation Regulations Part 77

Federal Regulation Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects. (FAA, 2016a)

Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA (FAA, 2016a):

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
  - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.
  - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.
  - within 5,000 feet of a public use heliport which exceeds a 25:1 surface.

- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location. (FAA, 2016a)

Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2016a)

B. State Regulations

1. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management. (SWRCB, 2014)

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014)

2. California Water Code

The California Water Code is the principle state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW.

Surface water quality is the responsibility of the Regional Water Quality Control Board (RWQCB), water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water.

3. California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§ 65000 - 66499.58. Under State of California planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures.

4. Subdivision Map Act

The Subdivision Map Act ("Map Act") vests in the cities and counties the power to regulate and control the design and improvement of subdivisions within its boundaries. Each city must adopt an ordinance regulating and controlling subdivisions for which the Map Act requires a tentative and final or parcel map. The authority for a city or county to regulate land use, including subdivisions, flows from the general police power. However,

the Map Act sets forth certain mandates that must be followed for subdivision processing. A city can impose conditions on the subdivision process when the Map Act is silent, but it cannot regulate contrary to specific provisions contained in the Map Act. (Curtin, Jr. & Merritt, 2002, p. 1) The Map Act's primary goals are:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of the subdivision, with a proper consideration of its relation to adjoining areas;
- To ensure that the areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community; and
- To protect the public and individual transferees from fraud and exploitation. (Curtin, Jr. & Merritt, 2002, p. 1)

The Map Act is applied in conjunction with other state land use laws such as the general plan, specific plans, zoning, CEQA, and the Permit Streamlining Act. The Map Act provides for regulation of land divisions by a city or county and is interpreted and enforced by the city or county. (Curtin, Jr. & Merritt, 2002, p. 2)

5. Office of Planning and Research (OPR) General Plan Guidelines

Each city and county in California must prepare a comprehensive, long term general plan to guide its future. To assist local governments in meeting this responsibility, the Governor's Office of Planning and Research (OPR) is required to adopt and periodically revise guidelines for the preparation and content of local general plans pursuant to Government Code § 65040.2. The General Plan Guidelines is advisory, not mandatory. Nevertheless, it is the state's only official document explaining California's legal requirements for general plans. Planners, decision-making bodies, and the public depend upon the General Plan Guidelines for help when preparing local general plans. The courts have periodically referred to the General Plan Guidelines for assistance in determining compliance with planning law. For this reason, the General Plan Guidelines closely adheres to statute and case law. It also relies upon commonly accepted principles of contemporary planning practice. (OPR, 2017b, p. 1)

6. State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics ("Division"), and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division's first priorities are those mandated by the Aeronautics Act, then Caltrans guidance, then Division guidance as expressed through its Policy Element. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that "protect the public interest in aeronautics and aeronautical progress." (§ 21002) (CA Legislative Info, n.d.)

The Aeronautics Act itself is divided into six chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature's intent for a State aviation program. Chapter two explains Caltrans' role in administering the Division, and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from Federal Aviation Administration (FAA) regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four

deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of Airport Land Use Commissions (ALUC). Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Finally, Chapter six introduces airport planning and specifically introduces the intent of the CASP and how it can be used to support California aviation. (CA Legislative Info, n.d.)

7. Senate Bill 375 (SB 375)

SB 375 contains five major components. The first is regional GHG emissions targets: California ARB's Regional Targets Advisory Committee guides the adoption of targets to be met by 2035 for each Metropolitan Planning Organization (MPO) in the state. These targets, which MPOs may propose themselves, are updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs are required to prepare a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on 8-year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Certain residential or mixed-use projects qualify if they conform to the SCS. Transit-oriented developments (TODs) also qualify if they (1) are at least 50% residential, (2) meet density requirements, and (3) are within 0.5-mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC). Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines. (CA Legislative Info, 2008a)

8. SCAG Connect SoCal

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast

components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. (SCAG, n.d.)

As an MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. In April 2024, SCAG's Regional Council adopted *Connect SoCal (2024-2050 Regional Transportations Plan/Sustainable Communities Strategy* (herein, "RTP/SCS"). The RTP/SCS includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. The RTP/SCS also provides objectives for meeting emissions reduction targets set forth by CARB; these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. (SCAG, 2024b) The RTP/SCS is updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

C. Local Regulations

1. Riverside County Ordinances

These existing Riverside County ordinances implement and guide various aspects of land use development, while protecting existing uses, people and property within Riverside County from conflict. (Riverside County, 2015a, pp. 4.2-25)

Ordinance No. 348 - Zoning and Land Use Ordinance: Establishes allowable uses of land and sets standards for what and how land may be developed. Protects the people and property of Riverside County from development of unsuitable land uses and ensures built areas are developed safely and with minimal conflict with surrounding lands. (Riverside County, 2015a, pp. 4.2-25)

Ordinance No. 448 - Airport Approaches Zoning: This ordinance was adopted pursuant to the Airport Approaches Zoning Law, (CGC Sections 50485-50485.14) and shall be liberally construed in support of the purposes and provisions within Section 50485-50485.14. Any proceedings for additions or amendments to the official plan of airports are required to conform to this ordinance. (Riverside County, 2015a, pp. 4.2-25)

Ordinance No. 460 - Subdivision Regulations: This ordinance regulates subdivisions pursuant to the Subdivision Map Act. All land divisions throughout unincorporated Riverside County are subject to all of the applicable provisions of the Subdivision Map Act and this ordinance. (Riverside County, 2015a, pp. 4.2-25)

Ordinance No. 461 - Road Improvement Standards and Specifications: This ordinance establishes proper standards, specifications and directions for the design and construction of any road or other land division improvements required to be constructed in the unincorporated territory of Riverside County. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 509 - Agricultural Preserves: This ordinance establishes uniform rules for the agricultural and compatible uses allowed within an agricultural preserve. The ordinance ensures that incompatible uses are not allowed within established agricultural preserves and sets forth the powers of the County of Riverside in

establishing and administering agricultural preserves pursuant to the California Land Conservation Act of 1965 (CGC Section 51200, et seq.), which are to be devoted to agricultural and compatible uses. Land uses not covered in the ordinance are prohibited within agricultural preserves. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 576 - Regulating County Airports: The purpose of this ordinance is to provide minimum standards to safeguard life, limb, property and public welfare by regulating and controlling the various activities on airports, heliports or STOL (short takeoff and landing) ports owned or operated, or both, by the County of Riverside. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 659 - Development Mitigation Fee for Residential Development: This ordinance establishes an impact mitigation fee to help mitigate the impacts caused by new developments on public facilities within Riverside County. The fees will be used to help establish new County of Riverside facilities that are necessary to meet the increased demand that will come about due to new development. These facilities include new fire and police stations, courts, libraries, regional parks and other facilities necessary to provide services to the residents of Riverside County. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 671 - Consolidated Fees for Land Use and Related Functions: The purpose of this ordinance is to provide for the consolidation of certain schedules of fees related to the land use matters as provided for in the separate ordinances, resolutions and rules of the County of Riverside. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 673 - Establishing the Coachella Valley Transportation Uniform Mitigation Fee: This ordinance establishes a mitigation fee program for funding the engineering, the purchase of right-of-way and construction of transportation improvements required of land developments within the Coachella Valley. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 726 - Transportation Management Requirements - New Development Projects: This ordinance is intended to meet the requirements of the Riverside County Congestion Management Program and the Air Quality Management Plan as well as to promote consideration of transportation demand management objectives early in the development review process. Often, conventional land development promotes reliance on the single occupancy vehicle. This ordinance establishes policies and procedures to encourage and promote the use of alternative transportation modes through project design and facility planning. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 748 - Traffic Signal Mitigation Program: This ordinance establishes a means of equitably assessing the costs of Traffic Signal installations needed to mitigate the cumulative environmental impacts resulting from the additional traffic generated by new development projects. (Riverside County, 2015a, pp. 4.2-26)

Ordinance No. 824 - Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program: This ordinance establishes fees to fund the mitigation of cumulative regional transportation impacts resulting from future development. The mitigation fees collected through the TUMF program will be utilized

to complete transportation system capital improvements necessary to meet the increased travel demand and to sustain current levels of traffic. (Riverside County, 2015a, pp. 4.2-26)

2. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The continued loss of habitat to new development and the cumbersome process of environmental review and habitat mitigation on a project-by-project basis led to preparation of the MSHCP. The MSHCP is a multi-jurisdictional accomplishment that provides a regional conservation solution to species and habitat issues. The primary intent of the MSHCP is to provide for the conservation of a range of plants and animals within natural communities characteristic of western Riverside County and in return, provide take coverage and mitigation for projects throughout the plan area to avoid the cost and delays of mitigating biological impacts on a project-by-project basis. (Riverside County, 2015a, p. 4.8-49)

The MSHCP was adopted by Riverside County on June 17, 2003, and is a comprehensive, multijurisdictional Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of FESA, as well as an NCCP pursuant to the California Fish and Game Code. The USFWS issued a Biological Opinion and Federal ESA Section 10 permit for the MSHCP on June 22, 2004, and CDFW issued a Natural Community Conservation Planning (NCCP) Approval and Take Authorization on the same date. As long as adherence to the policies and requirements of the MSHCP is maintained, participants in the MSHCP, which include the County of Riverside and 18 cities, are allowed to authorize 'incidental take' of covered plant and wildlife species. (Riverside County, 2015a, p. 4.8-49)

The MSHCP provides for the long-term survival of protected and sensitive species by designating a contiguous system of habitat to be added to existing public/quasi-public lands. The Plan includes an impact fee collected by the permittees and used in part to acquire these lands. Depending on the location of the private or public development project, certain biological studies are required for Plan compliance. These studies may identify the need for specific measures to avoid, minimize and reduce impacts to covered species and their habitat. (Riverside County, 2015a, pp. 4.8-49 and 4.8-50)

The MSHCP defines two distinct consistency processes for development projects based on their location within the MSHCP's coverage area, with separate processes for projects located outside of Criteria Areas and those within a Criteria Area. Criteria Areas consist of 160-acre 'cells' with identified conservation objectives. (Riverside County, 2015a, p. 4.8-50)

4.11.3 Basis for Determining Significance

Section XI of Appendix G to the CEQA Guidelines, as updated in December 2018, addresses typical adverse effects on land use and planning, and includes the following threshold questions to evaluate the Project's impacts on land use and planning (OPR, 2018a):

- Would the project physically divide an established community?

- Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, and have been updated to reflect the 2018 updates to Section XI of Appendix G to the CEQA Guidelines (listed above). Accordingly, the proposed Project would have a significant impact on land use and planning if construction and/or operation of the Project would:

a. *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; or*

b. *Disrupt or divide the physical arrangement of an established community (including a low-income or minority community).*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified/updated per the 2018 updates to the CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on land use and planning. It should be noted that the Project's consistency with the Western Riverside County MSHCP and the SKR HCP, which are the only habitat conservation plans or natural community conservation plans applicable to the Project site, is evaluated in EIR Subsection 4.4, *Biological Resources*, under the analysis of Threshold a., and the analysis concludes that impacts due to a conflict with the MSHCP and SKR HCP would be less than significant with mitigation. In addition, the Project's consistency with Riverside County's Climate Action Plan (CAP) is addressed in EIR Subsection 4.8, *Greenhouse Gas Emissions*. Additionally, the Project's consistency with the SCAQMD AQMP is addressed under EIR Subsection 4.3, *Air Quality*. Project consistency with the MSHCP, SKR HCP, CAP, and the SCAQMD AQMP is not further discussed in this Subsection.

4.11.4 Impact Analysis

Threshold a.: ***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?***

The proposed Project has the potential to conflict with the Riverside County General Plan and LMWAP, as well as Connect SoCal. Additionally, the Project's consistency with the SCAQMD AQMP is addressed under EIR Subsection 4.3, *Air Quality*. Similarly, the Project's consistency with the Western Riverside County MSHCP and the SKR HCP are addressed in EIR Subsection 4.4, *Biological Resources*. In addition, the Project's consistency with Riverside County's Climate Action Plan (CAP) is addressed in EIR Subsection 4.8, *Greenhouse Gas Emissions*. As discussed in Subsection 4.3, the Project would be fully consistent with the 2022 SCAQMD AQMP. As indicated in EIR Subsections 4.4 and 4.8, the Project would not conflict with the MSHCP, the SKR HCP, or the Riverside County CAP with implementation of mitigation measures; thus, impacts due to a conflict with the MSHCP, SKR HCP, and CAP would be less than significant. The Project's consistency with the SCAQMD AQMP, MSHCP, SKR HCP, and the County's CAP is not further discussed below.

A. Project Consistency with the Riverside County General Plan and LMWAP

1. General Plan and LMWAP Land Use Consistency

Under existing conditions, the General Plan and LMWAP designate the Project site for RC-VLDR land uses on 6.7 acres and RC-LDR land uses on approximately 104.9 acres. The Project Applicant proposes General Plan Amendment No. 240072 (GPA 240072) to reconfigure the existing land use designation of RC-VLDR and RC-LDR to match the proposed development in the post development conditions. With the proposed reconfiguration, areas designated for RC-VLDR and RC-LDR land uses would remain unchanged at 6.7 and 104.9 acres, respectively. With approval of GPA240072, the Project would be fully consistent with the General Plan and LMWAP land use designations for the 111.6-acre property, and the Project's proposed GPA 240072 would not allow for any intensification of development in comparison to the Project site's existing General Plan land use designations. Moreover, impacts associated with the proposed land uses have been evaluated throughout this EIR. Where significant impacts are identified, mitigation measures are identified to reduce impacts to the maximum feasible extent. Based on the foregoing analysis, the proposed Project would not result in a significant environmental impact due to a conflict with any land use plan adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

2. General Plan and LMWAP Policy Consistency

A General Plan Policies Consistency Analysis was prepared for the proposed Project in order to demonstrate the Project's consistency with applicable General Plan and LMWAP policies, and is included as *Technical Appendix J.* For more information regarding the Project's consistency with specific applicable Riverside County General Plan and LMWAP policies, please refer to *Technical Appendix J.* As concluded therein, the Project would not conflict with any of the applicable General Plan or LMWAP policies adopted for the purpose of avoiding or reducing significant environmental effects. In addition, the Project site is located within the LMWAP El Sobrante Policy Area. As indicated in Table 4.11-1, Project Consistency with LMWAP El Sobrante Policy Area, and Table 4.11-2, El Sobrante Policy Area Unit Count, the Project would be fully consistent with Policies LMWAP 1.1 through LMWAP 1.10. Accordingly, impacts due to a conflict with applicable General Plan or LMWAP policies would be less than significant.

Table 4.11-1 Project Consistency with LMWAP El Sobrante Policy Area

LMWAP El Sobrante Policy Area Policies	Project Consistency
LMWAP 1.1 Require the provision of adequate and available infrastructure to support development. To sustain the rural lifestyle found within the area, while still providing an acceptable level of service on local roadways, the total number of dwelling units within the Policy Area shall not exceed an additional 1,500 dwelling units. The circulation system, which would support the development of these additional dwelling units and which would, in part, be funded by their development, includes the following roadway improvements: the McAllister Street/Dufferin Avenue Loop and the construction of a new connection (A Street) between McAllister Street/Dufferin Avenue Loop and Van Buren Boulevard, south of Dufferin	Consistent. As indicated in EIR Subsection 4.20, *Utilities and Service Systems*, adequate utilities and service systems exist or are proposed to serve the proposed Project. The El Sobrante Policy Area was adopted in 2003. As shown in Table 4.11-2, prior to its adoption there were a total of 703 residential lots existing or approved within the El Sobrante Policy Area. Since 2003, a total of 1,083 additional dwelling units have been approved or proposed within the El Sobrante Policy Area. Thus, with approval of the proposed Project, there still would be 417 dwelling units available to be built within the El Sobrante Policy Area (1,500 dwelling units - 1,083 dwelling units = 417 dwelling units). Accordingly, the Project would be

LMWAP El Sobrante Policy Area Policies	Project Consistency
Avenue. In addition to these improvements, other circulation connections between the Policy Area and the adjacent City of Riverside would be closed. These closures would direct high traffic volumes away from rural residential and green belt streets and toward more appropriate thoroughfares. Limiting the number of dwelling units within the Policy Area will help to maintain acceptable levels of service on local roadways both within the County of Riverside and adjacent green belt areas of the City of Riverside. Limiting the number of dwelling units will also contribute to the continuation of the rural lifestyle enjoyed by area residents.	consistent with the dwelling unit cap established by Policy LMWAP 1.1. In addition, Citrus Heights Drive previously was constructed in the local area in approximately 2016, providing a connection between McCallister Parkway (south of Dufferin Avenue) and Van Buren Boulevard. The Project would not inhibit the County's ability to close additional roadways between the Policy Area and the City of Riverside. Accordingly, the proposed Project would be consistent with Policy LMWAP 1.1.
LMWAP 1.2 Within the area depicted as Medium Density Residential, overall density shall not exceed three dwelling units per acre.	Not Applicable. Policy LMWAP 1.2 applies to lands designated for Medium Density Residential (MDR) land uses, while the Project site is designated for RC-VLDR and RC-LDR land uses.
LMWAP 1.3 Coordinate with local agencies to ensure adequate service provision for all development within the Policy Area.	Consistent. There are no components of the proposed Project that would inhibit the County's ability to coordinate with local agencies to provide services, and the analysis in EIR Subsections 4.16, *Public Services*, and 4.20, *Utilities and Service Systems*, demonstrates that the Project would be adequately served by public services (police, fire, schools, water, sewer, etc.).
LMWAP 1.4 Coordinate development strategies with the City of Riverside.	Not Applicable. Policy LMWAP 1.4 provides direction to County staff and decision makers, and is unrelated to the proposed Project.
LMWAP 1.5 Encourage the use of Specific Plans to implement the land use designations identified within the Policy Area.	Not Applicable. Policy LMWAP 1.5 provides direction to County staff and decision makers, and is unrelated to the proposed Project. No specific plan is proposed as part of the Project, although no specific plan is required.
LMWAP 1.6 Encourage clustering of dwelling units when it would avoid the development of areas constrained by physical features or sensitive resources. Encourage clustering in areas designated for Low Density Residential uses (½ acre minimum lot size) rather than areas designated for Very Low Density Residential uses (1 acre minimum lot size) or Estate Density Residential uses (2 acre minimum lot size), except where Very Low Density Residential-designated properties consisting of at least 300 acres and processed through a Specific Plan offer significant public recreational and/or areawide circulation benefits. Where clustering is allowed, minimum pad size shall not be less than 8,000 square feet. However, for projects featuring public golf courses, a minimum pad size of 7,200 square feet will be allowed on a minimum lot size of 8,500 square feet. This pad size exception may only occur adjacent to golf courses.	Consistent. The Project has been designed to avoid the two existing drainages on site/adjacent to the Project site to the extent feasible. All proposed residential lots are proposed in areas outside of the existing drainages, and improvements within the drainages would be limited to roadway crossings, and no clustering of lots is necessary to minimize impacts to the existing drainages.
LMWAP 1.7 Development shall be sensitive to and retain the unique topographical features within and adjacent to the planning area.	Consistent. The Project's proposed grading plan, depicted on EIR Figure 3-4, has been designed to minimize alterations to the site's existing topography. Additionally, there are no unique topographical features present on the Project site, aside from the

LMWAP El Sobrante Policy Area Policies	Project Consistency
	site's existing rolling hills, which generally would be retained with development of the property.
LMWAP 1.8 Require that development on hillsides blend with the natural surroundings through architecture, the use of appropriate construction materials and colors, and the retention of natural vegetation.	Not Applicable. The Project site does not contain any prominent hillsides; thus, Policy LMWAP 1.8 is not applicable to the proposed Project.
LMWAP 1.9 Restrict hillside development and grading in accordance with policies found in the Open Space, Habitat and Natural Resource Preservation, and Hillside Development and Slope sections of the Land Use Element and the Scenic Resources section of the Multipurpose Open Space Element.	Not Applicable. The Project site does not contain any prominent hillsides; thus, Policy LMWAP 1.9 is not applicable to the proposed Project.
LMWAP 1.10 Encourage open space and recreational amenities.	Consistent. The Project has been designed to include one park on 1.9 acres, 22.5 acres of open space, and an undisturbed WMWD easement on 2.5 acres. Accordingly, the Project would be consistent with Policy LMWAP 1.10.

Table 4.11-2 El Sobrante Policy Area Unit Count

Entitlement/Application[1]	Status[1]	Approved/Proposed Dwelling Units
El Sobrante Policy Area – Approved Dwelling Units in 2003[2]		
2003 Recorded Lots (RR, RC-LDR, RC-EDR, MDR)	Recorded Lots (Prior to 2003)	408
Specific Plan No. 325/TTM 30153	Approved (Prior to 2003)	295
Sub-Total – Approved/Recorded Dwelling Units as of 2003:		**703**
El Sobrante Policy Area – Proposed/Approved Dwelling Units Since 2003[2]		
Specific Plan No. 325, Amendment No. 1/TTM 36390	Approved (September 2013)/Constructed	54[3]
TTM 36475	Approved (July 2015)	171
TTM 36730	Approved (May 2016)	271
TTM 37217	DAC Review (Not Approved)	26[4]
TTM 38605	DAC Review (Not Approved)	163
PAR 230076	DAC Review (Not Approved)	128
TTM 39011/PAR 240044	DAC Review (Not Approved)	68
Proposed Project (TTM 38927)	DAC Review (Not Approved)	206
Sub-Total – Approved/Proposed Dwelling Units Since 2003:		**1,087**
Remaining Dwelling Units Available within El Sobrante Policy Area[2]:		**421**

1. RR = Rural Residential; RC-LDR = Rural Community – Low Density Residential; RC-EDR = Rural Community – Estate Density Residential; MDR = Medium Density Residential; TTM = Tentative Tract Map; PAR = Pre-Application Review; DAC = Development Advisory Committee.
2. A total of 408 lots were recorded within the residential General Plan land use designations as of 2003. It should be noted that the Proposed/Approved Dwelling Units Since 2003 listed in Table 4.11-2 encompass some of the parcels that were previously recorded as of 2003. No credit has been taken for the overlap between the 2003 Recorded Lots and the listed Proposed/Approved Dwelling Units Since 2003; thus, the analysis presented likely understates the number of remaining dwelling units within the El Sobrante Policy Area
3. Specific Plan No. 325 was approved for 295 dwelling units as of 2003. Amendment No. 1 to Specific Plan No 325 increased the total number of units allowed to 345 dwelling units; however, only 341 units were recorded/constructed. Thus, the net increase in dwelling units since 2003 is 50 dwelling units (345 proposed du – 291 recorded/constructed du = 54 du).
4. TTM 37217 previously was proposed and was undergoing DAC Review; however, the area encompassed by proposed TTM 37217 includes the entirety of the 111.6-acre Project site as well as the entire area encompassed by proposed TTM 39011/PAR 240044. Areas included in TTM 37217 that are not included in the boundaries of TTM 38927 or TTM 39011/PAR 240044 include two parcels designated by the General Plan for RC-LDR land uses (+/- 16.0 acres) and Rural Community – Estate Density Residential land uses (+/- 4.9 acres). Per the mid-point density values presented in Table E-1 of Appendix E to the General Plan, these parcels are expected to be developed with approximately 26 dwelling units ([16.0 acres RC-LDR x 1.5 du/ac] + [4.9 acres RC-EDR x 0.35 du/ac] = 25.7 dwelling units).

(RCIT, n.d.; Riverside County, 2021a, Appendix E, Table E-1)

B. Project Consistency with Connect SoCal

In April 2024, SCAG adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as "Connect SoCal." The RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in the RTP/SCS are pertinent to the proposed Project. These goals are meant to provide guidance for considering the proposed Project within the context of regional goals and policies. An analysis of the Project's consistency with the relevant goals of Connect SoCal is presented below in Table 4.11-3, *Analysis of Consistency with Connect SoCal Goals*. As indicated, the Project would not conflict with any Connect SoCal goals, and no impact would occur.

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
Mobility	
System Preservation and Resilience	
01. Prioritize repair, maintenance and preservation of the SCAG region's existing transportation assets, following a "Fix-It-First" principle	Not Applicable. RTP/SCS Policy 01 provides direction to County and regional staff and decision makers, and is not applicable to the proposed Project.
02. Promote transportation investments that advance progress toward the achievement of asset management targets, including the condition of the National Highway System pavement and bridges and transit assets (rolling stock, equipment, facilities and infrastructure)	Not Applicable. RTP/SCS Policy 02 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Complete Streets	
03. Pursue the development of Complete Streets that comprise a safe, multimodal network with flexible use of public rights-of-way for people of all ages and abilities using a variety of modes (e.g., people walking, biking, rolling, driving, taking transit)	Consistent. As part of the Project, the Project Applicant would include sidewalks throughout the development, and also would include a 10-foot-wide community trail along proposed Street A, both of which would promote non-vehicular modes of transportation in the local area.
04. Ensure the implementation of Complete Streets that are sensitive to urban, suburban or rural contexts and improve transportation safety for all, but especially for vulnerable road users (e.g., people, especially older adults and children, walking and biking)	Not Applicable. RTP/SCS Policy 04 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
05. Facilitate the implementation of Complete Streets and curb space management strategies that accommodate and optimize new technologies, micromobility devices and first/last mile connections to transit and last-mile delivery	Not Applicable. RTP/SCS Policy 05 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project. Additionally, the Project would not affect any existing connections to transit in the local area.
06. Support implementation of Complete Streets improvements in Priority Equity Communities, particularly with respect to Transportation Equity Zones, as a way to enhance mobility, safety and access to opportunities	Not Applicable. RTP/SCS Policy 06 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
Transit and Multimodal Integration	
07. Encourage and support the implementation of projects, both physical and digital, that facilitate multimodal connectivity, prioritize transit and shared mobility, and result in improved mobility, accessibility and safety	Not Applicable. RTP/SCS Policy 07 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
08. Support connections across the public, private and nonprofit sectors to develop transportation projects and programs that result in improved connectivity	Not Applicable. RTP/SCS Policy 08 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
09. Encourage residential and employment development in areas surrounding existing and planned transit/rail stations	Consistent. Riverside Transit Agency serves the Project area and RTA Route 27, which runs along Van Buren Boulevard, is approximately 1.5 miles northeast of the Project site. The Project would establish development intensities that could support future transit in the local area.
10. Support the implementation of transportation projects in Priority Equity Communities, particularly with respect to Transportation Equity Zones, as a way to enhance mobility, safety and access to opportunities	Not Applicable. RTP/SCS Policy 10 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
11. Create a resilient transportation system by preparing for emergencies and the impacts of climate change	Not Applicable. RTP/SCS Policy 11 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Transportation System Management	
12. Pursue efficient use of the transportation system using a set of operational improvement strategies that maintain the performance of the existing transportation system instead of adding roadway capacity, where possible	Not Applicable. RTP/SCS Policy 12 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
13. Prioritize transportation investments that increase travel time reliability, including build-out of the regional express lanes network	Not Applicable. RTP/SCS Policy 13 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Transportation Demand Management	
14. Encourage the development of transportation projects that provide convenient, cost-effective and safe alternatives to single-occupancy vehicle travel (e.g., trips made by foot, on bikes, via transit, etc.)	Not Applicable. RTP/SCS Policy 14 provides direction to County and regional agency staff and decision makers and relates to transportation projects, and is not applicable to the proposed Project.
15. Encourage jurisdictions and TDM practitioners to develop and expand local plans and policies to promote alternatives to single occupancy vehicle travel for residents, workers and visitors	Not Applicable. RTP/SCS Policy 15 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
16. Encourage municipalities to update existing (legacy) TDM ordinances by incorporating new travel modes and new technology and by incorporating employment and residential sites of certain populations – for example, employers who have less than 250 employees (below the 250 or more employees threshold identified in AQMD's Rule 2202)	Not Applicable. RTP/SCS Policy 16provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Technology Integration	
17. Support the implementation of technology designed to	Not Applicable. RTP/SCS Policy 17 provides direction to

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
provide equal access to mobility, employment, economic opportunity, education, health and other quality-of-life opportunities for all residents within the SCAG region	County and regional agency staff and decision makers, and is not applicable to the proposed Project.
18. Advocate for data sharing between the public and private sectors to effectively evaluate the services' benefits and impacts on communities while protecting data security and privacy	Not Applicable. RTP/SCS Policy 18 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
19. Advocate for technology that is adaptive and responsive to ensure it remains up to date and meets the evolving needs of users and stakeholders	Not Applicable. RTP/SCS Policy 19 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
20. Promote technology that has the capacity to facilitate economic growth, improve workforce development opportunities, and enhance safety and security	Not Applicable. RTP/SCS Policy 20 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
21. Proactively monitor and plan for the development, deployment and commercialization of new technology as it relates to integration with transportation infrastructure	Not Applicable. RTP/SCS Policy 21 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Safety	
22. Eliminate transportation-related fatalities and serious injuries (especially those involving vulnerable road users, such as people, especially older adults and children, walking and biking) on the regional multimodal transportation system	Not Applicable. RTP/SCS Policy 22 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
23. Integrate the assessment of equity into the regional transportation safety and security planning process, focusing on the analysis and mitigation of disproportionate impacts on disadvantaged communities	Not Applicable. RTP/SCS Policy 23 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project. Additionally, the Project does not include any components related to regional transportation safety or security.
24. Support innovative approaches for addressing transit safety and security issues so that impacts to transit employees and the public are minimized and those experiencing issues (e.g., unhoused persons) are supported	Not Applicable. RTP/SCS Policy 24 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
25. Support the use of transportation safety and system security data in investment decision-making, including consideration of new highway and transit/rail investments that would address safety and security needs	Not Applicable. RTP/SCS Policy 25 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Funding the System/Users Fees	
26. Promote stability and sustainability for core state and federal transportation funding sources	Not Applicable. RTP/SCS Policy 26 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
27. Establish a user fee–based system that better reflects the true cost of transportation, provides firewall protection for new and existing transportation funds, and represents equitable distribution of costs and benefits	Not Applicable. RTP/SCS Policy 27 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project. Additionally, the Project's Traffic Study (EIR *Technical Appendix K2*) identifies improvements, fair share contributions, and fee contributions to the County's DIF and/or TUMF programs, which would ensure that all study area intersections would

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
	operate at an acceptable Level of Service (LOS).
28. Pursue funding tools that promote access to opportunity and support economic development through innovative mobility programs	Not Applicable. RTP/SCS Policy 28 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
29. Promote national and state programs that include return-to-source guarantees while maintaining the flexibility to reward regions that continue to commit substantial local resources	Not Applicable. RTP/SCS Policy 29 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
30. Leverage locally available funding with innovative financing tools to attract private capital and accelerate project delivery	Not Applicable. RTP/SCS Policy 30 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
31. Promote local funding strategies that maximize the value of public assets while improving mobility, sustainability and resilience	Not Applicable. RTP/SCS Policy 31 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Communities	
Priority Development Areas	
32. Promote the growth of origins and destinations, with a focus on future housing and population growth, in areas with existing and planned urban infrastructure that includes transit and utilities	Consistent. The Project's residential land use is consistent with the residential land use in the surrounding area. The Project site is located approximately 2.7 miles south of SR-91, which has a mix of amenities for area residents.
33. Promote the growth of origins and destinations, in areas with a proclivity toward multimodal options like transit and active transportation, to reduce single occupant vehicle (SOV) dependency and vehicle miles traveled	Consistent. Riverside Transit Agency serves the Project area and RTA Route 27, which runs along Van Buren Boulevard, is approximately 1.5 miles northeast of the Project site. The Project would establish development intensities that could support future transit in the local area.
34. Seek to realize scale economies or a critical mass of jobs and destinations in areas across the region that can support non-SOV options and shorter trip distances, combined trips and reduced vehicle miles traveled	Consistent. The Project's residential land use is consistent with the residential land use in the surrounding area. The Project site is located approximately 2.7 miles south of SR-91, which has a mix of amenities for area residents.
Housing the Region	
35. Encourage housing development in areas with access to important resources and amenities (economic, educational, health, social and similar) to further fair housing access and equity across the region	Consistent. The proposed Project includes 206 single-family detached residential units, one park, and open space lots. The Project's residential land use is consistent with the residential land use in the surrounding area. The Project site is located approximately 2.7 miles south of SR-91, which has a mix of amenities for area residents.
36. Encourage housing development in transit-supportive and walkable areas to create more interconnected and resilient communities	Consistent. Riverside Transit Agency serves the Project area and RTA Route 27, which runs along Van Buren Boulevard, is approximately 1.5 miles northeast of the Project site. The Project would establish development intensities that could support future transit in the local area.
37. Support local, regional, state and federal efforts to produce and preserve affordable housing while meeting additional housing needs across the region	Consistent. The proposed Project would provide 206 single-family detached residential units to help meet the need for additional housing across the region.
38. Prioritize communities that are vulnerable to displacement pressures by supporting community	Consistent. The Project's residential land use is consistent with the residential land use in the surrounding area and

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
stabilization and increasing access to housing that meets the needs of the region	would provide 206 single-family detached residential units to help meet the need for additional housing across the region.
39. Promote innovative strategies and partnerships to increase homeownership opportunities across the region with an emphasis on communities that have been historically impacted by redlining and other systemic barriers to homeownership for people of color and other marginalized groups	Not Applicable. RTP/SCS Policy 39 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
40. Advocate for and support programs that emphasize reducing housing cost burden (for renters and homeowners), with a focus on the communities with the greatest needs and vulnerabilities	Not Applicable. RTP/SCS Policy 40 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
41. Support efforts to increase housing and services for people experiencing homelessness across the region	Consistent. The proposed Project would provide 206 single-family detached residential units to help meet the need for additional housing across the region.
15-Minute Communities	
42. Promote 15-minute communities as places with a mix of complementary land uses and accessible mobility options that align with and support the diversity of places (or communities) across the region. These are communities where residents can either access their most basic, day-to-day needs within a 15-minute walk, bike ride or roll from their home or as places that result in fewer and shorter trips because of the proximity of complementary land uses	Consistent. The Project's residential land use is consistent with the residential land use in the surrounding area. The Project site is located approximately 2.7 miles south of SR-91, which has a mix of land uses, including commercial and retail uses, for area residents.
43. Support communities across the region to realize 15-minute communities through incremental changes that improve equity, quality of life, public health, mobility, sustainability, resilience and economic vitality	Not Applicable. RTP/SCS Policy 43 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
44. Encourage efforts that elevate innovative approaches to increasing access to neighborhood destinations and amenities through an array of people-centered mobility options	Not Applicable. RTP/SCS Policy 44 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Equitable Engagement and Decision-Making	
45. Advance community-centered interventions, resources and programming that serve the most disadvantaged communities and people in the region, like Priority Equity Communities, with strategies that can be implemented in the short-to-long-term	Not Applicable. RTP/SCS Policy 45 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
46. Promote racial equity that is grounded in the recognition of the past and current harms of systemic racism and one that advances restorative justice	Not Applicable. RTP/SCS Policy 46 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
47. Increase equitable, inclusive, and meaningful representation and participation of people of color and disadvantaged communities in planning processes	Not Applicable. RTP/SCS Policy 47 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Environment	

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
Sustainable Development	
48. Promote sustainable development and best practices that enhance resource conservation, reduce resource consumption and promote resilience	Consistent. As presented throughout this EIR, the Project's impacts to the environment would be less than significant or would be reduced to the maximum feasible extent with the implementation of mitigation measures. Additionally, the analysis presented in EIR Subsection 4.6, *Energy*, with mandatory compliance with applicable federal and State regulations and requirements, including the provisions of the Title 24 Building Energy Standards, Project construction and operation would not result in the inefficient, wasteful, or unnecessary consumption of energy.
49. Support communities across the region to advance innovative sustainable development practices	Not Applicable. RTP/SCS Policy 49 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
50. Recognize and support the diversity of communities across the region by promoting local place-making, planning and development efforts that advance equity, mobility, resilience and sustainability	Not Applicable. RTP/SCS Policy 50 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Air Quality	
51. Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts	Consistent. As evaluated herein and in EIR Subsections 4.3, *Air Quality*, and 4.8, *Greenhouse Gas Emissions*, applicable regulations and design requirements have been imposed on the Project to reduce the Project's air quality emissions, and the Project's air quality and GHG emissions impacts were determined to be less than significant.
52. Support investments that reduce hazardous air pollutants and greenhouse gas emissions	Not Applicable. RTP/SCS Policy 52 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
53. Reduce the exposure and impacts of emissions and pollutants and promote local and regional efforts that improve air quality for vulnerable populations, including but not limited to Priority Equity Communities and the AB 617 Communities	Not Applicable. RTP/SCS Policy 53 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Clean Transportation	
54. Accelerate the deployment of a zero-emission transportation system and use near-zero-emission technology to offer short-term benefits where zero-emissions solutions are not yet feasible or commercially viable	Not Applicable. RTP/SCS Policy 54 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
55. Promote equitable use of and access to clean transportation technologies so that all may benefit from them	Not Applicable. RTP/SCS Policy 55 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
56. Consider the full environmental life cycle of clean transportation technologies, including upstream production and end of life as an important part of meeting SCAG's	Not Applicable. RTP/SCS Policy 56 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
objectives in economic development and recovery, resilience planning and achievement of equity	
57. Maintain a technology-neutral approach in the study of, advancement of and investment in clean transportation technology	Not Applicable. RTP/SCS Policy 57 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Natural and Agricultural Lands Preservation	
58. Prioritize the climate mitigation, adaptation, resilience and economic benefits of natural and agricultural lands in the region	Not Applicable. RTP/SCS Policy 58 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
59. Support conservation of habitats that are prone to hazards exacerbated by climate change, such as wildfires and flooding	Not Applicable. RTP/SCS Policy 59 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
60. Support regional conservation planning and collaboration across the region	Not Applicable. RTP/SCS Policy 60 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
61. Encourage the protection and restoration of natural habitat and wildlife corridors	Not Applicable. RTP/SCS Policy 49 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project. Additionally, the Project site is located in an area that is planned for future development and the majority of the sensitive habitats on site would be avoided (refer to EIR Subsection 4.4, *Biological Resources*, for a complete discussion of Project impacts to and mitigation for sensitive habitats).
62. Encourage the conservation and viability of agricultural lands to protect the regional and local food supply and ensure the sustainability of local agriculture as a vital part of the region's economy	Not Applicable. RTP/SCS Policy 49 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project. In addition, the Project site is located in an area that is planned for future development, and the Project site contains no active agricultural uses under existing conditions.
63. Encourage policy development of the link between natural and agricultural conservation with public health	Not Applicable. RTP/SCS Policy 63 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Climate Resilience	
64. Prioritize the most vulnerable populations and communities subject to climate hazards to help the people, places and infrastructure that are most at risk for climate change impacts. In doing so, recognize that disadvantaged communities are often overburdened	Not Applicable. RTP/SCS Policy 64 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
65. Support local and regional climate and hazard planning and implementation efforts for transportation, land use, and other factors	Not Applicable. RTP/SCS Policy 65 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
66. Support nature-based solutions to increase regional resilience of the natural and built environment	Not Applicable. RTP/SCS Policy 66 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
67. Promote sustainable water use planning, practices and storage that improve regional water security and resilience	Not Applicable. RTP/SCS Policy 67 provides direction to County and regional agency staff and decision makers, and

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
in a drier environment	is not applicable to the proposed Project.
68. Support an integrated planning approach to help local jurisdictions meet housing production needs in a drier environment	Not Applicable. RTP/SCS Policy 68 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Economy	
Goods Movement	
69. Leverage and prioritize investments, particularly where there are mutual co-benefits to both freight and passenger/commuter rail	Not Applicable. RTP/SCS Policy 69 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
70. Prioritize community and environmental justice concerns, together with economic needs, and support workforce development opportunities, particularly around deployment of zero-emission and clean technologies and their supporting infrastructure	Not Applicable. RTP/SCS Policy 70 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
71. Explore and advance the transition toward zero-emission and clean technologies and other transformative technologies, where viable	Not Applicable. RTP/SCS Policy 71 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
72. Advance comprehensive, systems-level planning of corridor/supply chain operational strategies that is integrated with road and rail infrastructure and inland port concepts	Not Applicable. RTP/SCS Policy 72 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
73. Ensure continued, significant investment in a safe, secure, clean and efficient transportation system – including both highways and rail – to support the intermodal movement of goods across the region	Not Applicable. RTP/SCS Policy 73 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Broadband	
74. Support ubiquitous regional broadband deployment and access to provide the necessary infrastructure and capability for Smart Cities strategies—to ensure the benefits of these strategies improve safety and are distributed equitably	Not Applicable. RTP/SCS Policy 74 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
75. Develop networks that are efficient, scalable, resilient and sustainable to support transportation systems management, operations services and "tele-everything" strategies that reduce vehicle miles traveled, optimize efficiency and accommodate future growth of regional economies	Not Applicable. RTP/SCS Policy 75 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
76. Encourage investments that provide access to digital activities that support educational, financial and economic growth	Not Applicable. RTP/SCS Policy 76 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
77. Advocate for current, accurate data to identify opportunity zones and solutions that support the development of broadband services to community anchor institutions and local businesses	Not Applicable. RTP/SCS Policy 77 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
78. Promote an atmosphere that allows for healthy competition and speed-driven innovative solutions while remaining technologically neutral	Not Applicable. RTP/SCS Policy 78 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.

Table 4.11-3 Analysis of Consistency with Connect SoCal Goals

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
79. Use a bottom-up approach to identify and support a community's broadband needs	Not Applicable. RTP/SCS Policy 79 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Universal Basic Mobility	
80. Encourage partnerships and policies to broaden safe and efficient access to a range of mobility services that improve connections to jobs, education and basic services	Not Applicable. RTP/SCS Policy 80 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
81. Promote increased payment credentials for disadvantaged community members and the transition of cash users to digital payment technologies to address payment barriers	Not Applicable. RTP/SCS Policy 81 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Workforce Development	
82. Foster a positive business climate by promoting regional collaboration in workforce and economic development between cities, counties, educational institutions and employers	Not Applicable. RTP/SCS Policy 82 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
83. Encourage inclusive workforce development that promotes upward economic mobility	Not Applicable. RTP/SCS Policy 83 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
84. Support entrepreneurial growth with a focus on underrepresented communities	Not Applicable. RTP/SCS Policy 84 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
85. Foster a resilient workforce that is poised to effectively respond to changing economic conditions (e.g., market dynamics, technological advances and climate change)	Not Applicable. RTP/SCS Policy 85 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
86. Inform and facilitate data-driven decision-making about the region's workforce	Not Applicable. RTP/SCS Policy 86 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
Tourism	
87. Consult and collaborate with state, county and local agencies within the region that are charged with promoting tourism and transportation	Not Applicable. RTP/SCS Policy 87 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.
88. Encourage the reduced use of cars by visitors to the region by working with state, county and local agencies (e.g., park services, transportation agencies) to highlight and increase access to alternative options, including transit, passenger rail and active transportation	Not Applicable. RTP/SCS Policy 88 provides direction to County and regional agency staff and decision makers, and is not applicable to the proposed Project.

C. *Land Use Compatibility*

The Project as evaluated herein would provide for the future development of the 111.6-acre Project site with residential land uses on lot sizes ranging from 10,000 s.f. to 25,765 s.f. Under existing conditions, to the southeast of the Project site is undeveloped vacant land and a 0.54-acre freshwater pond. To the south of the Project site is undeveloped vacant land. Further south are agricultural and commercial uses, including Gone Straw Farms. West of the Project site are single-family residential and agricultural uses. To the north of the

Project site is undeveloped vacant land and agricultural uses, beyond which is single-family residential use. As previously noted, lands immediately to the north of the Project site are designated for Open Space - Conservation (OS-C) and RC-LDR, with lands further to the north being designated for RC-VLDR. Lands immediately to the east, south, and west are designated for RC-LDR land uses. Lands to the southwest are designated for MDR land uses, with lands further to the west being designated for Rural Residential (RR), Rural Community – Estate Density Residential (RC-EDR), and Low Density Residential (LDR).

The Project's proposed land uses would be fully compatible with all existing and planned land uses in the surrounding area, as the residential density proposed as part of the Project is consistent with residential densities in the surrounding area. In addition, impacts associated with the Project's potential land use compatibility with surrounding uses have been evaluated throughout this EIR under the appropriate subject headings. For example, EIR Subsection 4.3, *Air Quality*, includes an assessment of potential localized air quality impacts that could result from Project implementation. As concluded in EIR Subsection 4.3, the Project's localized air quality impacts affecting surrounding sensitive receptors would be less than significant. EIR Subsection 4.9, *Hazards and Hazardous Materials*, includes an analysis of potential hazardous materials impacts that could affect surrounding land uses, and demonstrates that with mandatory regulatory compliance, impacts associated with hazards and hazardous materials would be less than significant. EIR Subsection 4.13, *Noise*, includes an assessment of potential noise impacts associated with the Project, including noise from construction, site operations, and Project-related traffic, and concludes that Project impacts would be less than significant following the implementation of mitigation measures. There are no environmental effects to surrounding existing or planned land uses that have not already been evaluated throughout this EIR, and where necessary mitigation measures have been imposed on the Project to reduce potential impacts to less-than-significant levels. Therefore, the Project's potential impacts due to land use compatibility would be less than significant.

Threshold b.: ***Would the Project disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?***

Under existing conditions, the Project site is undeveloped and contains no public thoroughfares. Rural single-family residential homes occur in areas surrounding the Project site, while medium density residential uses exist to the west of McAllister Street and currently are being constructed at the northeast corner of McAllister Street at El Sobrante Road intersection. There are no components of the proposed Project that would disrupt of divide the physical arrangement of an established community. There are no existing residential developments immediately to the northeast of the Project site, and residential uses to the west and south of the Project site still would be accessible via McAllister Street and/or El Sobrante Road. There are no components of the proposed Project that would disrupt or divide the physical arrangement of an established community, and no impact would occur.

4.11.5 Cumulative Impact Analysis

As indicated under the analysis of Threshold a., the proposed Project would not conflict with any of the policies included in the Riverside County General Plan or LMWAP, and would not conflict with Connect SoCal. Other developments within the western Riverside County region similarly would be required to demonstrate

compliance with applicable General Plan and Connect SoCal policies. Thus, the Project's impacts due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be less-than-cumulatively considerable.

As indicated under the analysis of Threshold b., the Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community). As such, cumulatively-considerable impacts would not occur.

4.11.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would not conflict with the General Plan, LMWAP, Connect SoCal, or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Threshold b.: Less-than-Significant Impact. The Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority community), and impacts would be less than significant.

4.11.7 Applicable Regulations, Design Requirements, and Mitigation

Impacts to land use and planning would be less than significant; therefore, mitigation measures are not required.

4.12 MINERAL RESOURCES

This Subsection 4.12 describes the potential mineral resources that are located on the Project site and in the vicinity and evaluates the potential effects that the Project may have on these resources. The following analysis is based in part on information obtained in the County's General Plan (Riverside County, 2015a). The analysis in this Subsection also is based on information from the report entitled, "Geotechnical Investigation Report Proposed Highland Grove IV, Lake Matthews Area, Riverside County, California," prepared by Leighton and Associates, Inc. (herein, "Leighton"), dated August 8, 2024, and included as *Technical Appendix F* to this EIR (Leighton, 2024). Refer to Section 7.0*, References*, for a complete list of these and other reference sources.

4.12.1 EXISTING CONDITIONS

A. Geology

The Project site is located within the Peninsular Ranges, a prominent physiographic province forming much of southwestern California. This region is characterized by relatively steep, elongated northwest trending mountain ranges and valleys. More specifically, the Project site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline bedrock. The Perris Block, approximately 20 miles by 50 miles in extent, is bounded by the San Jacinto Fault Zone to the northeast, the Elsinore Fault Zone to the southwest, the Cucamonga Fault Zone to the northwest, and the Temecula Basin to the southeast. The southeast boundary of the Perris block is poorly defined. The Perris Block has had a complex tectonic history, apparently experiencing relative vertical land movements of several thousand feet in response to movement along the Elsinore and San Jacinto Fault Zones. Sedimentary and volcanic deposits locally mantle the crystalline bedrock. Alluvial and colluvial deposits fill the valley areas. Geologic deposits underlying the Project site include Quaternary alluvium within the low-lying drainage areas of the site and Cretaceous-age granitic bedrock exposed on the hillsides and underlying the alluvium. (Leighton, 2024, p. 5)

B. Mineral Resources Potential

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, §§ 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. The SMARA requires the State Geologist to classify land according to the presence, absence, or likely occurrence of significant mineral deposits in certain areas of the State subject to urban expansion or land uses incompatible with mining. The State classification system is broken out into four general zones, as shown below in Table 4.12-1, *Mineral Resources Zones*.

According to mapping information available from the California Department of Conservation (CDC), the Project site is classified as MRZ-3, which indicates that the Project site occurs in an area of undetermined mineral resource significance (CDC, n.d., Plate 3-22). Accordingly, the Project site does not contain any areas of known mineral resources.

Table 4.12-1 Mineral Resources Zones

Zone	Significance
MRZ-1	Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
MRZ-2a	Areas where the available geologic information indicates that there are significant mineral deposits.
MRZ-2b	Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
MRZ-3a	Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined.
MRZ-4	Areas where there is not enough information available to determine the presence or absence of mineral deposits.

(Riverside County, 2015b, pp. OS-37 and OS-38)

4.12.2 Applicable Environmental Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to mineral resources.

A. State Regulations

1. Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, §§ 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. Public Resources Code § 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations. (CDC, n.d.)

SMARA, Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1. (CDC, n.d.)

4.12.3 Basis for Determining Significance

Section XII of Appendix G to the State CEQA Guidelines addresses typical adverse effects to mineral resources, and includes the following threshold questions to evaluate the Project's impacts on mineral resources (OPR, 2018a):

- *Would the Project 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?*

- *Would the Project result in the loss of availability of a locally-important mineral resource recover site delineated on a local general plan, specific plan, or other land use plan.*

Significance thresholds as implemented by Riverside County are set forth in Riverside County's Environmental Assessment Checklist form, which are derived from Section XII of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact on mineral resources if construction and/or operation of the Project would:

a. *Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State;*

b. *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan;*

c. *Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine; or*

d. *Expose people or property to hazards from proposed, existing or abandoned quarries or mines.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts on mineral resources.

4.12.4 Impact Analysis

Threshold a: ***Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?***

According to the CDC, the Project site is classified as Mineral Resources Zone (MRZ) 3, which includes "areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined" (CDC, n.d., Plate 3-22). Therefore, the Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, with implementation of the proposed Project there would be no impact to known mineral resources.

Threshold b: ***Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

The Project site is not designated as a mineral resource recovery site by the County's General Plan or the Lake Mathews/Woodcrest Area Plan (LMWAP), and is not located within the boundaries of any specific plans. There are no other land use plans that identify the site for containing mineral resources. Accordingly, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, and no impact would occur.

Threshold c: ***Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?***

As mapped by the CDC, there are no areas surrounding the Project site that contain known mineral resources (CDC, n.d., Plate 3-22). No lands in the Project vicinity are classified or designated by the State as containing mineral resource deposits, and there are no known surface mines in the Project vicinity. Accordingly, the Project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and no impact would occur.

Threshold d: ***Expose people or property to hazards from proposed, existing or abandoned quarries or mines?***

Historical records indicate that no quarrying or mining activities ever occurred on the Project site, and there is no evidence of any proposed, existing, or abandoned quarries in the surrounding area (McAlister, 2024, pp. 7-11). Accordingly, the Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no impact would occur.

4.12.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects within the western Riverside County region. This cumulative study area was selected because western Riverside County encompasses large areas that include geologic conditions similar to those that occur on the Project site, and because this study area encompasses a large portion of the local market for the production and consumption of mineral resources.

As mapped by the CDC, the Project site is classified as MRZ-3 and contains no known mineral resource deposits. As such, the Project has no potential to result in cumulatively-considerable impacts due to the loss of availability of a known mineral resource that would be of value to the region or residents of the State. No cumulatively-considerable impacts would occur.

Riverside County's General Plan and the LMWAP do not designate the Project site or surrounding areas as a mineral resource recovery site, and there are no other land use plans that identify the site or surrounding areas for containing mineral resources. As such, the Project has no potential to result in cumulatively-considerable impacts due to the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No cumulatively-considerable impacts would occur.

There are no lands in the Project vicinity that include State classified or designated areas for mineral resources, and there are no existing surface mines in the Project vicinity. As such, no cumulatively-considerable impacts to State classified or designated areas or existing surface mines would occur.

There are no known proposed, existing, or abandoned quarries or mines in the Project vicinity. As such, the Project has no potential to expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no cumulatively-considerable impacts would occur.

4.12.6 Significance of Impacts Before Mitigation

Threshold a.: No Impact. The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, with implementation of the proposed Project there would be no impact to known mineral resources.

Threshold b.: No Impact. The Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, and no impact would occur.

Threshold c.: No Impact. The Project would not be an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and no impact would occur.

Threshold d.: No Impact. The Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines, and no impact would occur.

4.12.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

No impact to mineral resources would occur with implementation of the proposed Project; thus, mitigation measures are not required.

4.13 NOISE

This Subsection 4.13 addresses the environmental issue of noise. The information in this Subsection is based in part on a technical report prepared by Urban Crossroads, Inc. (herein, "Urban Crossroads"), titled, "Highland Grove Vistas 4 TTM No. 38927 Noise Impact Analysis" (herein, "NIA"), dated June 5, 2025, and included as *Technical Appendix K* to this EIR (Urban Crossroads, 2025d). Refer to Section 7.0, References, for a complete list of reference sources.

4.13.1 NOISE FUNDAMENTALS

A. *Noise Definitions*

Noise has been simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Because the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel (dB) scale. A sound increase of 10 dB indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum (i.e., frequencies that are not audible to the human ear). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet, which can cause serious discomfort. (Urban Crossroads, 2025d, pp. 9-10)

B. *Noise Descriptors*

Environmental noise descriptors generally are based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment. (Urban Crossroads, 2025d, p. 10)

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{50}, L_{25}, L_8 and L_2, are commonly used. The percentile noise descriptors are the noise levels equaled or exceeded during 50 percent, 25 percent, 8 percent, and 2 percent of a stated time. Sound levels associated with the L_2 and L_8 typically describe transient or short-term events, while levels associated with the L_{50} describe the steady state (or median) noise conditions. While the L_{50} describes the median noise levels occurring 50 percent of the time, the L_{eq} accounts for the total energy (average) observed for the entire hour. Therefore, the L_{eq} noise descriptor is generally 1-2 dBA higher than the L_{50} noise level. (Urban Crossroads, 2025d, p. 10)

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of

a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The County of Riverside relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources. (Urban Crossroads, 2025d, p. 10)

C. Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

1. Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (Urban Crossroads, 2025d, pp. 10-11)

2. Ground Absorption

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (Urban Crossroads, 2025d, p. 11)

3. Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (Urban Crossroads, 2025d, p. 11)

4. Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (Urban Crossroads, 2025d, p. 11)

D. Noise Control

Noise control is the process of obtaining an acceptable noise environment for an observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to these three elements. (Urban Crossroads, 2025d, p. 11)

E. Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source. (Urban Crossroads, 2025d, p. 12)

F. Land Use Compatibility With Noise

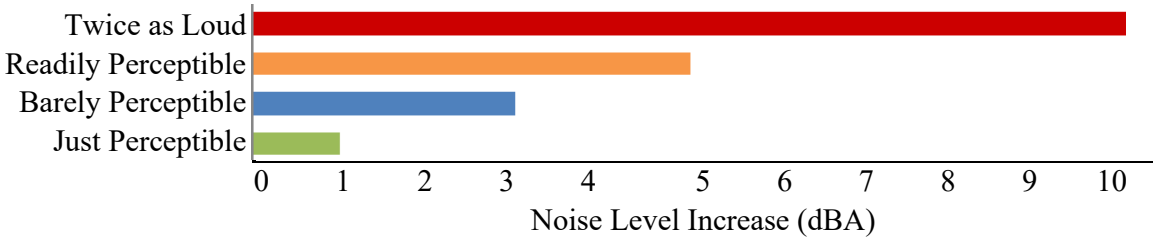
Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop, and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (Urban Crossroads, 2025d, p. 12)

G. Community Response to Noise

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Another twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise,

and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Figure 4.13-1, *Noise Level Increase Perception*. An increase or decrease of 1 dBA cannot be perceived except in carefully controlled laboratory experiments, a change of 3 dBA is considered barely perceptible, and changes of 5 dBA are considered readily perceptible. (Urban Crossroads, 2025d, p. 12)

Figure 4.13-1 Noise Level Increase Perception



(Urban Crossroads, 2025d, Exhibit 2-B)

H. Vibration

Per the FTA's *Transit Noise and Vibration Impact Assessment Manual*, vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency. (Urban Crossroads, 2025d, p. 13)

Additionally, in contrast to airborne noise, ground-borne vibration outdoors is not a common environmental problem and annoyance from ground-borne vibration is almost exclusively an indoor phenomenon. Therefore, the effects of vibrations should only be evaluated at a structure and the effects of the building structure on the vibration should be considered. Wood-frame buildings, such as typical residential structures, are more easily excited by ground vibration than heavier buildings. In contrast, large masonry buildings with spread footings have a low response to ground vibration. In general, the heavier a building is, the lower the response will be to the incident vibration energy. However, all structurers reduce vibration levels due to the coupling of the building to the soil. (Urban Crossroads, 2025d, p. 13)

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. However, the RMS amplitude and PPV are related mathematically, and

the RMS amplitude of equipment typically is calculated from the PPV reference level. The RMS amplitude is approximately 70% of the PPV. Thus, either can be used on the description of vibration impacts. (Urban Crossroads, 2025d, p. 13)

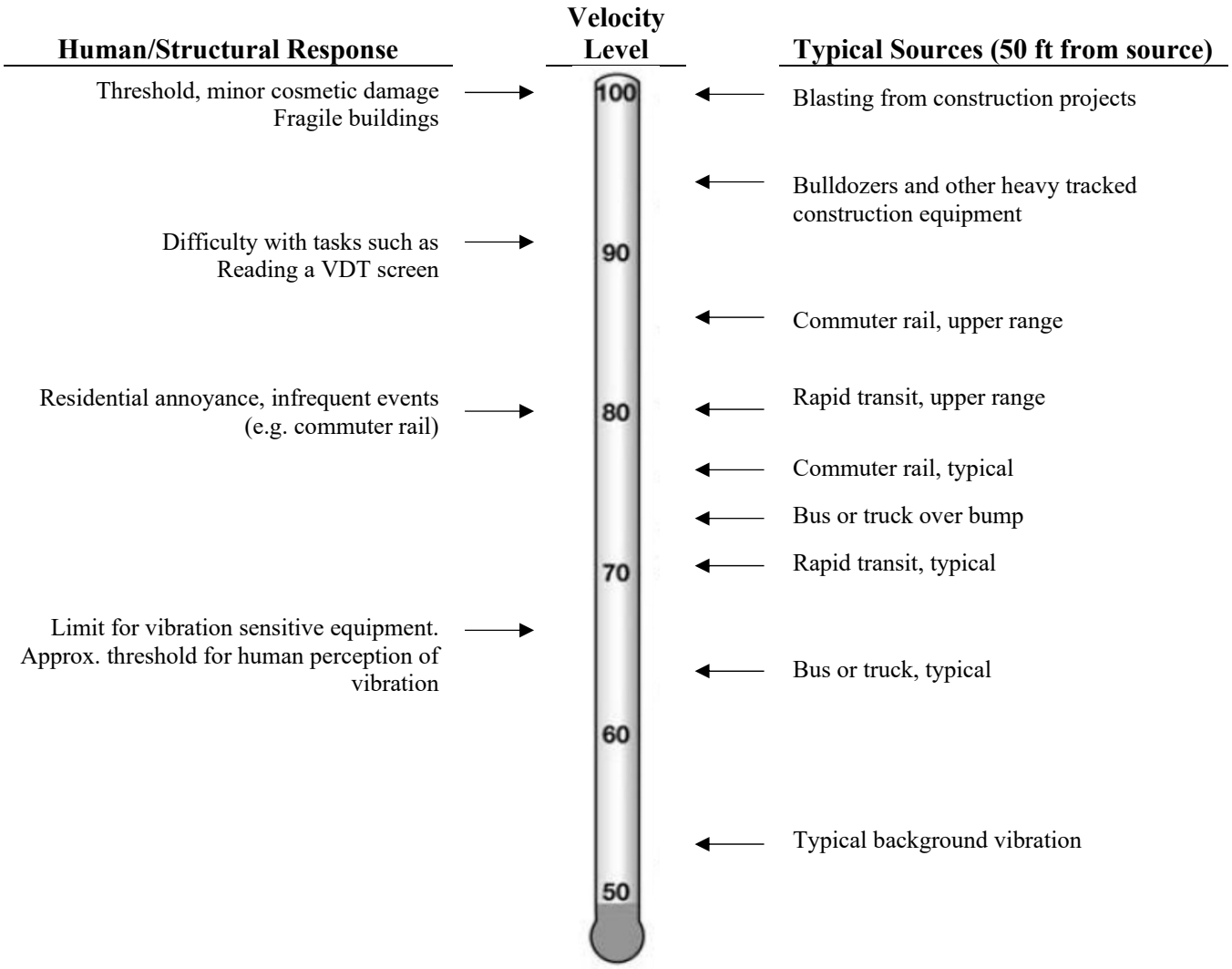
While not universally accepted, vibration decibel notation (VdB) is another vibration notation developed and used by the FTA in their guidance manual to describe vibration levels and provide a background of common vibration levels and set vibration limits. Decibel notation (VdB) serves to reduce the range of numbers used to describe vibration levels and is used in this report to describe vibration levels. As stated in the FTA guidance manual, the background vibration-velocity level in residential areas generally is 50 VdB. Ground-borne vibration normally is perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Figure 4.13-2, *Typical Levels of Ground-Borne Vibration*, illustrates common vibration sources and the human and structural response to ground-borne vibration. (Urban Crossroads, 2025d, pp. 13-14)

4.13.2 Existing Conditions

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Figure 4.13-3, *Noise Measurement Locations,* shows the Project site and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads on Tuesday, July 2, 2024. (Urban Crossroads, 2025d, p. 27)

A. Measurement Procedure and Criteria

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (Urban Crossroads, 2025d, p. 27)



* RMS Velocity Level in VdB relative to 10^{-6} inches/second

Figure 4.13-2 Typical Levels of Ground-Borne Vibration

Figure 4.13-3 *Noise Measurement Locations*

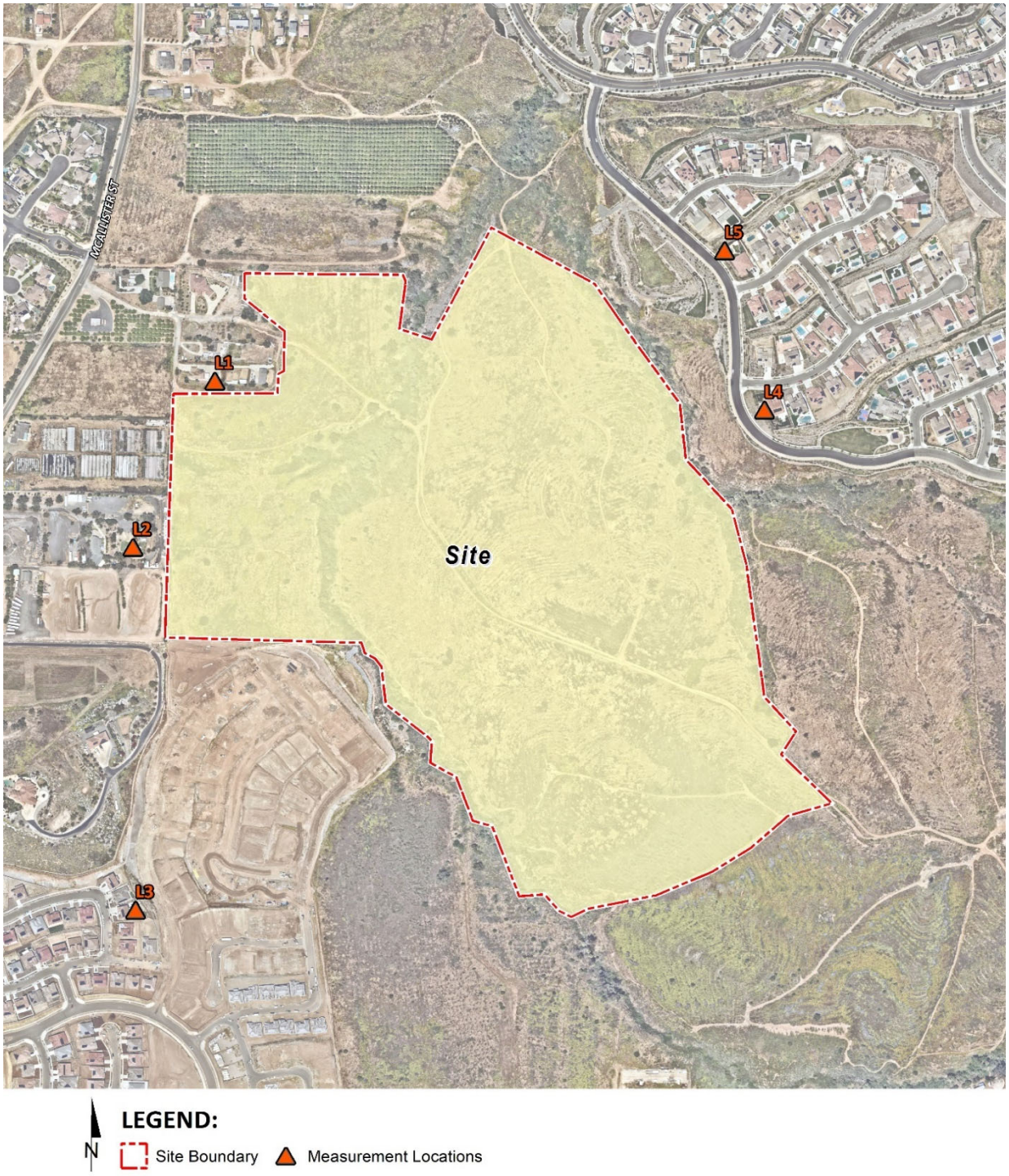


Figure 4.13-3 Noise Measurement Locations

Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community*. (Urban Crossroads, 2025d, p. 27)

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels. (Urban Crossroads, 2025d, p. 29)

B. Noise Measurement Results

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Table 4.13-1, *24-Hour Ambient Noise Level Measurements*, identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Appendix 5.2 to the Project's NIA (*Technical Appendix K*) provides a summary of the existing hourly ambient noise levels. (Urban Crossroads, 2025d, p. 29)

Table 4.13-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 to the Project's NIA (*Technical Appendix K*) provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods. The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with nearby surface streets. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations. (Urban Crossroads, 2025d, pp. 29-30)

4.13.3 Applicable Environmental Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to noise.

Table 4.13-1 24-Hour Ambient Noise Level Measurements

Location[1]	Description	Energy Average Noise Level (dBA Leq)[2]	
		Daytime	Nighttime
L1	Located north of the site near the existing residence at 17172 McAllister St.	45.9	39
L2	Located West of the site near the existing residence at 17360 McAllister St.	47.2	41.8
L3	Located southwest of the site near the existing residence at 17754 Pinot Noir Dr.	60.3	48
L4	Located northeast of the site near the existing residence at 13394 Planet Ct.	53.8	48.3
L5	Located south of the Project site near the existing residence at 16016 Gamble Avenue	55.5	48.8

[1] See Figure 4.13-3 for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2 of the Project's NIA (*Technical Appendix K*).
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
(Urban Crossroads, 2025d, Table 5-1)

A. Federal Regulations

1. Noise Control Act of 1972

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. (EPA, 2024c)

While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control. (EPA, 2024c)

2. Federal Transit Administration

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents. In the interest of promoting quality and uniformity in assessments, the manual is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents. The manual sets forth the methods and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining what can be done to mitigate such impact. (FTA, 2006, p. 1-1)

The NVIA also establishes criteria for acceptable ground-borne vibration, which are expressed in terms of root mean square (rms) velocity levels in decibels and the criteria for acceptable ground-borne noise are expressed

in terms of A-weighted sound levels. As shown in Table 4.13-2, *Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment*, the FTA identifies three categories of land uses and provides Ground-Based Vibration (GBV) and Ground-Based Noise (GBN) criteria for each category of land use. (FTA, 2006, pp. 8-3 and 8-4)

Table 4.13-2 Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch /sec)			GBN Impact Levels (dB re 20 micro Pascals)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[4]	N/A[4]	N/A[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Notes:

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
5. Vibration-sensitive equipment is generally not sensitive to ground-borne noise.

(FTA, 2006, Table 8-1)

3. Federal Aviation Administration

The Federal Aviation Administration (FAA) regulates the maximum noise level that an individual civil aircraft can emit through requiring aircraft to meet certain noise certification standards. These standards designate changes in maximum noise level requirements by "stage" designation. The standard requires that the aircraft meet or fall below designated noise levels. For civil jet aircraft, there are four stages identified, with Stage 1 being the loudest and Stage 4 being the quietest. For helicopters, two different stages exist, Stage 1 and Stage 2. As with civil jet aircraft, Stage 2 is quieter than Stage 1. In addition, the FAA is currently working to adopt the latest international standards for helicopters, which will be called Stage 3 and will be quieter than Stage 2. (FAA, 2024)

The FAA has undertaken a phase out of older, noisier civil aircraft, resulting in some stages of aircraft no longer being in the fleet. Currently within the contiguous US, civil jet aircraft over 75,000 pounds maximum take-off weight must meet Stage 3 and Stage 4 to fly. In addition, aircraft at or under 75,000 pounds maximum take-off weight must meet Stage 2, 3, or 4 to operate within the U.S. In addition, by December 31, 2015, all civil jet aircraft, regardless of weight must meet Stage 3 or Stage 4 to fly within the contiguous U.S. Both Stage 1 and Stage 2 helicopters are allowed to fly within the U.S. (FAA, 2024)

The U.S. noise standards are defined in the Code of Federal Regulations (CFR) Title 14 Part 36 – *Noise Standards: Aircraft Type and Airworthiness Certification* (14 CFR Part 36). The FAA publishes certificated noise levels in the advisory circular, *Noise Levels for U.S Certificated and Foreign Aircraft*. This advisory circular provides noise level data for aircraft certificated under 14 CFR Part 36 and categorizes aircraft into their appropriate "stages." Any aircraft that is certified for airworthiness in the U.S. needs to also comply with noise standard requirements to receive a noise certification. The purpose of the noise certification process is to ensure that the latest available safe and airworthy noise reduction technology is incorporated into aircraft design and enables the noise reductions offered by those technologies to be reflected in reductions of noise experienced by communities. As noise reduction technology matures, the FAA works with the international community to determine if a new stringent noise standard is needed. If so, the international community through the International Civil Aviation Organization (ICAO) embarks on a comprehensive analysis to determine what that new standard will be. (FAA, 2022)

The current FAA noise standards applicable to new type certifications of jet and large turboprop aircraft is Stage 4. It is equivalent to the ICAO Annex 16, Volume 1 Chapter 4 standards. Recently, the international community has established and approved a more stringent standard within the ICAO Annex 16, Volume 1 Chapter 14, which became effective July 14, 2014. The FAA is adopting this standard and promulgating the rule for Stage 5 that is anticipated to be effective for new type certificates after December 31, 2017 and December 31, 2020, depending on the weight of the aircraft. The Notice of Proposed Rule Making (NPRM) for Stage 5 was published on January 14, 2016. (FAA, 2022)

For helicopters, the FAA has noise standards for a Stage 3 helicopter that became effective on May 5, 2014. These more stringent standards apply to new type helicopters and are consistent with ICAO Annex 16, Volume 1 Chapter 8 and Chapter 11. (FAA, 2022)

The FAA Modernization and Reform Act of 2012, in Section 513, had a prohibition on operating certain aircraft weighing 75,000 pounds or less not complying with Stage 3 noise levels, and on July 2, 2013, the FAA published a Final Rule in the Federal Register for the *Adoption of Statutory Prohibition the Operation of Jets Weighing 75,000 Pounds or Less That Are Not Stage 3 Noise Compliant*. In 1990, Congress passed the Aviation Noise and Capacity Act, which required that by the year 2000 all jet and large turboprop aircraft at civilian airports be Stage 3. (FAA, 2022)

4. Federal Highway Administration

The Federal Highway Administration (FHWA) is the agency responsible for administering the Federal-aid highway program in accordance with Federal statutes and regulations. The FHWA developed the noise

regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, applies to highway construction projects where a State department of transportation has requested Federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design. (FHWA, 2022b)

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in Title 23 of the United States Code of Federal Regulations Part 772. The regulations require the following during the planning and design of a highway project:

- Identification of traffic noise impacts;
- Examination of potential mitigation measures;
- The incorporation of reasonable and feasible noise mitigation measures into the highway project; and
- Coordination with local officials to provide helpful information on compatible land use planning and control. (FHWA, 2022b)

The regulations contain noise abatement criteria, which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require meeting the abatement criteria in every instance. Rather, they require highway agencies make every reasonable and feasible effort to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of Federal-aid highway funds for construction or reconstruction of a highway. (FHWA, 2022b)

5. Construction-Related Hearing Conservation

The Occupational Safety and Health Administration (OSHA) hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposures over their entire working lifetimes. Standard 29 CFR, Part 1910 indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels. (OSHA, 2002) This analysis does not evaluate the noise exposure of construction workers within the Project site based on CEQA requirements, and instead, evaluates the Project-related construction noise levels at the nearby sensitive receiver locations in the Project study area. Further, periodic exposure to high noise levels in short duration, such as Project construction, is typically considered an annoyance and not impactful to human health. It would take several years of exposure to high noise levels to result in hearing impairment.

B. State Regulations

1. Building Standards Code

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise

standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL. (BSC, n.d.)

2. California Noise Insulation Standards

The California Noise Insulation Standards (CCR Title 25 Section 1092) establish uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 25 specifies that interior noise levels attributable to exterior sources shall not exceed 45 dBA Ldn/CNEL (i.e., the same levels that the EPA recommends for residential interiors) in any habitable room of a new dwelling. An acoustical study must be prepared for proposed multiple unit residential and hotel/motel structures where outdoor Ldn/CNEL is 60 dBA or greater. The study must demonstrate that the design of the building would reduce interior noise to 45 dBA Ldn/CNEL or lower. Because noise levels can increase over time in developing areas, Title 25 also specifies that dwellings are to be designed so that interior noise levels will meet this standard for at least ten years from the time of building permit application. (MLA, n.d.)

3. OPR General Plan Guidelines

Though not adopted by law, the 2003 California General Plan Guidelines, published by the California Governor's Office of Planning and Research (OPR), provides guidance for local agencies in preparing or updating General Plans. The Guidelines provide direction on the required Noise Element portion of the General Plans. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. Local governments must "analyze and quantify" noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that "minimizes the exposure of community residents to excessive noise." Noise level contours must be mapped and the conclusions of the element used as a basis for land use decisions. The element must include implementation measures and possible solutions to existing and foreseeable noise problems. Furthermore, the policies and standards must be sufficient to serve as a guideline for compliance with sound transmission control requirements. The noise element directly correlates to the Land Use, Circulation, and Housing Elements. The Noise Element must be used to guide decisions concerning land use and the location of new roads and transit facilities since these are common sources of excessive noise levels. The noise levels from existing land uses, including mining, agricultural, and industrial activities, must be closely analyzed to ensure compatibility, especially where residential and other sensitive receptors have encroached into areas previously occupied by these uses. (OPR, 2017b, pp. 131-132)

C. *Local Regulations*

1. *Riverside County General Plan*

The Riverside County General Plan Noise Element was adopted to control and abate environmental noise, and to protect the citizens of Riverside County from excessive exposure to noise. The Noise Element specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise Element identifies several polices to minimize the impacts of excessive noise levels throughout the community and establishes noise level requirements for all land uses. To protect Riverside County residents from excessive noise, the Noise Element contains the following policies related to the Project: (Urban Crossroads, 2025d, pp. 17-18)

N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

N 1.2 Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise producing, such as transportation corridors or within the projected noise contours of any adjacent airports.

N 1.3 Consider the following uses noise sensitive and discourage these uses in areas in excess of 65 CNEL:

- *Schools*
- *Hospitals*
- *Rest Homes*
- *Long Term Care Facilities*
- *Mental Care Facilities*
- *Residential Uses*
- *Libraries*
- *Passive Recreation Uses*
- *Places of Worship*

N 1.4 Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

N 4.1 Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:

a. 45 dBA 9-minute L_{eq} between 10:00 p.m. and 7:00 a.m.;

b. 65 dBA 9-minute L_{eq} between 7:00 a.m. and 10:00 p.m.

N 13.1 Minimize the impacts of construction noise on adjacent uses within acceptable standards.

N 13.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse impacts on surrounding areas.

N 13.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the [County] for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:

i. Temporary noise attenuation fences;

ii. Preferential location and equipment; and

iii. Use of current noise suppression technology and equipment.

N 14.1 Enforce the California Building Standards that sets standards for building construction to mitigate interior noise levels to the tolerable 45 CNEL limit. These standards are utilized in conjunction with the Uniform Building Code by the County's Building Department to ensure that noise protection is provided to the public. Some design features may include extra-dense insulation, double-paned windows, and dense construction materials.

N 16.3 Prohibit exposure of residential dwellings to perceptible ground vibration from passing trains as perceived at the ground or second floor. Perceptible motion shall be presumed to be a motion velocity of 0.01 inches/second over a range of 1 to 100 Hz.

To ensure noise-sensitive land uses are protected from high levels of noise (N 1.1), Table N-1 of the Noise Element identifies guidelines to evaluate proposed developments based on exterior and interior noise level limits for land uses and requires a noise analysis to determine needed mitigation measures if necessary. The Noise Element identifies residential use as a noise-sensitive land use (N 1.3) and discourages new development in areas with transportation related levels of 65 dBA CNEL or greater existing ambient noise levels. To prevent and mitigate noise impacts for its residents (N 1.5), County of Riverside requires exterior noise attenuation measures for sensitive land use exposed to transportation related noise levels higher than 65 dBA CNEL. In addition, the County of Riverside had adopted an interior noise level limit of 45 dBA CNEL (N 14.1). (Urban Crossroads, 2025d, pp. 18-19)

Policy N 4.1 of the Noise Element sets a stationary-source exterior noise limit to not to be exceeded for a cumulative period of more than ten minutes in any hour of 65 dBA L_{eq} for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. To prevent high levels of construction noise from impacting noise-sensitive land uses, policies N 13.1 through 13.3 identify construction noise mitigation requirements for new development located near existing noise-sensitive land uses. Policy 16.3 establishes the vibration perception threshold for rail-related vibration levels, used in this analysis as a threshold for determining potential vibration impacts due to Project construction. (Urban Crossroads, 2025d, p. 19)

Land Use Compatibility

The noise criteria identified in the County of Riverside Noise Element (Table N-1) are guidelines to evaluate the land use compatibility of transportation related noise. The compatibility criteria, shown on Figure 4.13-4, *Land Use Compatibility for Community Noise Exposure*, provides the County with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The *Land Use Compatibility for Community Noise Exposure* matrix describes categories of compatibility and not specific noise standards. The Project's land use is considered *normally acceptable* with unmitigated exterior noise levels of less than 60 dBA CNEL. For conditionally acceptable exterior noise levels, approaching 70 dBA CNEL for residential land uses, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. (Urban Crossroads, 2025d, p. 19)

Riverside County Stationary Noise Standards

The County of Riverside has set hourly average L_{eq} exterior noise limits to control the stationary-source noise associated with the development of the proposed Project. The County regulates noise generated by motor vehicles as stationary noise sources when operated on private property. These operation-related noises, as projected to any portion of any surrounding property containing a *habitable dwelling, hospital, school, library or nursing home*, must not exceed the noise levels outlined in Policy N 4.1 of the County of Riverside General Plan Noise Element. Policy N 4.1 sets a stationary-source average L_{eq} exterior noise limit not to be exceeded for a cumulative period of more than ten minutes in any hour of 65 dBA L_{eq} for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. (Urban Crossroads, 2025d, p. 19)

Section 4 of Riverside County Ordinance No. 847, *General Sound Level Standards,* identifies lower, more restrictive exterior noise level standards, which for the purpose of analysis herein are used to evaluate potential Project-related operational noise level limits instead of the higher General Plan exterior noise level standards previously identified. The County of Riverside County Code of Ordinances identifies exterior noise level limits of 55 dBA L_{eq} during the daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA L_{eq} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. for noise-sensitive uses. (Urban Crossroads, 2025d, p. 21)

Based on several discussions with the County of Riverside Department of Environmental Health (DEH), Office of Industrial Hygiene (OIH), it is important to recognize that the County of Riverside County Code of Ordinances noise level standards, incorrectly identify maximum noise level (L_{max}) standards that should instead reflect the maximum hourly average noise levels (L_{eq}). Moreover, the County of Riverside DEH OIH's April 15th, 2015 *Requirements for Determining and Mitigating, Non-Transportation Noise Source Impacts to Residential Properties* also identifies operational (stationary-source) noise level limits using the L_{eq} metric, consistent with the direction of the County of Riverside General Plan guidelines and standards provided in the Noise Element. Therefore, this report has been prepared consistent with the direction of the County of Riverside DEH OIH guidelines and standards using the average L_{eq} noise level metric for stationary-source (operational) noise level evaluation. (Urban Crossroads, 2025d, p. 21)

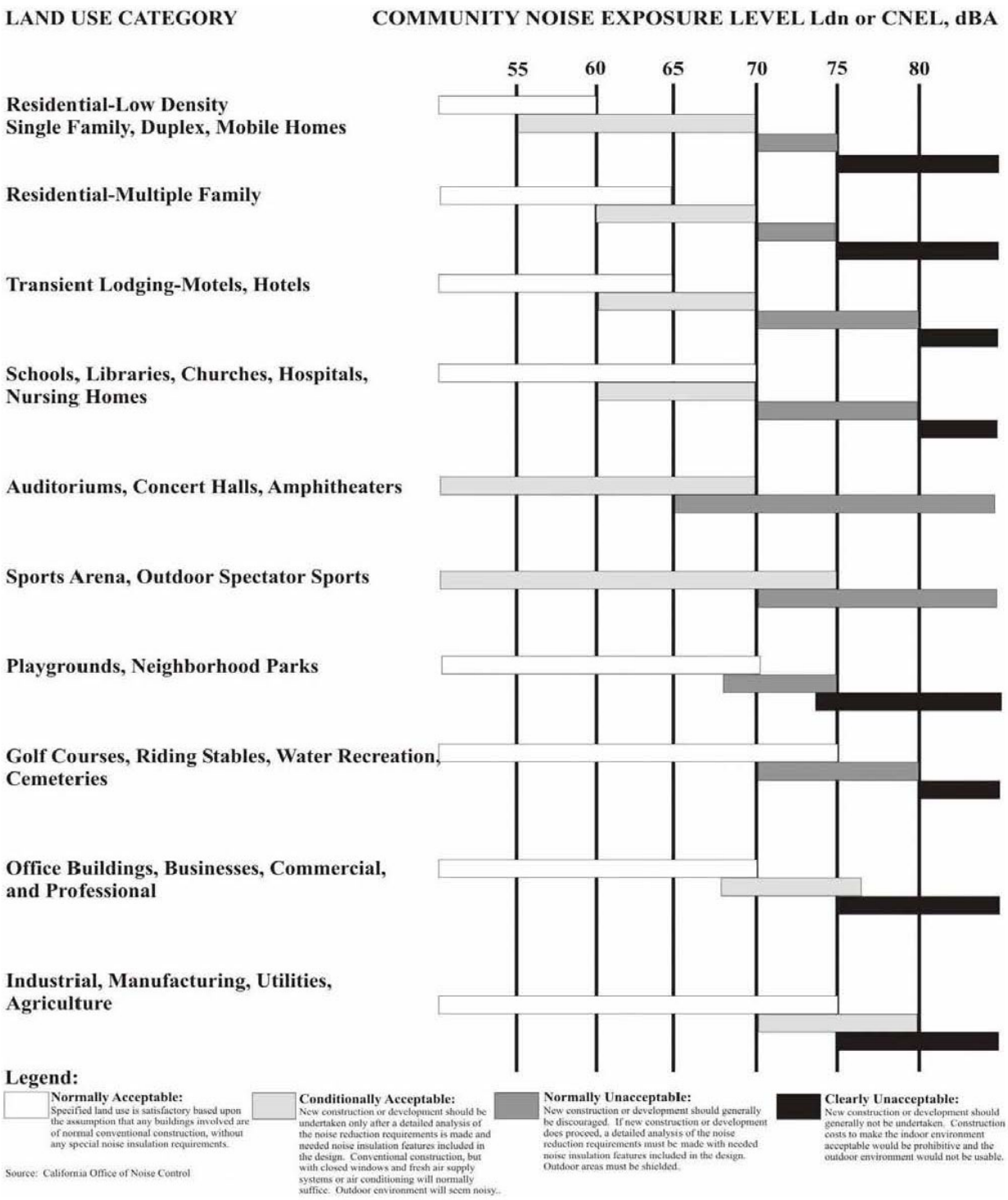


Figure 4.13-4 Land Use Compatibility for Community Noise Exposure

2. Construction Noise Standards

To control noise impacts associated with the construction of the proposed Project, the County of Riverside has established limits to the hours of operation. Section 9.52.020 of the County's Noise Regulation ordinance indicates that noise associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is considered exempt between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. Neither the County's General Plan nor County Code of Ordinances establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on the FTA's *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts, as discussed below. (Urban Crossroads, 2025d, p. 21)

According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA Leq as a reasonable threshold for noise-sensitive residential land use. (Urban Crossroads, 2025d, p. 21)

3. Construction Vibration Standards

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. Occasionally large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity. (Urban Crossroads, 2025d, p. 22)

The County of Riverside does not have vibration standards, but the County's General Plan Noise Element does contain the human reaction to typical vibration levels. Typical vibration levels between 10 and 30 Hertz with peak particle velocity of 0.0787 inches per second are considered readily perceptible and above 0.1968 in/sec are considered annoying to people in buildings. Further, County of Riverside General Plan Policy N 16.3 identifies a motion velocity perception threshold for vibration due to passing trains of 0.01 inches per second (in/sec) over the range of one to 100 Hz. Human perception of passing train vibrations is typically described in terms of root mean square versus peak particle velocity. Thus, the vibration level identified in Policy N 16.3 is assumed to be 0.01 (in/sec) RMS. (Urban Crossroads, 2025d, p. 22)

4. Construction Blasting Standards

The construction of the proposed Project will include blasting of hard rock areas, which is a major source of potential noise and vibration impacts to nearby residential receivers. Since the County of Riverside General Plan and County Code of Ordinances do not identify specific construction noise level limits for blasting

activities, the Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Code of Federal Regulations (CFR) Airblast Limits (30 CFR 816.67(b)) are used. Section 816.2 of Title 30 of the CFR indicates that the blasting regulations are intended to ensure that all surface mining activities are conducted in a manner that preserves and enhances environmental and other values in accordance with the Act. While the OSMRE regulates mining activities, the blasting activities at the Project site represent surface mining activities which, to satisfy California Environmental Quality Act (CEQA) guidelines, must demonstrate that they do not adversely affect the existing environment. Therefore, the OSMRE blasting regulations are applied to the blasting activities anticipated at the Project site. For mining operations, which require larger blasts than that of the Project, the lowest noise level threshold identified in the CFR is a maximum noise level 129 dBA L_{max} for blasting activity measured at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area. The L_{max} threshold used in the noise analysis is suitable for single-event noise levels, such as blasting activities, since other noise regulations in Leq (energy average), for example, average out a reference noise level over a given time period which reduces the single-event noise level over a longer period of time. The L_{max}, therefore, allows for the shorter-duration single-event noise levels to be evaluated against an appropriate threshold. (Urban Crossroads, 2025d, p. 22)

4.13.4 Basis for Determining Significance

A. Significance Thresholds

Section XIII of Appendix G to the CEQA Guidelines addresses typical adverse effects to noise, and includes the following threshold questions to evaluate a project's impacts on noise:

- Would the project 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?
- Would the project result in the generation of excessive ground-borne vibration or noise levels?
- For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Additionally, the following thresholds are derived from Riverside County's Environmental Assessment Checklist and are used to evaluate the significance of the proposed Project's impacts due to noise. Thus, for purposes of analysis herein, significant impacts to noise would occur if the Project or any Project-related component would:

a. *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, expose people residing or working in the project area to excessive noise levels;*

b. *For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels;*

c. 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, noise ordinance, or applicable standards of other agencies; or

d. Generate excessive ground-borne vibration or ground-borne noise levels.

B. Noise Level Increases

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing baseline ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted – the so-called *ambient* environment. (Urban Crossroads, 2025d, p. 23)

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}). (Urban Crossroads, 2025d, p. 23)

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increases in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or readily perceptible, 3 dBA or barely perceptible, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increase and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration and Caltrans. (Urban Crossroads, 2025d, pp. 23-24)

C. Blasting Noise

The construction of the proposed Project would include blasting of hard rock areas, which is a major source of potential noise and vibration impacts to nearby residential receivers. Since the County of Riverside General Plan and County Code of Ordinances do not identify specific construction noise level limits for blasting activities, the Office of Surface Mining Reclamation and Enforcement (OSMRE) and the Code of Federal Regulations (CFR) Airblast Limits (30 CFR 816.67(b)) are used. Section 816.2 of Title 30 of the CFR indicates that the blasting regulations are intended to ensure that all surface mining activities are conducted in a manner

that preserves and enhances environmental and other values in accordance with the Act. While the OSMRE regulates mining activities, the blasting activities at the Project site represent surface mining activities which, to satisfy CEQA requirements must demonstrate that they do not adversely affect the existing environment. Therefore, the OSMRE blasting regulations are applied to the blasting activities anticipated at the Project site. For mining operations, which require larger blasts than that of the Project, the lowest noise level threshold identified in the CFR is a maximum noise level 129 dBA Lmax for blasting activity measured at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area. The Lmax threshold used in the noise analysis is suitable for single-event noise levels, such as blasting activities, since other noise regulations in Leq (energy average), for example, average out a reference noise level over a given time period which reduces the single-event noise level over a longer period of time. The Lmax, therefore, allows for the shorter-duration single-event noise levels to be evaluated against an appropriate threshold. (Urban Crossroads, 2025d, p. 22)

D. Vibration

The County of Riverside does not have vibration standards, but the County's General Plan Noise Element does contain the human reaction to typical vibration levels. Typical vibration levels between 10 and 30 Hertz with peak particle velocity of 0.0787 inches per second are considered readily perceptible and above 0.1968 in/sec are considered annoying to people in buildings. Further, County of Riverside General Plan Policy N 16.3 identifies a motion velocity perception threshold for vibration due to passing trains of 0.01 inches per second (in/sec) over the range of one to 100 Hz. Human perception of passing train vibrations is typically described in terms of root mean square versus peak particle velocity. As the policy is based on human perception, the 0.01 in/sec limit is assumed to be a root means squared (RMS) value. An RMS value of 0.01 in/sec is equivalent to a PPV value of 0.04 in/sec. For purposes of clarity and to reduce the number of terms used in the analysis of vibration impacts, the vibration analysis presented herein uses PPV for all sources and calculations. Thus, the impact threshold would be 0.04 in/sec PPV. (Urban Crossroads, 2025d, p. 24)

E. Summary of Significance Criteria

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4.13-3, *Significance Criteria Summary*, shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

Table 4.13-3 Significance Criteria Summary

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
On-Site Traffic[1]	Exterior Noise Level Criteria	65 dBA CNEL	
	Interior Noise Level Standard	45 dBA CNEL	
Off-Site Traffic[2]	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
	If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
	If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Operational	Exterior Noise Level Standards[3]	55 dBA L_{eq}	45 dBA L_{eq}
	If ambient is < 60 dBA Leq[1]	≥ 5 dBA L_{eq} Project increase	
	If ambient is 60 - 65 dBA Leq[1]	≥ 3 dBA L_{eq} Project increase	
	If ambient is > 65 dBA Leq[1]	≥ 1.5 dBA L_{eq} Project increase	
Construction	Noise Level Threshold[4]	80 dBA L_{eq}	
	Vibration Level Threshold[5]	0.04 in/sec PPV	
	Blasting Noise Threshold	129 dBA L_{max}	
	Blasting Vibration Level Threshold[5]	0.04 in/sec PPV	

[1] County of Riverside General Plan Noise Element.
[2] FICON, 1992.
[3] County of Riverside General Plan Municipal Code, Section 9.52.040.
[4] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[5] County of Riverside General Plan Noise Element, Policy N 16.3.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
(Urban Crossroads, 2025d, Table 4-1)

4.13.5 Methodology for Calculating Project-Related Noise Impacts

A. *Sensitive Receiver Locations*

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown in Figure 4.13-5, *Sensitive Receiver Locations*, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals. (Urban Crossroads, 2025d, p. 53)

To describe the potential off-site Project noise levels, five receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as discussed above. Other sensitive land uses in the Project study area that are located at greater

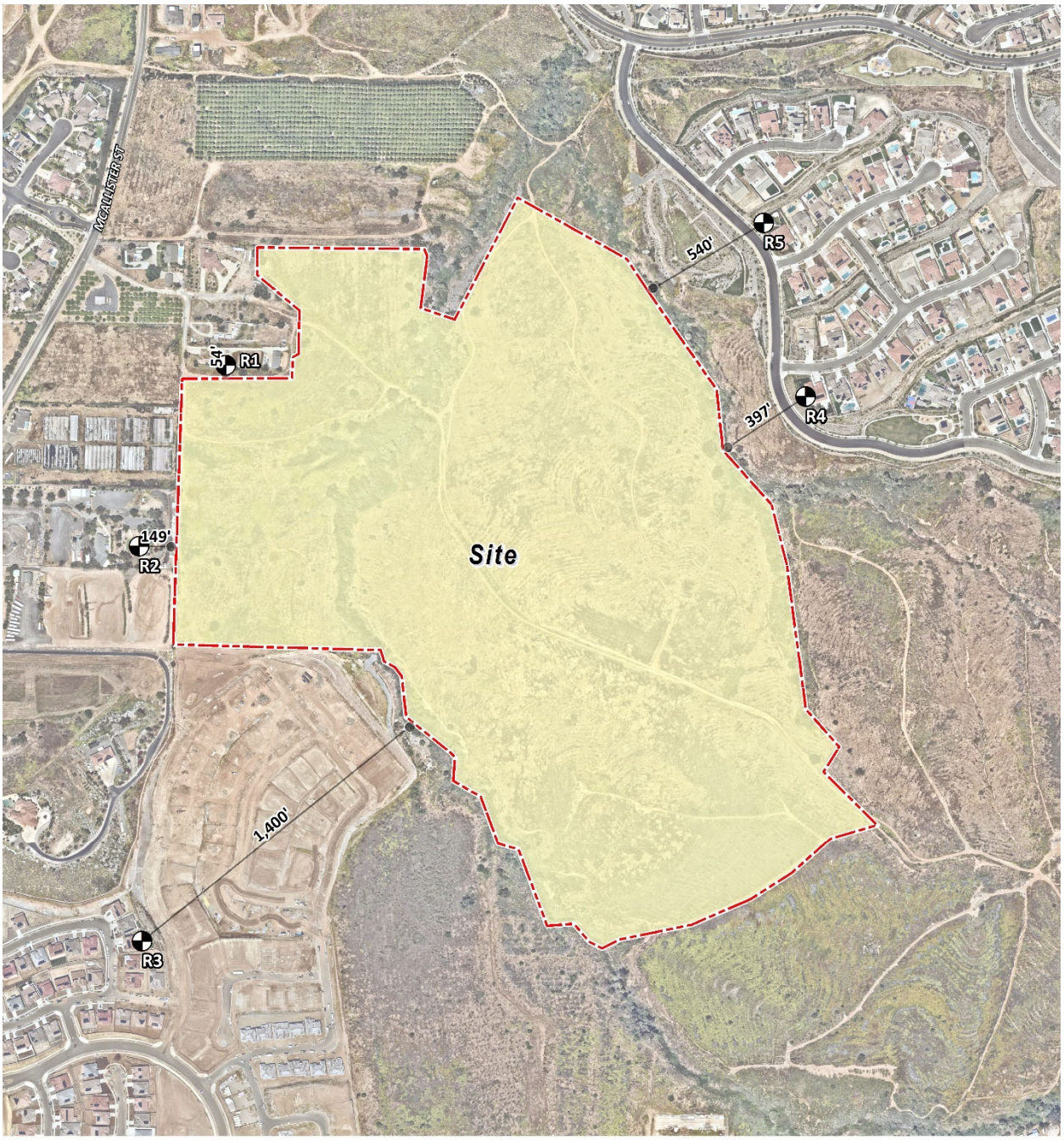


Figure 4.13-5 Sensitive Receiver Locations

distances than those identified in this noise study will experience lower noise levels than those presented herein due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the Project boundary to each receiver location. (Urban Crossroads, 2025d, p. 53)

R1: Location R1 represents existing noise-sensitive residence at 17172 McAllister Street, approximately 54 feet north of the Project site. Receiver R1 is placed in the private outdoor living area (backyard) facing the project site. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents the existing noise-sensitive residence at 17360 McAllister Street, approximately 149 feet west of the Project site. Receiver R2 is placed at the building façade facing the project site. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.

R3: Location R3 represents the existing noise-sensitive residence at 17766 Pinot Noir Dr., approximately 1,400 feet southwest of the Project site. Receiver R3 is placed at the façade facing the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.

R4: Location R4 represents the existing noise-sensitive residence at 13396 Planet Court, approximately 397 feet northeast of the Project site. Receiver R4 is placed at the façade facing the Project site. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R5: Location R5 represents the existing noise-sensitive residence at 13402 Gold Medal Court, approximately 540 feet northeast of the Project site. Receiver R5 is placed in the private outdoor living area (backyard) facing the Project site. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment.

B. Construction Noise and Vibration Methodology

1. Construction Noise Analysis Methodology

To describe construction noise activities, the construction noise analysis was prepared using reference construction equipment noise levels from the FHWA published the Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. The RCNM equipment database provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. The reference noise level summary shown in Table 4.13-4, *Construction Reference Noise Levels*, describes construction activity noise levels with multiple pieces of equipment operating simultaneously. (Urban Crossroads, 2025d, p. 61)

Table 4.13-4 Construction Reference Noise Levels

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Site Preparation	Tractor	80	84.0	115.6
	Backhoe	74		
	Grader	81		
Grading	Scraper	80	83.3	114.9
	Excavator	77		
	Dozer	78		
Building Construction	Crane	73	80.6	112.2
	Generator	78		
	Front End Loader	75		
Paving	Paver	74	77.8	109.5
	Dump Truck	72		
	Roller	73		
Architectural Coating	Man Lift	68	76.2	107.8
	Compressor (air)	74		
	Generator (<25kVA)	70		
Pipeline Construction	Excavator	77	79.9	111.5
	Front End Loader	75		
	Vacuum Street Sweeper	72		
Blasting	Blasting	94	94.1	125.7
	Rock Drill	74		
	Front End Loader	75		
Rock Crushing	Rock Crusher	89	89.8	121.4
	Front End Loader	75		
	Hydra Break Ram	80		

[1] FHWA Road Construction Noise Model.
(Urban Crossroads, 2025d, Table 11-1)

2. *Construction Vibration Analysis Methodology*

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. With the exception of blasting, it is expected that ground-borne vibration from Project construction and rock crushing activities would cause only localized vibrations. Ground-borne vibration levels resulting from rock crushing and typical construction activities occurring within the Project site were estimated by data published by the FTA. Ground vibration levels associated with various types of construction equipment are summarized on Table 4.13-5, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the Caltrans. To calculate the vibration of equipment at distance Caltrans provides the following equation: $PPV_{equip} = PPV_{ref}$ x (25/D). (Urban Crossroads, 2025d, pp. 65-66)

Table 4.13-5 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Crane	0.008
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Caltrans, Transportation and Construction Vibration Guidance Manual, 2020.
(Urban Crossroads, 2025d, Table 11-4)

3. Blasting Noise and Vibration Analysis Methodology

Blasting is anticipated to be required throughout the Project site during Project grading activities. Blasting operations can have unacceptable noise and vibration impacts if not conducted correctly. A blasting contractor would be required to complete all blasting-related activities in compliance with applicable regulations of the Riverside County Sheriff's Department, the U.S. Bureau of Mines, the California Division of Occupational Safety and Health (Cal-OHSA), the Department of Homeland Security, and the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). As required by law, a licensed blasting contractor would be responsible for performing and supervising all blasting activities, including the following: drill pattern design; pre-blast inspection; loading of explosives; pre-blast notifications and warning signaling; blasting safety procedures; blasting site security; post-blast inspections and re-entry procedures; and blast log and history. (Urban Crossroads, 2025d, p. 67)

Explosives used for blasting usually consist of a primer, secondary explosive, and an initiator. The blasting contractor would most likely use a high explosive Ammonia Gelatin as a primer for each shot and ammonium nitrate mixed with fuel oil (ANFO) as the primary blasting agent. Nonelectric blasting caps are typically used to initiate the blasting agent. The charges are time delayed by at least 8-milliseconds. Delays between charges are used to decouple changes and reduce vibration. (Urban Crossroads, 2025d, p. 67)

To evaluate the potential noise levels from blasting activities during Project construction, the FHWA's RCNM reference noise level of 94.1 dBA L_{max} is used at a reference distance of 50 feet, as previously shown in Table 4.13-4. Each blast represents a point source of noise that attenuates at a rate of 6 dB for each doubling of distance from the source. Detonating as little as 25 pounds of explosives may produce vibration levels that can be perceived up to 500 feet from a charge. (Urban Crossroads, 2025d, p. 68)

4. Rock Crushing Noise Analysis Methodology

Rock crushing may be used during grading to reuse on-site excavated material. It is common to use multiple crusher types within a project and set them up as stations in a circuit format to perform the necessary material reduction work. In many cases, primary, secondary, and tertiary, and quaternary stations are installed to reduce the rock to the desired size, shape, and consistency. Unlike typical construction activity, the rock crushing

activity is assessed using the stationary source construction noise level limit. (Urban Crossroads, 2025d, pp. 64-65)

The analysis presented herein was completed to assess potential noise level impacts due to rock-crushing activities. The anticipated location of the crushing activity area in relation to the nearest receiver locations is unknown at this time. However, using reference construction equipment noise levels from the FHWA's RCNM, which includes a national database of construction equipment reference noise emission levels, a reference noise levels has been developed to describe crushing activities, as previously shown in Table 4.13-4. The reference noise level summary describes construction activity noise levels with multiple pieces of construction equipment operating simultaneously and includes source noise levels for a hoe ram or breaker representing a percussion hammer fitted to an excavator for breaking rock and a rock crushing activity including jaw crushers, a cone crusher, screens, and a conveyor system. (Urban Crossroads, 2025d, p. 65)

C. *Operational Noise Methodology*

The following provides a summary of the methodology used to evaluate Project-related operational noise impacts. Refer to Section 10 of the Project's NIA (*Technical Appendix K*) for a complete discussion of the methodology and modeling inputs and assumptions.

1. *Reference Noise Levels*

To assess the noise levels created by the air conditioning units, which are the main source of operational noise associated with residential uses, reference noise levels were taken from equipment specifications for a 3- to 5-ton residential packaged air conditioning unit (Carrier 50VR-A). The manufacturer's specifications are included in Appendix 10.2 of the Project's NIA (*Technical Appendix K*). At a uniform reference distance of 50 feet, the units would generate a reference noise level of 44.4 dBA L_{eq}. The air conditioning units were modeled 3 feet above the roof level, operating 45 minutes per hour during the daytime and 30 minutes at nighttime, which represents the typical maximum operating time for properly sized AC systems. Table 4.13-6, *Operational Reference Noise Levels*, provides a summary of the modeling inputs used for air conditioning units. (Urban Crossroads, 2025d, p. 55)

2. *CadnaA Noise Prediction Model*

To fully describe the exterior operational noise levels from the Project, Urban Crossroads developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels. Using the ISO 9613-2 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. (Urban Crossroads, 2025d, p. 57)

Table 4.13-6 Operational Reference Noise Levels

Noise Source	Noise Source Height (Feet)	Min./Hour[2]		Reference Noise Level (dBA L_{eq})		Sound Power Level (dBA)[6]
		Day	Night	@ Ref. Dist.	@ 50 Feet	
Air Conditioning Units[1]	3'	45	30	77.2	44.4	76.0

[1] Carrier 50VR-A air conditioning unit, Appendix 10.2 of the Project's NIA (*Technical Appendix K*).
[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site.
"Daytime" = 7:01 a.m. to 10:00 p.m.; "Nighttime" = 10:01 p.m. to 7:00 a.m.
(Urban Crossroads, 2025d, Table 10-1)

Consistent with the ISO 9613-2 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment. The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.1 of the Project's NIA (*Technical Appendix K*) includes the detailed noise model inputs. (Urban Crossroads, 2025d, p. 57)

D. Off-Site Traffic Modeling Methodology

1. FHWA Traffic Noise Prediction Model

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. (Urban Crossroads, 2025d, p. 31)

2. Off-Site Traffic Noise Prediction Model Inputs

Table 6-4 of the Project's NIA (*Technical Appendix K*) identifies the eighteen off-site study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the County of Riverside General Plan Circulation Element and the posted vehicle speeds. Consistent with the Traffic Analysis (TA) prepared by Urban Crossroads for the Project (EIR *Technical Appendix M2*), the off-site traffic noise analysis includes the following traffic scenarios. (Urban Crossroads, 2024, p. 33)

- Existing Conditions Without Project: This scenario refers to the existing present-day noise conditions without the proposed Project.
- Existing plus Project Conditions – Project Buildout: This scenario refers to the existing present-day noise conditions with the addition of traffic from the proposed Project.
- Existing plus Ambient Growth (EAP) 2027 Conditions Without Project: This scenario includes near-term noise conditions from ambient growth developments without traffic from the proposed Project.
- Existing plus Ambient Growth plus Project (EAP) (2027) Conditions – Project Buildout: This scenario includes near-term noise conditions with traffic from the proposed Project and from ambient growth.
- Existing plus Ambient Growth plus Cumulative (EAPC) 2027 Conditions Without Project: This scenario includes near-term noise conditions from ambient growth and cumulative developments without traffic from the proposed Project.
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2027) Conditions – Project Buildout: This scenario includes Project-related traffic, ambient growth, and all cumulative projects identified in the Project's traffic analysis.

The average daily traffic (ADT) volumes used for this study are presented in Table 6-5 of the Project's NIA (*Technical Appendix K*). Tables 6-2 and 6-3 of the Project's NIA provide the time of day (daytime, evening, and nighttime) vehicle splits used for calculating CNEL values. (Urban Crossroads, 2024, p. 33)

3. Traffic Noise Contours

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect the modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Tables 8-1 through 8-4 of the Project's NIA (*Technical Appendix K*) present a summary of the exterior dBA CNEL traffic noise levels. Roadway segments are analyzed in each of the timeframes studied by the Project's TA (as described in subsection 4.13.5.D. Appendix 8.1 of the Project's NIA includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios. (Urban Crossroads, 2025d, p. 41)

4.13.6 IMPACT ANALYSIS

Threshold a.:	***For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?***

There are no public airports or public use airports within two miles of the Project site. The closest airport to the Project site is the Riverside Municipal Airport, which is located approximately 5.4 miles north of the Project site. According to Map RI-3 of the Airport Land Use Compatibility Plan (ALUCP) prepared for the Riverside Municipal Airport, the Project site is located more than five miles southwest of the nearest portion of the 60 dBA CNEL contour for the Riverside Municipal Airport. According to Table 2B of the Countywide ALUCP Policy Document, the Project's residential land uses are considered "clearly acceptable" with exterior noise levels below 55 dBA CNEL, and are considered "normally acceptable" with exterior noise levels up to 60 dBA CNEL. These noise compatibility levels also are consistent with Table N-1 of the General Plan Noise Element. Therefore, because the Project's proposed residential uses would not be exposed to airport-related noise levels exceeding 60 dBA CNEL, the Project would not expose people residing or working in the Project area to excessive airport-related noise levels, and impacts would be less than significant. (RCALUC, 2005, Map RI-3; RCALUC, 2004, Table 2B)

Threshold b.:	***For a project located within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?***

There are no private airstrips within a 10-mile radius of the Project site. The nearest private airstrip to the Project site is the Perris Valley Airport, located approximately 13.6 miles southeast of the Project site. According to the ALUCP prepared for the Perris Valley Airport, the Project site is located well outside of the 55 dBA CNEL contour for this facility. As indicated under the analysis of Threshold a., the Project's residential land uses are considered "clearly acceptable" with exterior noise levels below 55 dBA CNEL. As such, the Project would not expose people residing or working in the Project area to excessive noise levels associated with private airstrips, and no impact would occur. (RCALUC, 2010, Map PV-3; RCALUC, 2004, Table 2B)

Threshold c.:	***Would the Project 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, noise ordinance, or applicable standards of other agencies?***

The Project has the potential to result in the generation of substantial noise levels associated with construction activities, site operations, and Project-related traffic. Each is discussed below.

A. Construction Noise Impacts

The following is an analysis of potential impacts resulting from the short-term construction activities associated with the development of the Project. Figure 4.13-6, *Construction Noise Source and Receiver Locations*, shows the noise source locations in relation to the nearest sensitive receiver locations previously described in 4.13.5.A. Section 2 of Riverside County Ordinance No. 847 states that construction activities are exempted from the noise ordinance if located ¼-mile or greater from inhabited dwelling units; or if within a

quarter mile, if it occurs between the hours of 6:00 a.m. to 6:00 p.m. Monday through Friday from June 1st to September 30th, or 7:00 a.m. to 6:00 p.m. Monday through Friday from October 1st to May 30th. Section 2 of Riverside County Ordinance No. 847 states that construction activities are exempted from the noise ordinance if located ¼-mile or greater from inhabited dwelling units; or if within a quarter mile, if it occurs between the hours of 6:00 a.m. to 6:00 p.m. Monday through Friday from June 1st to September 30th, or 7:00 a.m. to 6:00 p.m. Monday through Friday from October 1st to May 30th. In addition, since the County of Riverside has not established a numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes, a numerical construction threshold based on the FTA Transit Noise and Vibration Impact Assessment Manual is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA Leq as a reasonable threshold for noise sensitive residential land use. (Urban Crossroads, 2025d, p. 61)

Noise generated by the Project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that, when combined, can reach high levels. The number and mix of construction equipment are expected to occur in the following stages: (1) site preparation; (2) blasting; (3) grading; (4) rock crushing; (5) building construction; (6) paving; (7) architectural coating; and (8) pipeline construction. (Urban Crossroads, 2025d, p. 61)

1. Typical Construction Noise Analysis

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project's typical construction noise level impacts at the nearby sensitive receiver locations were completed. To account for the dynamic nature of construction activities, the Project construction noise analysis models the typical construction equipment as a combination of the highest reference level as multiple moving points within the construction area (Project site boundary). Construction impacts are based on the highest noise level calculated at each receiver location. As shown in Table 4.13-7, *Typical Construction Equipment Noise Level Summary*, the highest construction noise levels at the nearest sensitive receiver locations are expected to range from 53.7 to 61.2 dBA L_{eq}. Appendix 11.1 pf the Project's NIA includes the detailed CadnaA construction noise model inputs. (Urban Crossroads, 2025d, p. 63)

2. Typical Construction Noise Level Compliance

To evaluate whether the Project would generate potentially significant short-term noise levels at the nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations would not be exposed to Project-related construction noise levels exceeding the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities, as shown in Table 4.13-8, *Typical Construction Noise Level Compliance*. In addition, future construction activities on site would be subject to the timing restrictions specified by Riverside County Ordinance No. 847, thereby ensuring that no Project construction activities would occur during nighttime hours. Therefore, the noise impacts due to Project construction noise would be less than significant at all receiver locations. (Urban Crossroads, 2025d, p. 64)

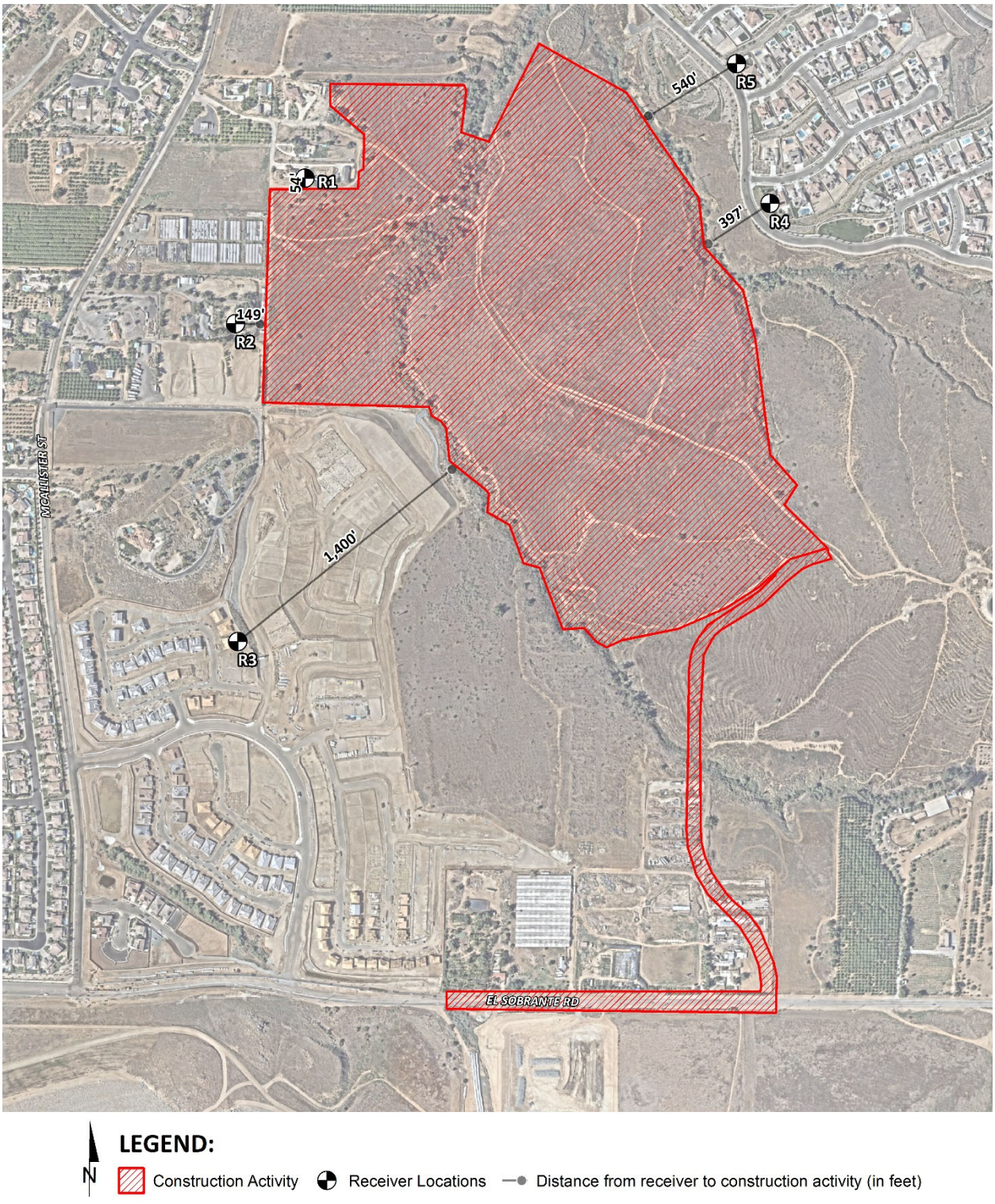


Figure 4.13-6 Construction Noise Source and Receiver Locations

Table 4.13-7 Typical Construction Equipment Noise Level Summary

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Pipeline Construction	Highest Levels[2]
R1	61.2	60.5	57.8	55.1	57.1	61.2
R2	58.7	58.0	55.3	52.6	54.6	58.7
R3	53.7	53.0	50.3	47.6	49.6	53.7
R4	57.6	56.9	54.2	51.5	53.5	57.6
R5	55.5	54.8	52.1	49.4	51.4	55.5

[1] Construction noise source and receiver locations are shown on Figure 4.13-6.
[2] Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1 of the Project's NIA (*Technical Appendix K*).
(Urban Crossroads, 2024, Table 11-2)

Table 4.13-8 Typical Construction Noise Level Compliance

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	61.2	80	No
R2	58.7	80	No
R3	53.7	80	No
R4	57.6	80	No
R5	55.5	80	No

[1] Noise receiver locations are shown on Figure 4.13-6.
[2] Highest construction noise level operating at the Project site boundary to nearby receiver locations (Table 4.13-7).
[3] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?
(Urban Crossroads, 2025d, Table 11-3)

3. Blasting Noise Analysis

To evaluate the potential noise levels from blasting activities during Project construction, the FHWA RCNM reference noise level of 94.1 dBA Lmax is used at a reference distance of 50 feet. Each blast represents a point source of noise that attenuates at a rate of 6 dB for each doubling of distance from the source. The closest residential homes to the Project construction area are represented by receiver location R1 at a distance of 54 feet (refer to Figure 4.13-5). With the distance attenuation from blasting activities within the Project boundary, the unmitigated noise levels at nearby receiver locations would be approximately 93.4 dBA Lmax based on the RCNM reference noise level, as shown in Table 4.13-9, *Blasting Construction Noise Levels*. It should be noted that since the type of blasting techniques planned within the Project site were unknown at the time of this analysis, the noise levels presented at the nearby sensitive receiver locations represent the worst-case conditions based on the RCNM reference noise level. (Urban Crossroads, 2025d, p. 68)

Table 4.13-9 Blasting Construction Noise Levels

Receiver Location	Distance To Construction Activity (Feet)[2]	Construction Noise Level (dBA Lmax)
R1	54'	93.4
R2	149'	84.6
R3	1,400'	65.2
R4	540'	73.4
R5	397'	76.1

[1] FHWA Roadway Construction Noise Model.
[2] Distance from the nearest point of construction activity to the nearest receiver.
[3] Point (stationary) source drop off rate of 6.0 dBA per doubling of distance.
(Urban Crossroads, 2025d, Table 11-6)

The County of Riverside General Plan and County Code of Ordinances do not identify specific construction noise level limits for blasting activities. Therefore, the OSMRE and CFR lowest maximum Airblast Limit (30 CFR 816.67(b)) of 129 dBA Lmax at nearby sensitive uses is used in this analysis as discussed in subsection 4.13.4.C. Based on the reference blasting noise level, and as summarized in Table 4.13-9, the closest residential receiver would experience noise levels approaching 93.4 dBA Lmax over the course of the blast, which likely would occur for only a few seconds. While some blasting noise may be noticeable by nearby residents, the single-event, temporary noise levels generated by the blast would not exceed the OSMRE and the CFR standards for airblasts of 129 dBA Lmax. Therefore, noise impacts due to blasting activities would be less than significant. (Urban Crossroads, 2025d, p. 68)

4. Rock Crushing Noise

Rock crushing may be used during grading to reuse on-site excavated material. It is common to use multiple crusher types within a project and set them up as stations in a circuit format to perform the necessary material reduction work. In many cases, primary, secondary, and tertiary, and quaternary stations are installed to reduce the rock to the desired size, shape, and consistency. Unlike typical construction activity, the rock crushing activity is assessed using the stationary source construction noise level limit. (Urban Crossroads, 2025d, pp. 64-65)

The anticipated location of the crushing activity area in relation to the nearest receiver locations is unknown at this time. However, the analysis herein uses the reference construction equipment noise levels from the FHWA published in the RCNM, as shown in Table 4.13-4. The reference noise level summary describes construction activity noise levels with multiple pieces of construction equipment operating simultaneously and includes source noise levels for a hoe ram or breaker representing a percussion hammer fitted to an excavator for breaking rock and a rock crushing activity including jaw crushers, a cone crusher, screens, and a conveyor system. (Urban Crossroads, 2025d, p. 65)

Based on the reference noise levels presented in Table 4.13-4, uncontrolled rock-crushing activities could exceed the daytime construction noise level limit of 80 dBA L_{eq} at distances closer than 160 feet. Since the final location of rock crushing activities is unknown, noise associated with rock crushing conservatively is evaluated as a potentially significant for which mitigation would be required. (Urban Crossroads, 2025d, p. 65)

B. Operational Noise Impacts

1. Project Operational Noise Levels and Compliance

The operational noise analysis is intended to describe noise level impacts to the existing environment associated with the expected typical daytime and nighttime activities at the Project site. The Project is considered a noise-sensitive receiving land use and is not expected to include any meaningful sources of noise activity. Additionally, according to the recently adopted Section 21085 of the California Public Resources Code, "noise effects" on humans that are associated with "project occupants and guests" within residential Projects are not an impact on the environment. Based on Section 21085, it is expected that for CEQA purposes, operational noise level impacts are limited to the air conditioning units. (Urban Crossroads, 2025d, p. 55)

Using the reference noise levels to represent the proposed Project's air condition units, Urban Crossroads calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 4.13-10, *Daytime Project Operational Noise Levels*, shows the Project operational noise levels during the daytime hours of 7:01 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 29.0 to 33.9 dBA L_{eq}. (Urban Crossroads, 2025d, p. 57)

Table 4.13-10 Daytime Project Operational Noise Levels

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{max})				
	R1	R2	R3	R4	R5
Air Conditioning Units	33.9	33.5	29.0	32.8	31.0
Total (All Noise Sources)	**33.9**	**33.5**	**29.0**	**32.8**	**31.0**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2 of the Project's NIA (*Technical Appendix K*).
(Urban Crossroads, 2025d, Table 10-2)

Table 4.13-11, *Nighttime Project Operational Noise Levels* shows the Project operational noise levels during the nighttime hours of 10:01 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 26.3 to 31.2 dBA L_{eq}. (Urban Crossroads, 2025d, p. 58)

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the County of Riverside exterior noise level standards at nearby

Table 4.13-11 Nighttime Project Operational Noise Levels

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{max})				
	R1	R2	R3	R4	R5
Air Conditioning Units	31.2	30.8	26.3	30.1	28.3
Total (All Noise Sources)	**31.2**	**30.8**	**26.3**	**30.1**	**28.3**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2 of the Project's NIA (*Technical Appendix K*).
(Urban Crossroads, 2025d, Table 10-3)

noise-sensitive receiver locations. Table 4.13-12, *Operational Noise Level Compliance*, shows the operational noise levels associated with the Project would not exceed the County of Riverside 55 dBA L_{eq} daytime and 45 dBA L_{eq} nighttime exterior noise level standards at any nearby receiver locations. Therefore, the Project's operational noise impacts would be less than significant at each of the nearby noise-sensitive receiver locations. (Urban Crossroads, 2025d, p. 58)

Table 4.13-12 Operational Noise Level Compliance

Receiver Location[1]	Project Operational Noise Levels (dBA L_{max})[2]		Exterior Noise Level Standards (dBA L_{max})[3]		Noise Level Standards Exceeded?[4]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	33.9	31.2	55	45	No	No
R2	33.5	30.8	55	45	No	No
R3	29.0	26.3	55	45	No	No
R4	32.8	30.1	55	45	No	No
R5	31.0	28.3	55	45	No	No

[1] See Figure 4.13-5 for the receiver locations.
[2] Proposed Project operational noise levels as shown in Table 4.13-10 and Table 4.13-11.
[3] Exterior noise level standard for residential land use as shown in Table 4.13-3.
[4] Do the estimated Project operational noise source activities exceed the noise level standards?
[5] Non-residential land use with no expected nighttime occupancy.
"Daytime" = 7:01 a.m. to 10:00 p.m.; "Nighttime" = 10:01 p.m. to 7:00 a.m.
(Urban Crossroads, 2025d, Table 10-4)

2. Project Operational Noise Level Increases

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise level measurements for the nearby receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational, and existing ambient noise levels cannot be combined using standard arithmetic equations. Instead, they must be logarithmically added using the formula presented in Subsection 10.6 of the Project's NIA (*Technical Appendix K*). (Urban Crossroads, 2025d, p. 59)

Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented on Table 4.13-13, *Daytime Project Operational Noise Level Increases*, and Table 4.13-14, *Nighttime Project Operational Noise Level Increases*, respectively. As indicated in Table 4.13-13, the Project would generate daytime operational noise level increases ranging from less than 0.1 to 0.3 dBA L_{eq} at the nearest receiver locations. Table 4.13-14, shows that the Project would generate nighttime operational noise level increases ranging from less than 0.1 to 0.7 dBA L_{eq} at the nearest receiver locations. Project-related operational noise level increases would not exceed the operational noise level increase significance criteria presented in Table 4.13-3; thus, the Project's operational noise increases at the sensitive receiver locations would be less than significant. (Urban Crossroads, 2025d, p. 59)

Table 4.13-13 Daytime Project Operational Noise Level Increases

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	33.9	L1	45.9	46.2	0.3	5	No
R2	33.5	L2	47.2	47.4	0.2	5	No
R3	29.0	L3	60.3	60.3	0.0	3	No
R4	32.8	L4	53.8	53.8	0.0	5	No
R5	31.0	L5	55.5	55.5	0.0	5	No

[1] See Figure 4.13-5 for the receiver locations.
[2] Total Project daytime operational noise levels as shown in Table 4.13-10.
[3] Reference noise level measurement locations as shown on Table 4.13-6.
[4] Observed daytime ambient noise levels as shown in Table 4.13-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4.13-3.
(Urban Crossroads, 2025d, Table 10-5)

C. Off-Site Transportation Noise Impacts

1. Existing Traffic Noise Level Increases

Table 8-1 of the Project's NIA (*Technical Appendix K*) shows the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise levels are expected to range from 59.8 to 78.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8-2 of the Project's NIA shows the Existing plus Project conditions noise contours would range from 60.0 to 78.7 dBA CNEL. Table 4.13-15, *Existing With Project Traffic Noise Increases*, shows that the Project off-site traffic noise level increases would range from less than 0.1 to 0.5 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4.13-3, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases due to unmitigated Project-related traffic noise levels under Existing with Project conditions. (Urban Crossroads, 2025d, p. 48)

Table 4.13-14 Nighttime Project Operational Noise Level Increases

Receiver Location[1]	Total Project Operational Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Project Increase[6]	Increase Criteria[7]	Increase Criteria Exceeded?
R1	31.2	L1	39.0	39.7	0.7	5	No
R2	30.8	L2	41.8	42.1	0.3	5	No
R3	26.3	L3	48.0	48.0	0.0	5	No
R4	30.1	L4	48.3	48.4	0.1	5	No
R5	28.3	L5	48.8	48.8	0.0	5	No

[1] See Figure 4.13-5 for the receiver locations.
[2] Total Project nighttime operational noise levels as shown in Table 4.13-11.
[3] Reference noise level measurement locations as shown on Table 4.13-6.
[4] Observed daytime ambient noise levels as shown in Table 4.13-1.
[5] Represents the combined ambient conditions plus the Project activities.
[6] The noise level increase expected with the addition of the proposed Project activities.
[7] Significance increase criteria as shown in Table 4.13-3.
(Urban Crossroads, 2025d, Table 10-6)

Table 4.13-15 Existing With Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	La Sierra Ave.	n/o SR-91 WB Ramps	Residential	78.0	78.0	0.0	Yes	1.5	No
2	La Sierra Ave.	s/o SR-91 WB Ramps	Residential	78.0	78.1	0.1	Yes	1.5	No
3	La Sierra Ave.	s/o SR-91 EB Ramps	Residential	78.6	78.7	0.1	Yes	1.5	No
4	La Sierra Ave.	s/o Indiana Ave.	Residential	78.0	78.2	0.1	Yes	1.5	No
5	La Sierra Ave.	s/o Victoria Ave.	Residential	77.6	77.8	0.2	Yes	1.5	No
6	La Sierra Ave.	s/o McAllister Pkwy.	Residential	76.6	76.8	0.2	Yes	1.5	No
7	La Sierra Ave.	s/o El Sobrante Rd.	Residential	72.4	72.5	0.1	Yes	1.5	No
8	McAllister Pkwy.	n/o El Sobrante Rd.	Residential	59.8	60.0	0.1	Yes	5.0	No
9	Indiana Ave.	e/o La Sierra Ave.	Residential	69.2	69.2	0.0	Yes	1.5	No
10	Indiana Ave.	w/o La Sierra Ave.	Residential	70.6	70.7	0.0	Yes	1.5	No
11	Victoria Ave.	e/o La Sierra Ave.	Residential	67.4	67.5	0.1	Yes	1.5	No
12	El Sobrante Rd.	e/o La Sierra Ave.	Residential	74.2	74.7	0.5	Yes	1.5	No
13	El Sobrante Rd.	e/o McAllister Pkwy.	Residential	74.3	74.8	0.5	Yes	1.5	No
14	El Sobrante Rd.	e/o Street A	Residential	74.3	74.4	0.1	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise-sensitive uses are limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.13-3)?
(Urban Crossroads, 2025d, Table 8-7)

2. Existing Plus Ambient Growth (EAP) 2027 Traffic Noise Level Increases

Table 8-3 of the Project's NIA (*Technical Appendix K*) presents the EAP Year 2027 without Project conditions CNEL noise levels. The EAP Year 2027 without Project exterior noise levels are expected to range from 60.1 to 78.9 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8-4 of the Project's NIA shows the EAP Year 2027 with Project conditions would range from 60.2 to

79.0 dBA CNEL. Table 4.13-16, *EAP (2027) With Project Traffic Noise Increases*, shows that the Project off-site traffic noise level increases would range from less than 0.1 to 0.4 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4.13-3, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases due to unmitigated Project-related traffic noise levels under EAP 2027 conditions. (Urban Crossroads, 2025d, p. 48)

Table 4.13-16 EAP (2027) With Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	La Sierra Ave.	n/o SR-91 WB Ramps	Residential	78.2	78.2	0.0	Yes	1.5	No
2	La Sierra Ave.	s/o SR-91 WB Ramps	Residential	78.3	78.3	0.0	Yes	1.5	No
3	La Sierra Ave.	s/o SR-91 EB Ramps	Residential	78.9	79.0	0.1	Yes	1.5	No
4	La Sierra Ave.	s/o Indiana Ave.	Residential	78.3	78.4	0.1	Yes	1.5	No
5	La Sierra Ave.	s/o Victoria Ave.	Residential	77.9	78.1	0.2	Yes	1.5	No
6	La Sierra Ave.	s/o McAllister Pkwy.	Residential	76.8	77.0	0.2	Yes	1.5	No
7	La Sierra Ave.	s/o El Sobrante Rd.	Residential	72.7	72.8	0.1	Yes	1.5	No
8	McAllister Pkwy.	n/o El Sobrante Rd.	Residential	60.1	60.2	0.1	Yes	3.0	No
9	Indiana Ave.	e/o La Sierra Ave.	Residential	69.4	69.5	0.1	Yes	1.5	No
10	Indiana Ave.	w/o La Sierra Ave.	Residential	70.9	70.9	0.0	Yes	1.5	No
11	Victoria Ave.	e/o La Sierra Ave.	Residential	67.7	67.7	0.0	Yes	1.5	No
12	El Sobrante Rd.	e/o La Sierra Ave.	Residential	74.5	74.9	0.4	Yes	1.5	No
13	El Sobrante Rd.	e/o McAllister Pkwy.	Residential	74.6	75.0	0.4	Yes	1.5	No
14	El Sobrante Rd.	e/o Street A	Residential	74.6	74.7	0.1	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.13-3)?
(Urban Crossroads, 2025d, Table 8-8)

3. Existing Plus Ambient Growth Plus Cumulative (EAPC) 2027 Traffic Noise Level Increases

Table 8-5 of the Project's NIA (*Technical Appendix K*) presents the EAPC Year 2027 without Project conditions CNEL noise levels. The EAPC Year 2027 without Project exterior noise levels are expected to range from 61.7 to 79.2 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 8-6 of the Project's NIA shows the EAPC Year 2027 with Project conditions would range from 61.7 to 79.3 dBA CNEL. Table 4.13-17, *EAPC (2027) With Project Traffic Noise Increases*, shows that the Project off-site traffic noise level increases would range from less than 0.1 to 0.4 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4.13-3, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases due to unmitigated Project-related traffic noise levels under EAPC (2027) conditions. (Urban Crossroads, 2025d, p. 48)

D. On-Site Transportation Noise Impacts

An on-site exterior noise impact analysis has been completed to determine the traffic noise exposure and to identify any necessary noise abatement measures for the Project. The primary source of noise impacts on the Project site will be traffic noise from Travertine Drive and McAllister Street. The Project will also experience

Table 4.13-17 EAPC (2027) With Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	La Sierra Ave.	n/o SR-91 WB Ramps	Residential	78.7	78.8	0.1	Yes	1.5	No
2	La Sierra Ave.	s/o SR-91 WB Ramps	Residential	78.7	78.8	0.1	Yes	1.5	No
3	La Sierra Ave.	s/o SR-91 EB Ramps	Residential	79.2	79.3	0.1	Yes	1.5	No
4	La Sierra Ave.	s/o Indiana Ave.	Residential	78.7	78.8	0.1	Yes	1.5	No
5	La Sierra Ave.	s/o Victoria Ave.	Residential	78.4	78.5	0.1	Yes	1.5	No
6	La Sierra Ave.	s/o McAllister Pkwy.	Residential	77.3	77.5	0.2	Yes	1.5	No
7	La Sierra Ave.	s/o El Sobrante Rd.	Residential	72.9	73.0	0.1	Yes	1.5	No
8	McAllister Pkwy.	n/o El Sobrante Rd.	Residential	61.7	61.7	0.0	Yes	3.0	No
9	Indiana Ave.	e/o La Sierra Ave.	Residential	69.4	69.5	0.1	Yes	1.5	No
10	Indiana Ave.	w/o La Sierra Ave.	Residential	70.9	70.9	0.0	Yes	1.5	No
11	Victoria Ave.	e/o La Sierra Ave.	Residential	67.7	67.7	0.0	Yes	1.5	No
12	El Sobrante Rd.	e/o La Sierra Ave.	Residential	74.5	74.9	0.4	Yes	1.5	No
13	El Sobrante Rd.	e/o McAllister Pkwy.	Residential	74.6	75.0	0.4	Yes	1.5	No
14	El Sobrante Rd.	e/o Street A	Residential	74.6	74.7	0.1	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.13-3)?
(Urban Crossroads, 2025d, Table 8-9)

some background traffic noise from the Project's internal local streets; however, due to low traffic volume/speed, traffic noise from these roads will not make a significant contribution to the noise environment. (Urban Crossroads, 2025d, p. 37)

2. *On-Site Exterior Noise Analysis*

Using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-1 to 6-4 of the Project's NIA (*Technical Appendix K*), the expected future exterior noise levels for individual lots were calculated. Table 4.13-18, *Future Exterior Noise Levels (CNEL)*, presents a summary of future exterior noise levels in the outdoor living areas (backyards) within the Project site. The on-site traffic noise level impacts indicate that the outdoor living areas near Travertine Drive and McAllister Street would experience unshielded exterior noise levels ranging from 41.3 to 56.7 dBA CNEL. Thus, the Project's proposed residential uses would not be exposed to traffic-related noise levels exceeding the County's 65 dBA CNEL exterior noise level standards for residential land uses, and impacts would therefore be less than significant. The on-site traffic noise analysis calculations are provided in Appendix 7.1 of the Project's NIA. (Urban Crossroads, 2025d, p. 37)

3. *On-Site Interior Noise Analysis*

Since exterior noise levels would exceed 55 dBA CNEL, the interior noise levels affecting future on-site dwelling units Project would be considered "conditionally acceptable," meaning that any new construction or development would be required to conduct a detailed analysis of the noise reduction requirements and include the needed noise insulation features in the Project design. According to the County of Riverside, conventional construction, with closed windows and fresh air supply systems or air conditioning will normally suffice to

Table 4.13-18 Future Exterior Noise Levels (CNEL)

Lot	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)[1]
Building 91	McAllister	56.7
Building 102	McAllister	41.3
Building 133	Travertine	50.4
Building 189	Travertine	51.3

[1] Exterior noise level calculations are included in Appendix 7.1 of the Project's NIA (*Technical Appendix K*).
(Urban Crossroads, 2025d, Table 7-1)

reduce exterior noise levels up to 70 dBA CNEL to comply with the 45 dBA CNEL interior standard. Therefore, to verify the future interior noise levels will comply, the exterior noise levels were calculated at the first- and second-floor building façades. Interior noise levels were then calculated based on standard construction techniques with windows closed to determine if any special insulation would be required beyond a windows closed condition. (Urban Crossroads, 2025d, p. 37)

The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: [1] weather-stripped solid core exterior doors; [2] upgraded dual glazed windows; [3] mechanical ventilation/air conditioning; and [4] exterior wall/roof assembles free of cut outs or openings. (Urban Crossroads, 2025d, p. 38)

Table 4.13-19, *First Floor Interior Noise Impacts*, and Table 4.13-20, *Second Floor Interior Noise Impacts*, show that the future unmitigated noise levels affecting on-site residential units would range from 41.3 to 56.7 dBA CNEL at the first-floor building façade and 46.1 to 56.7 dBA CNEL at the second-floor building façade. The interior noise level analysis shows that the interior noise areas would require up to 11.7 dBA CNEL reduction to comply with the County of Riverside 45 dBA CNEL interior noise level standard, which is less than the minimum 12 dBA reduction with "windows open." Therefore, the Project's proposed residential uses would not be exposed to interior noise levels exceeding 45 dBA CNEL, and impacts would therefore be less than significant. (Urban Crossroads, 2025d, p. 38)

Threshold d.: ***Would the Project result in the generation of excessive ground-borne vibration or ground-borne noise levels?***

The Project only has the potential to result in the generation of excessive ground-borne vibration or ground-borne noise levels during construction, as the residential uses proposed as part of the Project are not associated with excessive ground-borne vibration or ground-borne noise levels. Accordingly, the analysis below focuses

Table 4.13-19 First Floor Interior Noise Impacts

Lot	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]	Threshold	Threshold Exceeded?
Building 91	56.7	11.7	12.0	No	44.7	45	No
Building 102	41.3	-3.7	12.0	No	29.3	45	No
Building 133	50.4	5.4	12.0	No	38.4	45	No
Building 189	51.3	6.3	12.0	No	39.3	45	No

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] Estimated minimum interior noise reduction in first-floor bedrooms.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise reduction
(Urban Crossroads, 2025d, Table 7-2)

Table 4.13-20 Second Floor Interior Noise Impacts

Lot	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Calculated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]	Threshold	Threshold Exceeded?
Building 91	56.7	11.7	12.0	No	44.7	45	No
Building 102	46.1	1.1	12.0	No	34.1	45	No
Building 133	50.4	5.4	12.0	No	38.4	45	No
Building 189	51.3	6.3	12.0	No	39.3	45	No

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] Estimated minimum interior noise reduction in second floor bedrooms.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise reduction
(Urban Crossroads, 2025d, Table 7-2)

on potential vibration impacts during typical construction activities, including vibration impacts associated with blasting activities during site grading and vibration impacts associated with typical construction activities.

A. Typical Construction Vibration Impacts

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. With the exception of blasting, it is expected that ground-borne vibration from Project construction activities would cause only localized vibrations. Ground-borne vibration levels resulting from rock crushing and typical construction activities occurring within the Project site were estimated by data published by the FTA. Ground vibration levels associated with various types of construction equipment previously were summarized on Table 4.13-5. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the Caltrans (and as discussed in more detail in Subsection 11.6 of the Project's NIA (*Technical Appendix K*). (Urban Crossroads, 2025d, pp. 65-66)

Using the vibration source level of construction equipment provided in Table 4.13-5 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 4.13-21, *Project Construction Vibration Levels (Unmitigated)*, presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 54 to 1,400 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.03 in/sec PPV and would not exceed the County of Riverside threshold of 0.04 in/sec PPV at off-site receivers, as shown in Table 4.13-21. Therefore, the Project-related vibration impacts during typical construction activities would be less than significant. (Urban Crossroads, 2025d, p. 66)

Table 4.13-21 Project Construction Vibration Levels (Unmitigated)

Receiver Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]						Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Crane	Jack-hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level		
R1	54'	0.00	0.00	0.01	0.02	0.03	0.03	0.04	No
R2	149'	0.00	0.00	0.00	0.01	0.01	0.01	0.04	No
R3	1,400'	0.00	0.00	0.00	0.00	0.00	0.00	0.04	No
R4	540'	0.00	0.00	0.00	0.00	0.00	0.00	0.04	No
R5	397'	0.00	0.00	0.00	0.00	0.00	0.00	0.04	No

[1] Construction receiver locations are shown in Figure 4.13-5.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 4.13-5).
[4] County of Riverside General Plan.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity
(Urban Crossroads, 2025d, Table 11-5)

B. Blasting Vibration Analysis

Blasting operations can have unacceptable noise and vibration impacts if not conducted correctly. Excessive levels of structural vibration due to ground vibration from blasting can cause substantial damage to structures. A blasting contractor would be required to complete all blasting-related activities in compliance with applicable regulations of the Riverside County Sheriff's Department, the U.S. Bureau of Mines, the California Division of Occupational Safety and Health (Cal-OHSA), the Department of Homeland Security, and the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), which have many requirements for the safe handling, use, and storage of explosives and recommend various measures and controls, including, but not limited to monitoring and reporting of each blast to verify no damage has occurred at nearby structures, notifications to surrounding neighbors, limitations on the amounts and times blast may occur. (Urban Crossroads, 2025d, p. 69)

Detonating as little as 25 pounds of explosives may be perceived up to 500 feet from a charge. Therefore, without vibration controls and measures, blasting could exceed thresholds at the areas near existing residential homes surrounding the Project site. This is evaluated as a potentially significant impact of the proposed Project for which mitigation would be required. (Urban Crossroads, 2025d, p. 69)

4.13.7 Cumulative Impact Analysis

The cumulative study area for the issue of noise includes the Project vicinity as well as areas adjacent to roadways evaluated by the Project's TA (*Technical Appendix M2*). Areas outside of the cumulative study area are too far away to be adversely impacted by noise and ground-borne vibration generated as a result of the proposed Project.

As indicated under the analysis of Thresholds a. and b., the Project would not be subject to excessive noise levels associated with public airports, public use airports, or private airstrips. There are no components of the proposed Project that would cause or contribute to increased airport-related noise in the area. As such, impacts due to airport-related noise would be less-than-cumulatively considerable.

As indicated under the analysis of Threshold c., typical Project-related construction activities would not expose any nearby sensitive receptors to noise levels exceeding the identified threshold of significance of 80 dBA Leq. While it is possible that Project construction activities could occur simultaneously with construction activities from cumulative developments, based on the list of cumulative developments identified by the Project's TA, which were previously depicted on EIR Figure 4.0-1, the nearest cumulative developments that could be under construction concurrently with Project construction activities all occur to the southeast of the Project site, and away from existing residential uses and residential uses under construction to the northwest and northeast of the Project site. Furthermore, given that the highest noise levels at nearby sensitive receptors during typical construction activities only would be exposed to noise levels up to 61.2 dBA Leq, which is far below the identified threshold of significance of 80 dBA Leq. Thus, even when considering cumulative construction-related noise levels from the cumulative developments to the southeast of the Project site, under the scenario in which construction activities are occurring on site concurrently with off-site construction activities the resulting noise levels would not have the potential to exceed 80 dBA Leq at the nearest sensitive receiver locations. Thus, cumulatively-considerable impacts due to construction-related noise would be less than significant.

As also discussed under the analysis of Threshold c., based on the reference noise levels presented in Table 4.13-4, uncontrolled rock-crushing activities could exceed the daytime construction noise level limit of 80 dBA L_{eq} at distances closer than 160 feet. However, as noted above the nearest cumulative developments to the Project site occur to the southeast of the Project site, and away from existing residential uses and residential uses under construction to the northwest and northeast of the Project site. Thus, although the Project has the potential to result in a direct impact due to noise from rock crushing activities, the Project's noise from rock crushing activities would not combine with construction-related noise from cumulative developments such that there would be a perceptible increase in noise levels experienced at the nearby sensitive receptors. Therefore, while the Project would result in direct impacts due to rock crushing activities, these impacts would not be cumulatively considerable.

In addition, the analysis under Threshold c. demonstrates that noise from Project-related blasting activities would not expose nearby sensitive receptors to noise levels in excess of the OSMRE and the CFR standards for airblasts at the nearest sensitive receptor. Blasting activities consist of a single-event source of noise that would be very short in duration, and thus there is no potential for Project-related blasting activities to result in

cumulatively-considerable noise increases at nearby sensitive receptors. Accordingly, cumulatively-considerable noise impacts during construction-related blasting activities would be less than significant.

The analysis under Threshold c. also demonstrates that the highest Project-related operational noise levels at nearby sensitive receptors would be 33.9 dBA Leq during the daytime and 31.2 dBA Leq during the nighttime (as previously shown on Table 4.13-12), which is well below the daytime and nighttime thresholds of 55 dBA Leq and 45 dBA Leq, respectively. In addition, the Project's increase in ambient noise level due to Project operations would be 0.3 dBA Leq during daytime hours and 0.7 dBA Leq during nighttime hours, which is far below the 5.0 dBA Leq increase that is identified as the threshold of significance for Project-related operational noise increases. Accordingly, the Project has no potential to result in cumulatively-considerable noise impacts during long-term operations, and impacts would therefore be less than significant on a cumulatively-considerable basis.

The analysis of Threshold c. also discloses the Project's potential cumulatively-considerable traffic-related noise impacts. Specifically, as indicated in Table 4.13-17, under EAPC (2027) conditions, Project-related traffic noise, when considered in the context of traffic from ambient growth and cumulative developments, would not expose any nearby sensitive receptors to traffic-related noise levels exceeding the identified thresholds of significance. Thus, Project traffic-related noise impacts under EAPC (2027) conditions would be less than significant on a cumulatively-considerable basis.

Although not a significant impact under CEQA, the analysis of potential impacts due to on-site exterior and interior traffic-related noise levels as presented under the analysis of Threshold c. shows potential traffic-related noise impacts affecting future residential dwelling units on site would not exceed the County's exterior noise threshold of 65 dBA CNEL or the County's interior noise threshold of 45 dBA CNEL. Thus, there is no potential for cumulatively-considerable impacts associated with traffic-related noise affecting future residential uses on site.

The analysis under Threshold d. shows that typical Project-related construction activities would not expose any nearby sensitive receptors to construction-related vibration exceeding the identified threshold of significance of 0.04 in/sec PPV, as the highest Project-related vibration levels at nearby sensitive receptors only would be 0.03 in/sec PPV. While it is possible that Project construction activities could occur simultaneously with construction activities from cumulative developments, as noted above the nearest cumulative developments to the Project site occur to the southeast of the Project site, and away from existing residential uses and residential uses under construction to the northwest and northeast of the Project site. Furthermore, vibration levels diminish rapidly from the source. Thus, it is unlikely that vibration from Project-related construction activities would combine with vibration from cumulative developments to the southeast such that the existing/under construction residential uses to the northwest and northeast of the Project site would be exposed to cumulative vibration levels exceeding 0.04 in/sec PPV. Accordingly, the Project's typical construction-related vibration impacts would be less than significant on a cumulatively-considerable basis.

Although the analysis of Threshold d. also shows that vibration-related impacts associated with Project blasting activities would be potentially significant prior to mitigation, blasting activities consist of a single-event source of vibration and each blasting event would be of very short in duration. As noted above the nearest cumulative

developments to the Project site occur to the southeast of the Project site, and away from existing residential uses and residential uses under construction to the northwest and northeast of the Project site. Thus, it is highly unlikely that other sources of vibration from cumulative developments (including blasting), when combined with Project-related blasting vibration levels, would expose nearby sensitive receptors to perceptible vibration level increases. Thus, while vibration impacts associated with Project-related construction activities would represent a potentially significant direct impact of the Project, the Project's construction-related vibration impacts during blasting activities would be less than significant on a cumulatively-considerable basis.

4.13.8 Significance of Impacts Before Mitigation

Threshold a.: Less-than-Significant Impact. The Project site occurs approximately 5.4 miles south of the Riverside Municipal Airport. According to Map RI-3 of the Airport Land Use Compatibility Plan (ALUCP) prepared for the Riverside Municipal Airport, the Project site is located more than five miles southwest of the nearest portion of the 60 dBA CNEL contour for the Riverside Municipal Airport. Therefore, because the Project's proposed residential uses would not be exposed to airport-related noise levels exceeding 60 dBA CNEL, the Project would not expose people residing or working in the Project area to excessive airport-related noise levels, and impacts would be less than significant.

Threshold b.: Less-than-Significant Impact. There are no private airstrips within a 10-mile radius of the Project site. The nearest private airstrip to the Project site is the Perris Valley Airport, located approximately 13.6 miles southeast of the Project site. According to the ALUCP prepared for the Perris Valley Airport, the Project site is located well outside of the 55 dBA CNEL contour for this facility. As indicated under the analysis of Threshold a., the Project's residential land uses are considered "clearly acceptable" with exterior noise levels below 55 dBA CNEL. As such, the Project would not expose people residing or working in the Project area to excessive noise levels associated with private airstrips, and no impact would occur.

Threshold c.: Significant Direct Impact. The maximum Project-related noise levels from typical construction activities would be 61.2 dBA Leq at the nearest sensitive receptor, which is well below the threshold of significance of 80 dBA Leq; thus, noise impacts during typical construction activities would be less than significant. With the distance attenuation from blasting activities within the Project boundary, the unmitigated noise levels at nearby receiver locations would be approximately 93.4 dBA Lmax based on the RCNM reference noise level, which likely would occur for only a few seconds. While some blasting noise may be noticeable by nearby residents, the single-event, temporary noise levels generated by the blast would not exceed the OSMRE and the CFR standards for airblasts of 129 dBA Lmax. Therefore, noise impacts due to blasting activities would be less than significant. However, the anticipated location of the crushing activity area in relation to the nearest receiver locations is unknown at this time. Uncontrolled rock-crushing activities could exceed the daytime construction noise level limit of 80 dBA L_{eq} at distances closer than 160 feet. Since the final location of rock crushing activities is unknown, noise associated with rock crushing conservatively is evaluated as a potentially significant direct impact for which mitigation would be required.

Under long-term operating conditions, and as indicated on Table 4.13-12, the Project would generate daytime operational noise levels of up to 33.9 dBA Leq during daytime hours and 31.2 dBA Leq during nighttime hours at the nearest sensitive receptors, with a maximum increase in noise levels of 0.3 dBA Leq during daytime

hours and 0.7 dBA Leq during nighttime hours at nearby sensitive receptors. Noise from long-term Project operations would not exceed the identified thresholds of significance at the nearest sensitive receptor of 55 dBA Leq during daytime hours and 45 dBA Leq during nighttime hours, and the Project-related noise level increase would not exceed the identified threshold of significance of 5.0 dBA Leq. Accordingly, noise from long-term Project operations would be less than significant at all sensitive receptor locations.

Table 4.13-15 through Table 4.13-17 show the Project's traffic-related noise level increases would range from less than 0.1 to 0.5 dBA CNEL under Existing with Project conditions, and the Project's traffic-related noise increases would range from less than 0.1 to 0.4 dBA CNEL under EAP 2027 and EAPC 2027 conditions. Based on the significance criteria for off-site traffic noise presented in Table 4.13-3, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases due to unmitigated Project-related traffic noise levels.

The on-site traffic noise level impacts indicate that the outdoor living areas near Travertine Drive and McAllister Street would experience unshielded exterior noise levels ranging from 41.3 to 56.7 dBA CNEL at the first-floor building façade and 46.1 to 56.7 dBA CNEL at the second-floor building façade. Thus, the Project's proposed residential uses would not be exposed to traffic-related noise levels exceeding the County's 65 dBA CNEL exterior noise level standards for residential land uses, and impacts would therefore be less than significant. Additionally, the interior noise level analysis shows that the interior noise areas would require up to 11.7 dBA CNEL reduction to comply with the County of Riverside 45 dBA CNEL interior noise level standard, which is less than the minimum 12 dBA reduction with "windows open" condition that would result from the proposed residential structures. Therefore, the Project's proposed residential uses would not be exposed to interior noise levels exceeding 45 dBA CNEL, and impacts would therefore be less than significant.

Threshold d.: Significant Direct and Cumulatively-Considerable Impact. The residential uses proposed as part of the Project are not associated with excessive ground-borne vibration or ground-borne noise levels; thus, impacts due to excessive ground-borne vibration or ground-borne noise levels would be less than significant under long-term operating conditions. During normal construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.01 in/sec PPV at the nearest sensitive receptors and would not exceed the County of Riverside threshold of 0.04 in/sec PPV at off-site receivers, as shown on Table 4.13-21; therefore, the Project-related vibration impacts during typical construction activities would be less than significant. However, during blasting activities the Project has the potential to expose nearby sensitive receptors to vibration levels exceeding the County of Riverside threshold of 0.04 in/sec PPV. Therefore, vibration impacts associated with Project blasting activities would represent a significant direct impact of the proposed Project for which mitigation would be required.

4.13.9 County Regulations, Design Requirements, and Mitigation

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- All construction activities and haul truck deliveries shall adhere to Section 2.i of Riverside County Ordinance No. 847, which prohibits construction activities that make loud noise from occurring between 6:00 p.m. and 6:00 a.m. during the months of June through September, and between 6:00 p.m. and 7:00 a.m. during the months of October through May, and on Sundays and federal holidays. Exceptions to these time restrictions may be granted pursuant to Section 7 of Ordinance No. 847 (e.g., if needed to accommodate nighttime concrete pouring activities).

Mitigation

MM 4.13-1 Prior to issuance of grading permits that will allow for rock crushing activities on site during construction activities, the Project Applicant shall identify the location(s) of all rock crushing activities on site on the proposed grading plan. The Riverside County Department of Building and Safety shall review the Project's grading plans to ensure that all rock-crushing equipment and activities would occur at a minimum distance of 160 feet from any residential property boundary.

MM 4.13-2 Prior to approval of any grading permits that require blasting activities and a blasting permit, the Project Applicant shall prepare and submit for County review and approval of a Blasting Noise and Vibration Monitoring and Abatement Plan ("Noise and Vibration Abatement Plan"). The required Noise and Vibration Abatement Plan shall include the name and qualifications of the person(s) responsible for monitoring and reporting blast vibrations. In addition, the Noise and Vibration Abatement Plan shall require a minimum of three seismographs for monitoring peak ground vibration and air-overpressure. The Noise and Vibration Abatement Plan also shall require that equipment and its use shall conform fully to the standards developed by the Vibration Section of the International Society of Explosive Engineers (ISEE). For all blasts, the Noise and Vibration Abatement Plan shall require monitoring of ground motion and air-overpressure at the nearest residential properties or other structure of concern. The Noise and Vibration Abatement Plan also shall specify a minimum trigger level for monitoring of 0.05 in/s for ground motion and 120 dB for air-overpressure. Additionally, the Noise and Vibration Abatement Plan shall require regular reporting of blasting and measurements to Riverside County, and shall include a copy of the instrument/software-generated blast monitoring report at each instrument location that includes measured peak particle velocity in inches per second, peak air-overpressure in linear-scale decibels, and vibration and air-overpressure event plots, with date and time of event recording. In addition, the Noise and Vibration Abatement Plan shall include the following requirements:

- Prior to commencement of any blasting, a pre-blast survey of the conditions of all existing property and aboveground utilities located within 300 feet of any potential blasting areas shall be conducted. The pre-blast survey shall include a photographic record of all visible and accessible structures, facilities, utilities, or other improvements. The survey shall document the interior and exterior conditions of all residential property and associated structures located within 500 feet of blasting areas. If property owners refuse surveys, provide copies of certified-mail letters documenting attempts to provide the survey by a

third-party professional survey company. The required surveys shall include a description of the interior and exterior condition of the various structures examined. Descriptions shall include the locations of any cracks, damage, or other existing defects and shall include information needed to identify and describe the defect, if any, and to evaluate the construction operations on the defect. Survey records shall include photos of all cracks and other damaged, weathered, or otherwise deteriorated structural conditions. If necessary, macro lenses and flash illumination shall be used to ensure defects are shown clearly in the photographs. Photos shall contain an accurate date stamp. No blasting shall occur prior to completion of surveys of surrounding residential properties. Surveys also shall be repeated at facilities or properties where damage concerns have been expressed by individual residents, property owners, or other concerned parties. Details of any observed changes to surveyed structures and documenting photos shall be reported and submitted to Riverside County.

- Blasting only shall be allowed Monday through Friday only between the hours of 8:00 a.m. and 5:00 p.m.
- No blasting shall occur closer than 100 feet from residential structures. In the event that non-rippable materials are encountered within 100 feet from any residential structure, alternative methods shall be employed to reduce blasting-related noise and vibration impacts. Alternative rock blasting within 100 feet of residential homes may include methods such as the drilling of holes in the largest area of rock, inserting expansive grout or small charges into each whole to fragment the rock into smaller pieces, and then crushing the pieces for transport or other use.
- No more than a total of 2,000 pounds of explosive shall be detonated each day, excluding detonators.
- All blasts located within 500 feet of any structures or above ground utilities shall be covered with woven steel cable or steel-cable and rubber-tire blasting mats with a minimum weight of 30 pounds per square foot. Woven polypropylene or similar weed-barrier fabric, covered with at least 6 inches of soil or sand shall be placed over blast areas to protect initiators before mats are placed. Mats shall be overlapped at least 3 feet and shall completely cover the blast area and extend at least three feet beyond the blast area in all directions. If any flyrock or blasted material is thrown more than 10 feet or half the distance to the nearest structure, whichever is less, blasting shall be suspended until the County's has approved a revised blasting plan showing revisions to assure adequate ground movement control.
- Before blasts are covered, all loose soils above the blast shall be removed where feasible. Remaining ground located within 20 feet of the blast shall be thoroughly wetted with water to suppress airborne dust. Sand or soils placed over weed-barrier fabric shall be similarly wetted before placing blast mats.
- If specified vibration limits are exceeded, blasting operations shall cease immediately and a revised blasting plan shall be submitted to the County. Blasting shall not resume until a

revised blasting plan has been reviewed and the Contractor has expressed in writing the conditions that will be applied to further blasting work.

Project grading and blasting contractors shall be required to ensure compliance with the Noise and Vibration Abatement Plan requirements and shall permit periodic inspection of the construction site by County of Riverside staff or its designee to confirm compliance. The requirements of the Noise and Vibration Abatement Plan also shall be specified in bid documents issued to prospective construction contractors. Riverside County shall review all monitoring reports to ensure compliance with the Noise and Vibration Abatement Plan, and shall have the authority to stop all blasting activities on site if it is determined that blasting activities are not being conducted in conformance with Noise and Vibration Abatement Plan and/or the above-listed requirements.

4.13.10 Significance of Impacts After Mitigation

Threshold c.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.13-1 would ensure that any rock crushing activities that occur on site would be located a minimum distance of 160 feet from the nearest residential property line. A setback distance of 160 feet would ensure that rock crushing activities on site would not exceed 80 dBA Leq, and would reduce potential construction-related noise impacts from rock crushing activities to below a level of significance.

Threshold d.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.13-2 would ensure that all future blasting activities occur on site in conformance with a County-approved blasting Noise and Vibration Abatement Plan. The mitigation would ensure that any potentially affected structures or utilities would be subject to inspections prior to commencement of any blasting activities, and additional surveys would be required where damage concerns have been expressed by individual residents, property owners, or other concerned parties. The provisions of the Noise and Vibration Abatement Plan also would impose restrictions on blasting activities within 100 feet and within 500 feet of residential structures, and would require monitoring of vibration levels during blasting. In the event that blasting activities exceed the specified vibration limit of 0.05 in/s for ground motion and 120 dB for air-overpressure, then all blasting activities would cease until a revised blasting plan is prepared and approved by Riverside County. Implementation of Mitigation Measure MM 4.13-2 would ensure that vibration-related impacts during construction-related blasting activities do not adversely affect any existing structures, and would reduce blasting-related vibration impacts to less-than-significant levels.

4.14 PALEONTOLOGICAL RESOURCES

This Subsection 4.14 evaluates the Project's potential to result in direct, indirect, or cumulatively-considerable impacts to paleontological resources. The analysis in this subsection is based, in part, on information from two reports. The first report is titled, "Paleontological Assessment for the Willow Creek Project," prepared by BFSA Environmental Services (herein, "BFSA"), dated April 30, 2024, and included as *Technical Appendix L* to this EIR (BFSA, 2024b). The second report is titled, "Geotechnical Investigation Report Proposed Highland Grove IV, Lake Mathews Area, Riverside County, California," prepared by Leighton and Associates, Inc. (herein, "Leighton"), dated August 8, 2024, and included as *Technical Appendix F* to this EIR (Leighton, 2024). Refer to Section 7.0*, References*, for a complete list of these and other reference sources.

4.14.1 EXISTING CONDITIONS

A. *Geology*

The Project site is located within the Peninsular Ranges, a prominent physiographic province forming much of southwestern California. This region is characterized by relatively steep, elongated northwest trending mountain ranges and valleys. More specifically, the Project site is situated within the Perris Block, an eroded mass of Cretaceous and older crystalline bedrock. The Perris Block, approximately 20 miles by 50 miles in extent, is bounded by the San Jacinto Fault Zone to the northeast, the Elsinore Fault Zone to the southwest, the Cucamonga Fault Zone to the northwest, and the Temecula Basin to the southeast. The southeast boundary of the Perris block is poorly defined. The Perris Block has had a complex tectonic history, apparently experiencing relative vertical land movements of several thousand feet in response to movement along the Elsinore and San Jacinto Fault Zones. Sedimentary and volcanic deposits locally mantle the crystalline bedrock. Alluvial and colluvial deposits fill the valley areas. (Leighton, 2024, p. 5)

Geologic deposits underlying the Project site include Quaternary alluvium within the low-lying drainage areas of the site and Cretaceous-age granitic bedrock exposed on the hillsides and underlying the alluvium. The geologic units encountered at the Project site are described below in order of increasing age and further described on the logs of borings in *Technical Appendix F*. (Leighton, 2024, pp. 5-6)

- Artificial Fill. Artificial fill was observed as existing fill embankments supporting the unpaved access roads that traverse the site, as well as the berms associated with the water storage pond. Some minor undocumented fill exists associated with some end dump piles and previous grading associated with past agricultural activities and a home site.

- Topsoil/Residual Soil. Topsoil/residual soils were observed in the majority of the explorations overlying the bedrock and appear to be derived from in-place weathering of the bedrock below. As encountered in the explorations on-site, these materials are generally composed of silty sand, and clayey sand with varying amounts of gravel.

- Alluvium. Shallow alluvial soils should be expected in natural drainages crossing the site. These alluvial deposits are generally comprised of silty to clayey sand and sandy silt with varying amounts of gravel.

- Granitic Bedrock. Granitic bedrock is observed at ground surface (outcrops) along the elevated portions of the Project site and was encountered by Leighton in all of the test pits. The bedrock consists of highly to moderately weathered gabbro and granodiorite within the depth explored.

B. Paleontological Resources

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat, for example. Fossils are considered a nonrenewable resource under State guidelines. (Leighton, 2024, p. 5)

Fossils, which are nonrenewable paleontological resources, are important for dating sedimentary rocks and thus determining the time of movement of faults against which those sediments lie. Eastern and western Riverside County have fossiliferous sediments that occur in various settings. In the western portion of Riverside County, fossils occur in sediments lying on the surface of crystalline bedrock or are deposited in or between the major fault zones. The eastern desert portions of Riverside County are marked by fault block mountains that contain older fossil-bearing sediments with younger fossil-containing deposits found around dry lakes, along high stands of the Salton Sea and in terraces left by the Colorado River. (Riverside County, 2015a, p. 4.9-9)

Riverside County has an extensive record of fossil life. The record starts in Jurassic times, 150 million years ago, with diverse marine mollusks. The oldest Tertiary flora in Southern California is found east of Lake Elsinore and dates to around 60 million years ago. Fossils of 23 million-year-old oreodonts and camels, as well as camel tracks, were found in the Orocopia Mountains in central Riverside County. (Riverside County, 2015a, p. 4.9-10)

Marine advances are recorded in Corona and the Salton Trough. Marine sandstones of the Imperial Formation in the Salton Trough are found as far northwest as Cabazon. Three million years ago, near the present Interstate 15/Highway 91 interchange, a white sand beach lapped at the edge of the Pacific Ocean. The subsequent Ice Ages left fossils of giant sloths, mammoths, camels and bison that were preyed upon by giant bear, American lion and sabercats. (Riverside County, 2015a, p. 4.9-10)

Fossil resources generally occur only in areas of sedimentary rock (e.g., sandstone, siltstone, mudstone, claystone, or shale). Because of the infrequency of fossil preservation, fossils, particularly vertebrate fossils, are considered nonrenewable paleontological resources. Occasionally fossils may be exposed at the surface through the process of natural erosion or because of human disturbances; however, they generally lay buried beneath the surficial soils. Thus, the absence of fossils on the surface does not preclude the possibility of their being present within subsurface deposits, while the presence of fossils at the surface is often a good indication that more remains may be found in the subsurface.

C. *Paleontological Sensitivity*

The Society of Vertebrate Paleontology has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below: (BFSA, 2024b, pp. 7-8)

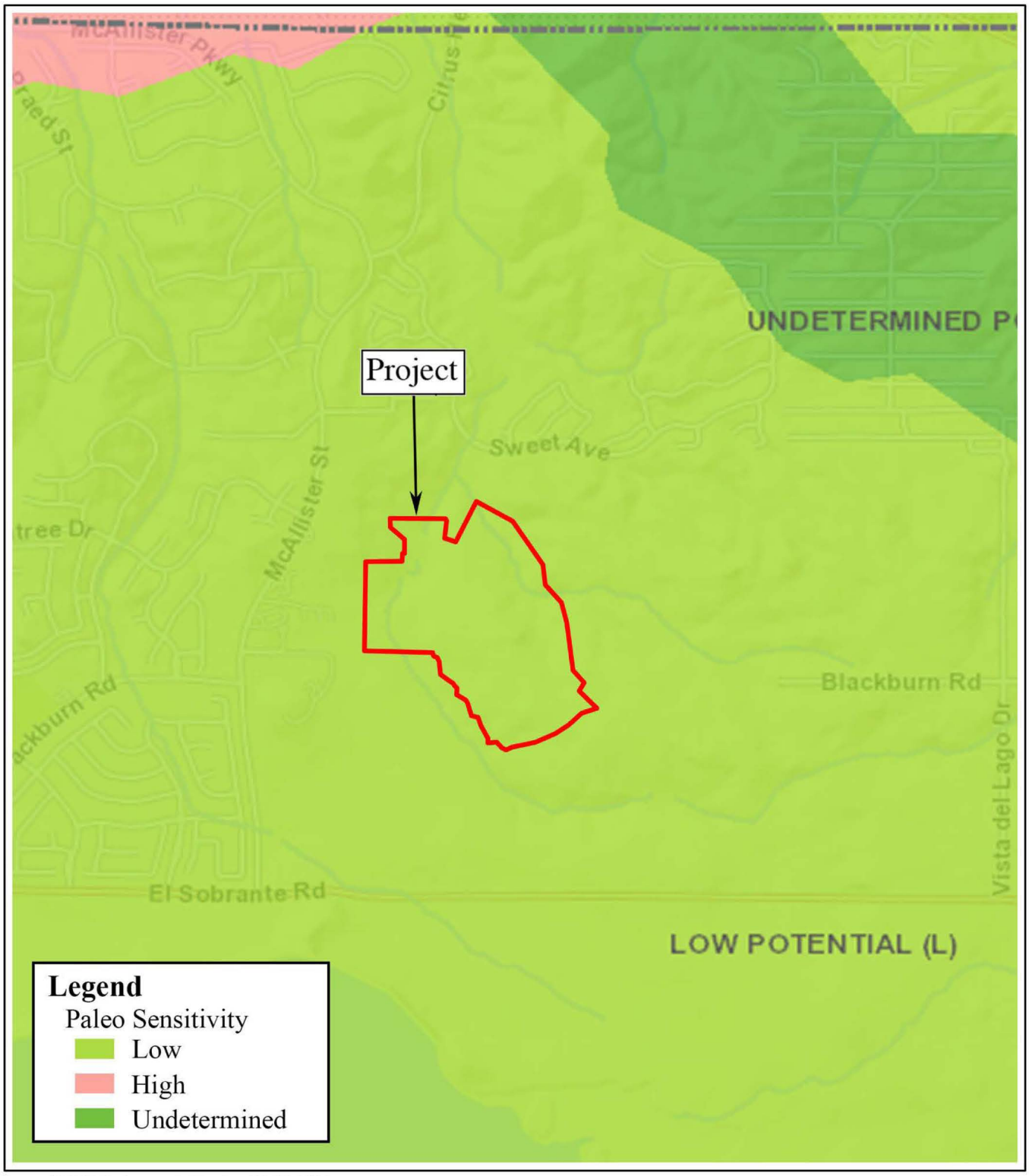
- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and that further study is needed to determine the potential of the rock unit.
- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or based on a general scientific consensus that only preserve fossils in rare circumstances.
- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that might have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and is thus typically assigned a low paleontological sensitivity. Pleistocene (more than 11,700-year-old) alluvial and alluvial fan deposits in western Riverside County, however, often yield important Ice Age terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, saber-toothed cats, and others. These Pleistocene sediments are thus accorded a high paleontological resource sensitivity. (BFSA, 2024b, p. 7)

According to Riverside County GIS, and as shown on Figure 4.14-1, *Paleontological Sensitivity Map*, the Project site and surrounding areas are mapped as having a "Low Potential (L)" for containing paleontological resources. Areas identified as having "Low Potential (L)" include lands for which previous field surveys and documentation demonstrate as having a low potential for containing significant paleontological resources subject to adverse impacts. In addition, and based on the Project's Paleontological Assessment, plutonic rocks, such as the gabbro and granodiorite mapped at the Project site, do not yield fossils and, therefore, have no paleontological resource sensitivity. (Riverside County, 2015a, p. 4.9-11; BFSA, 2024b, p. 7)

1. *Fossil Records Search*

A paleontological literature review and collections and locality records search was conducted for the Project using records collected from prior BFSA projects from the Division of Geological Sciences at the San Bernardino County Museum (SBCM), the Western Science Center (WSC) in Hemet, and the Los Angeles County Museum of Natural History (LACM), as well as data from published and unpublished paleontological literature. The closest-known fossils are from Miocene-aged deposits consisting of mammalian remains located



Source(s): BFSA Environmental Services (04-30-2024)

Figure 4.14-1

Not to Scale

Paleontological Sensitivity Map

just south of Lake Matthews, about three miles to the south. These fossils are held by the LACM. The next-closest known fossil locality listed by the LACM is about six-to-seven miles west of the Project site, between Lincoln Avenue and Main Street, north of Highway 91, in the city of Corona, and consists of the remains of a deer from Pleistocene alluvial deposits. The SBCM and the WSC have no known fossil localities in the vicinity of the Project, a representative of the WSC indicated that the WSC has a collection of fossils that are likely fossil land mammal assemblages from the Lake Mathews, but the collection/locality is not geo-referenced in their computer database. (BFSA, 2024b, p. 7)

4.14.2 Applicable Environmental Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to paleontological resources.

A. Federal Regulations

1. Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (PRPA) was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11). PRPA directs the Department of Agriculture (U.S. Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to implement comprehensive paleontological resource management programs. Section 6310 of PRPA specifically states, "As soon as practical after the date of enactment of this Act, the Secretary shall issue such regulations as are appropriate to carry out this subtitle, providing opportunities for public notice and comment." (NPS, 2023)

B. State Regulations

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.” (Westlaw, n.d.)

2. California Public Resources Code

Public Resources Code § 5097.5 states that “A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.” Public Resources Code § 30244 states that, “Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.” (FindLaw, 2023a)

C. *Local Regulations*

1. *Riverside County Planning Department Procedures*

In order to ensure the review and protection of paleontological resources for projects subject to the California Environmental Quality Act (CEQA) and not otherwise categorically exempt, the Riverside County Geologist performs an initial review of Riverside County's database and mapped information for the subject site. When existing information indicates that a site proposed for development has high paleontological sensitivity, a paleontological resource impact mitigation program (PRIMP) is required for the project. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources. If the site warrants protection, then an Environmental Constraint is placed on the approved map for the project, stating that (Riverside County, 2015a, pp. 4.9-26 and -27):

> "This site, as delineated on this [Environmental Constraint Sheet] map and as indicated in the county's General Plan, has been mapped as having a high potential for containing significant nonrenewable fossil material. The proposed project's potential to impact paleontological resources has been determined to be possible. Therefore, mitigation of this potential impact in the form of monitoring of all site earth-moving activities and collection/curation of all significant fossils unearthed is required unless proven unnecessary through comprehensive literature research and site inspection."

When existing information indicates that a site proposed for development has low paleontological sensitivity, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the Riverside County Geologist must be notified and a paleontologist must be retained by the project proponent. The paleontologist documents the extent and potential significance of the paleontological resources on the site and establishes appropriate mitigation measures for further site development. (Riverside County, 2015a, p. 4.9-27)

When existing information indicates that a site proposed for development has undetermined paleontological sensitivity, a report is filed with the Riverside County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources. (Riverside County, 2015a, p. 4.9-27)

4.14.3 Basis for Determining Significance

Section VII of Appendix G to the CEQA Guidelines addresses typical adverse effects on paleontological resources, and includes the following threshold question to evaluate the Project's impacts to paleontological resources (OPR, 2018a):

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

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, as modified based on the 2018 updates to Section VII of Appendix G to the CEQA Guidelines, and indicate significant impacts would occur if the Project or any Project-related component would:

a. Directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature.

The significance threshold set forth in Riverside County's Environmental Assessment Checklist, as modified by the 2018 updates to the CEQA Guidelines, was used to evaluate the significance of the proposed Project's impacts on paleontological resources.

4.14.4 Impact Analysis

Threshold a.: ***Would the Project directly or indirectly destroy a unique paleontological resource, or site, or unique geological feature?***

There are no unique geologic features on site. Although the Project site features rolling hillsides, these do not comprise unique geologic features as hill forms that occur on site are similar to existing off-site hill forms in the surrounding area. As such, no impacts to unique geologic features would occur with Project implementation.

Based on findings from the Project's Paleontological Assessment, the Project site is underlain by Cretaceous plutonic rocks (gabbro and granodiorite). According to the Society of Vertebrate Paleontology criteria, the plutonic rocks mapped at the Project site have no potential to yield paleontological resources. Paleontological resources do not occur in plutonic rocks such as those mapped at the Project site. (BFSA, 2024b, p. 7) Additionally, the paleontological sensitivity map generated by the County of Riverside Land Information System ranks the plutonic rocks mapped at the Project site as having a "low" paleontological sensitivity. The category "low" indicates that fossils are not likely to be encountered and during excavation by construction activities, and therefore, are not likely to be significantly impacted. As such, paleontological monitoring during Project-related grading and ground-disturbing activities would not be required for the Project. However, there is a low but remote potential that fossils may be discovered during grading and earthmoving activities, which is conservatively concluded to be a potentially significant impact of the proposed Project.

4.14.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the vicinity of the Project site, including buildout of the Riverside County General Plan Land Use Plan and the general plans of cities throughout western Riverside County. This cumulative study area was selected for analysis because it encompasses a region in which geological conditions, and thus paleontological sensitivity, are similar to what occurs in the immediate vicinity of the Project site.

As indicated under the analysis of Threshold a., the plutonic rocks mapped at the Project site have no potential to yield paleontological resources, and the Project site is mapped as having a "Low Potential (L)" for containing paleontological resources, indicating that monitoring for paleontological resources during Project construction is not warranted. However, there is a remote potential that fossils may be discovered during grading and earthmoving activities. As other cumulative developments within the region also have the potential to result in

impacts to paleontological resources, the Project's remote potential for impacting paleontological resources is evaluated as potentially significant on a cumulatively-considerable basis.

4.14.6 Significance of Impacts Before Mitigation

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The Project would not impact any known paleontological resources or unique geological features. However, there is a remote potential that fossils may be discovered during grading and earthmoving activities. This is considered a potentially significant impact on both a direct and cumulatively-considerable basis.

4.14.7 County Regulations, Design Requirements, and Mitigation

Mitigation

MM 4.14-1 Prior to grading permit issuance, the Riverside County shall verify that the following applicable notes are included on the grading plans. Project contractors shall be required to ensure compliance with these notes and permit periodic inspection of the construction site by Riverside County staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. These requirements only shall apply in the event that a paleontological resource(s) is uncovered during Project grading and earthmoving activities.

1. *If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 100-foot radius buffer so as to protect the discovery from further potential damage, and a county-qualified paleontologist shall be consulted to assess the discovery. If the discovery is determined to be significant by the paleontologist, a Mitigation Monitoring and Reporting Program (MMRP) shall be initiated, which shall include notification of appropriate personnel involved and monitoring of earth disturbance activities:*

    a. *If a paleontological resource(s) are uncovered, monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources shall be performed by a qualified paleontologist or paleontological monitor. Monitoring shall be conducted full-time in areas of grading or excavation in undisturbed sedimentary deposits.*

    b. *Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.*

c. *Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils shall be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes shall be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites shall be protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils shall be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site shall be determined with the use of handheld GPS units. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.*

d. *Isolated fossils shall be collected by hand, wrapped in paper, and placed in temporary collecting flats or five-gallon buckets. Notes shall be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place.*

e. *Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, as many as 20 to 40 five-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment.*

f. *In accordance with the "Microfossil Salvage" section of the Society of Vertebrate Paleontology guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth.*

g. *In the laboratory, individual fossils shall be cleaned of extraneous matrix, any breaks shall be repaired, and the specimen, if needed, shall be stabilized by soaking in an archivally approved acrylic hardener (e.g., a solution of acetone and Paraloid B-72).*

h. *Recovered specimens shall be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.*

i. *Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., Western Science Center [WSC], Natural History Museum of Los Angeles County [LACM], San Diego Natural History Museum [SDNHM], San Bernardino County Museum [SBCM], or Riverside Municipal Museum [RMM]) shall be conducted. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the lead agency (i.e., Riverside County) shall be consulted on the repository/museum to receive the fossil material.*

j. *A final report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, shall signify satisfactory completion of the Project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.*

4.14.8 Significance of Impacts After Mitigation

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. Although not anticipated, in the remote event that paleontological resources are uncovered during grading and earthmoving activities, Mitigation Measure MM 4.14-1 would ensure that the area where the resource(s) was identified is subject to monitoring, and would further ensure that any uncovered fossils are appropriately treated. With implementation of Mitigation Measure MM 4.14-1, the Project's potential impacts to previously-undiscovered paleontological resources would be reduced to less-than-significant levels.

4.15 Population and Housing

This Subsection provides analysis that discloses existing population and housing data from Riverside County and assess the potential for impacts on population and housing associated with implementation of the Project. The analysis in this Subsection is based on information contained in the Riverside County General Plan (including the Housing Element and Lake Mathews/Woodcrest Area Plan [LMWAP]) and the Southern California Association of Governments (SCAG) 6th Cycle Final Regional Housing Needs Assessment (RHNA) Allocation Plan (Riverside County, 2021a; Riverside County, 2021b; SCAG, 2021). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.15.1 Existing Conditions

A. *Existing Site Conditions*

Under existing conditions, the Project site is vacant and undeveloped, with no existing structures or residents. Several dirt trails cross through the Project site. Two streams are located on the Project site, one along the eastern boundary of the site and one along the southwestern boundary and north central portion of the site. Vegetation on the Project site consists of a mixture of grasses and shrubs, with shrubs and trees concentrated in the two streams. The County's General Plan and Lake Matthews/Woodcrest Area Plan (LMWAP) designate the 111.6-acre Project site for "Rural Community – Very Low Density Residential (RC-VLDR)" on 6.7 acres and "Rural Community – Low Density Residential (RC-LDR)" land uses on 104.9 acres. The RC-VLDR land use designation is intended to allow for single-family detached residences on large parcels of 1 to 2 acres, while limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. The RC-LDR land use designation is intended to allow for single-family detached residences on large parcels of 0.5 to 1 acre, while limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. (Riverside County, 2021b, Figure 3 and Table 1)

B. *Regional Population, Household, and Employment Estimates*

The Project site is within the Victoria Grove community of the Lake Matthews/Woodcrest Area Plan (LMWAP) of unincorporated Riverside County, which is within the jurisdiction of SCAG. Population projections according to SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy ("Connect SoCal" or "2024-2050 RTP/SCS") are shown in Table 4.15-1, *SCAG Region Projected 2020-2050 Growth Forecast*. Population within the SCAG region is expected to increase to 20,909,000 persons by 2050, reflecting an 11.0% increase in population over the 30-year period from 2020 to 2050. Over this same period, the number of households within the SCAG region are projected to increase from 6,265,000 in 2020 to 7,814,000 in 2050, representing an approximate 24.7% increase, while the number of jobs is anticipated to increase from 8,976,000 in 2019 to 10,276,000 in 2050, representing a 15.0% increase. (SCAG, 2024b, Table 12)

Table 4.15-1 SCAG Region Projected 2020-2050 Growth Forecast

	2020	2025	2030	2035	2040	2045	2050
Population	18,830,000	19,068,000	19,476,000	19,946,000	20,346,000	20,684,000	20,909,000
Households	6,265,000	6,632,000	7,006,000	7,311,000	7,538,000	7,701,000	7,814,000
Employment	8,937,000	9,235,000	9,581,000	9,885,000	10,097,000	10,190,000	10,276,000

(SCAG, 2024b, Table 12)

4.15.2 Applicable Regulatory Requirements

A. *Federal Plans, Policies, and Regulations*

1. *Fair Housing Act*

The federal Fair Housing Act protects people from discrimination when they are renting or buying a home, getting a mortgage, seeking housing assistance, or engaging in other housing-related activities. Additional protections apply to federally-assisted housing. (HUD, n.d.)

2. *U.S. Census Bureau*

The U.S. Census Bureau is the leading source of statistical information about the nation's people. Population statistics come from decennial censuses, which count the entire U.S. population every ten years, along with several other surveys. The American Community Survey (ACS) is an ongoing annual survey intended to help communities decide where to target services and resources. Demographic surveys measure income, poverty, education, health insurance coverage, housing quality, crime victimization, computer usage, and many other subjects. Economic surveys are conducted monthly, quarterly, and yearly, and cover selected sectors of the nation's economy. (USCB, 2024)

B. *State and Regional Plans, Policies, and Regulations*

1. *State Housing Law*

The State law regulating residential occupancies is entitled the "State Housing Law" and is found in Division 13, Part 1.5 of the California Health and Safety Code (HSC), Sections 17910 to 17998.3 Regulations implementing the State Housing Law mandate statewide residential building standards for new construction, which are found in the California Code of Regulations, Title 24, also referred to as the California Green Building Standards Code (CalGreen). (CA Legislative Info, n.d.)

2. *Southern California Association of Governments (SCAG)*

SCAG determines regional housing needs and the share of the regional needs to be addressed by Riverside County and its constituent cities. SCAG is a Joint Powers Agency and is the designated Council of Governments (COG), Regional Transportation Planning Agency (RTPA), and Metropolitan Planning Organization (MPO) for the six-county region of Los Angeles, Orange, Ventura, San Bernardino, Riverside, and Imperial counties. SCAG's Regional Comprehensive Plan and Guide (RCPG) and Regional Housing Needs Assessment (RHNA) are tools for coordinating regional planning and housing development strategies in southern California. (SCAG, n.d.)

3. *Regional Housing Needs Assessment (RHNA)*

State Housing Law (California Government Code Article 10.6, Sections 65580-65590) mandates that local governments, through COGs, identify existing and future housing needs in a Regional Housing Needs Assessment (RHNA). The RHNA provides recommendations and guidelines to identify housing needs within counties and cities. The County of Riverside addresses its RHNA allocation through its General Plan Housing Element. The RHNA prepared by SCAG projects the unincorporated County's share of regional housing need for 2021-2029 as 40,647 homes, as summarized in Table 4.15-2, *Regional Housing Needs Allocation Unincorporated County (2021-2029).* (SCAG, 2021)

Table 4.15-2 Regional Housing Needs Allocation Unincorporated County (2021-2029)

Income Category	Allocation
Very Low	10,371
Low	6,627
Moderate	7,347
Above Moderate	16,302
Total	**40,647**

(SCAG, 2021)

4. *Senate Bill 330 (Housing Crisis Act of 2019) and Senate Bill 8 (2021)*

On October 9, 2019, California Governor Gavin Newsom signed the Housing Crisis Act of 2019 (HCA) into law, commonly known as Senate Bill (SB) 330 (Chapter 654, Statutes of 2019) to respond to the California housing crisis. On September 16, 2021, Gov. Newsom also signed SB 8 (Chapter 161, Statutes of 2021), which is an extension of the HCA. The HCA aims to increase residential unit development, protect existing housing inventory, and expedite permit processing, and applies only to "affected cities" and "affected counties." Under this legislation, municipal and county agencies are restricted in ordinances and polices that can be applied to residential development. For example, State law now prohibits a local agency from disapproving, or conditioning approval in a manner that renders infeasible, a housing development project for very low, low-, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record. SB 330 requires a local agency that proposes to disapprove a housing development project that complies with applicable, objective general plan and zoning standards and criteria that were in effect at the time the application was deemed to be complete, or to approve it on the condition that it be developed at a lower density, to base its decision upon written findings supported by substantial evidence on the record that specified conditions exist, and places the burden of proof on the local agency to that effect. (CA Legislative Info, 2019)

C. *Regional and Local Plans, Policies, and Regulations*

1. *Riverside County General Plan Housing Element*

The 2021-2029 Housing Element identifies and establishes policies intended to fulfill the housing needs of existing and future residents in Riverside County. It establishes policies that guide County decision-making and set forth an action plan to implement its housing goals. The Housing Element includes a review of previous

housing goals, an assessment of the effectiveness of those goals, and an assessment of housing needs. Additionally, the Housing Element includes an inventory of resources and constraints related to meeting housing needs in Riverside County; an analysis of affordable housing developments and programs intended to preserve such housing; community goals for the maintenance, preservation, improvement and development of housing; and a program which sets forth a five-year schedule of actions that the County is undertaking or intends to undertake in implementing the polices set forth in the Housing Element. (Riverside County, 2021a, p. H-3)

2. SCAG Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

SCAG is a joint powers authority (JPA) under California State law, established as an association of local governments and agencies that convene as a forum to address regional issues. In April 2024, SCAG's Regional Council adopted *Connect SoCal (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy*). Connect SoCal is intended to create a plan for defining and solving regional problems including housing, traffic, water, air quality, and other regional challenges. Connect SoCal builds upon the elements of existing local general plans and provides a blueprint for where and how the southern California area will grow. (SCAG, 2024a)

4.15.3 Basis for Determining Significance

Section XIV of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to population and housing, and includes the following threshold questions to evaluate the Project's impacts due to population and housing (OPR, 2018a)

- *Would the project induce substantial unplanned population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through the extension of infrastructure)?*

- *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section XIV of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact to population and housing if construction and/or operation of the Project would:

a. *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;*

b. *Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income; or*

c. *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts on population and housing.

4.15.4 Impact Analysis

Threshold a.: ***Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

Under existing conditions, there are no existing residential homes or residents on the Project site. Implementation of the proposed Project would not result in the demolition of any existing homes and would not displace any existing people or housing. As such, no impact would occur.

Threshold b.: ***Would the Project create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?***

The Project would entail development of the 111.6-acre Project site with 206 single-family homes. As such, the Project would accommodate new housing opportunities within the County. The Project does not include any land uses, such as commercial retail or light industrial land uses, that would generate new employees or an increased demand for additional housing. Although the Project would not accommodate housing affordable to households earning 80% or less of the County's median income, the Project site is not designated for higher-density residential uses and is not identified as a site that is planned to help meet the County's RHNA obligations by the General Plan Housing Element. The Project would have no effect on the portions of the County that are planned to accommodate housing for lower-income households. Therefore, the Project would not create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income, and no impact would occur.

Threshold c.: ***Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

As previously indicated, under existing conditions, the General Plan and LMWAP designate the property for "Rural Community – Very Low Density Residential (RC-VLDR)" land uses on approximately 6.7 acres and "Rural Community – Low Density Residential (RC-LDR)" land uses on approximately 104.9 acres. The Project Applicant is seeking a General Plan Amendment (GPA 240072) to reconfigure the existing land use designation of RC-VLDR and RC-LDR to match the residential lotting proposed as part of TTM 38927. With approval of GPA 240072, the total acreage of RC-VLDR and RC-LDR land uses would remain unchanged at 6.7 acres and 104.9 acres, respectively. The RC-VLDR land use designation allows for residential development at a maximum density of 1.0 dwelling units per acre (du/ac), while the RC-LDR land use allows for residential development at a maximum density of 2.0 du/ac. Accordingly, based on the site's existing General Plan land use designations, the Project site may be developed with up to 217 dwelling units ([6.7 acres x 1.0 du/ac] + [104.9 acres x 2.0 du/ac] = 216.5 dwelling units). According to Table E-2 of Appendix E to the Riverside County General Plan, residential dwelling units within the LMWAP area generate approximately 3.34 persons per household. Thus, based on the site's existing General Plan, the Project site could accommodate a future

residential population of approximately 723 persons (216.5 dwelling units x 3.34 persons/dwelling unit = 723.1 persons). The Project's proposed TTM 38927 proposes to subdivide the 111.6-acre Project site to include a total of 206 residential lots, which would be expected to generate a future residential population of approximately 688 persons (206 dwelling units x 3.34 persons/dwelling unit = 688.0 persons). Accordingly, the Project's anticipated future population would be less than assumed for the Project site by the Riverside County General Plan. Accordingly, the Project would not result in substantial unplanned population growth in the area. Additionally, the Project's proposed roadway and other infrastructure (e.g., water, sewer, etc.) improvements have been designed and sized to serve the proposed Project, and would not indirectly induce growth in the local area. Thus, the Project would not induce substantial unplanned population growth in the area, either directly or indirectly, and impacts would be less than significant. (Riverside County, 2021a, Appendix E, Tables E-1 and E-2)

4.15.5 Cumulative Impact Analysis

For purposes of analysis, the cumulative study area for the issue of population and housing encompasses western Riverside County as well as the various cities within western Riverside County. This study area is appropriate because growth in the region is largely controlled by the Riverside County General Plan and the general plans of the various cities within the County.

Under existing conditions, there are no existing residential homes on the Project site. Implementation of the proposed Project would not result in the demolition any existing homes or the displacement of any existing residents. Accordingly, the Project would not result in any cumulatively-considerable impacts due to the displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The Project would entail development of the 111.6-acre Project site with 206 single-family homes. As such, the Project would accommodate new housing opportunities within the County. The Project does not include any land uses, such as commercial retail or light industrial land uses, that would generate new employees or an increased demand for additional housing. Accordingly, the Project would not result in any cumulatively-considerable impacts through the creation of a demand for additional housing, including housing affordable to households earning 80% or less of the County's median income.

The land uses proposed as part of the Project generally would conform to the site's existing General Plan and Specific Plan land use designations, and would not induce substantial unplanned population growth in the area. Infrastructure improvements proposed by the Project also would not indirectly induce substantial unplanned population growth. Cumulatively-considerable impacts would be less than significant.

4.15.6 Significance of Impacts Before Mitigation

Threshold a: No Impact. Under existing conditions, there are no existing residential homes or residents on the Project site. Implementation of the proposed Project would not result in the demolition of any existing homes and the Project would not displace any existing people or housing. As such, the Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and no impact would occur.

Threshold b: No Impact. The Project would entail development of the 111.6-acre Project site with 206 single-family homes, thereby accommodating new housing opportunities within the County. The Project does not include any land uses, such as commercial retail or light industrial land uses, that would generate new employees or an increased demand for additional housing. Therefore, the Project would not create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income, and no impact would occur.

Threshold c: Less-than-Significant Impact. The Project's anticipated future population would be less than assumed for the Project site by the Riverside County General Plan. Accordingly, the Project would not result in substantial unplanned population growth in the area. Additionally, the Project's proposed roadway and other infrastructure (e.g., water, sewer, etc.) improvements have been designed and sized to serve the proposed Project, and would not indirectly induce growth in the local area. Thus, the Project would not induce substantial unplanned population growth in the area, either directly or indirectly, and impacts would be less than significant.

4.15.7 County Regulations, Design Requirements, and Mitigation

No significant environmental impacts related to population and housing would occur due to the Project. No mitigation measures are required.

4.16 PUBLIC SERVICES

This Subsection 4.16 provides information on existing public services and service levels for fire protection, police protection, schools, libraries, and public health facilities, and evaluates impacts to the environment that may result from the demand the Project may have on such services.

4.16.1 EXISTING CONDITIONS

A. Fire Protection/Emergency Medical Services

Fire protection services for the Project site are provided by the Riverside County Fire Department (RCFD). The RCFD provides a full range of fire services within the County and contracting cities. The level of service provided is dependent on response times, travel distance, and staffing workload levels established in the Riverside County Fire Protection and Emergency Medical Aid Plan. The Fire Protection and Emergency Medical Aid Plan contains four fire response categories that are used to determine the response times/travel distances for primary and secondary fire stations. The response categories are based on the amount of community build-out presumed in the Fire Protection and Emergency Medical Aid Plan. The Fire Department assumes in any given region that three or more fire engines respond to any reported fire.

According to Riverside County GIS, the Project site is located within a State Responsibility Area (RCIT, n.d.). According to CAL FIRE, the northwestern portion of the Project site is within a Very High Fire Hazard Severity Zone (FHSZ), a small portion of the central portions of the Project site are within a High FHSZ, and the southern/southeastern portion of the Project site is within a Moderate FHSZ (CAL FIRE, 2024). The fire station that would serve the Project as the first responder is RCFD Station #82 (Lake Hills), located approximately 1.9 roadway miles west of the Project site at 17452 Lake Pointe Drive, Riverside CA, 92503 (Google Earth, 2024).

B. Sheriff Services

The Riverside County Sheriff's Department (RCSD) provides community policing for the Project area. The Sheriff Station serving the Project area is the Magnolia Station, located at 10540 Magnolia Avenue, Riverside, CA 92505, or approximately 3.1 miles northwest of the Project site (Google Earth, 2024). In addition to community policing, other services provided by the Sheriff's Department include, but are not limited to, operating of the emergency 911 system, operating correctional facilities, performing traffic control, and providing crime prevention education. Also, the Sheriff's Department coordinates with volunteer groups such as Neighborhood Watch Programs and the Community Oriented and Policing Problem Solving (COPPS) Program and the Community Oriented Policing (COP) Program. COPPS shifts the focus of police work from a solely reactive mode by supplementing traditional law enforcement methods with proactive problem-solving approaches that involve the community as well as the police.

Unincorporated Riverside County has set a minimum standard of 1.0 deputy per 1,000 residents. This standard was adopted as part of the "Commitment to Public Safety and Citizens' Option for Public Safety," by the Board of Supervisors on September 17, 1996. The Sheriff's Department has indicated that their desired staffing level is 1.2 deputies per 1,000 residents, while Mitigation Measure 4.15.C of EIR No. 441 establishes a standard of 1.5 sworn peace officers per 1,000 population.

C. Schools

The Project site is located in the attendance boundary of the Riverside Unified School District (RUSD), which provides K-12 educational services. The nearest schools to the Project site include Lake Matthews Elementary School, located approximately 0.7-mile southwest of the Project site; Frank Augustus Miller Middle School, located approximately 4.4 miles northeast of the Project site; and Arlington High School, located approximately 2.8 miles north of the Project site (Google Earth, 2024). According to the RUSD's 2016 Long Range Facilities Master Plan and the RUSD's April 15, 2024 Fee Justification Study, Lake Matthews Elementary School had an enrollment of 769 students in the 2023/2024 school year with a total capacity of 880 students; Frank Augustus Miller Middle School had an enrollment of 842 students in the 2023/2024 school year with a total capacity of 1,200 students; and Arlington High School had an enrollment of 1,971 students in the 2023/2024 school year with a total capacity of 2,500 students. (RUSD, 2016, pp. 97, 173, and 189; RUSD, 2024, Appendix C)

D. Libraries

The Project site is located within the Riverside County Public Library System (RCPLS) service area. The County of Riverside operates a system of 35 libraries and two book mobiles (one serving Coachella Valley and one serving western Riverside County) to serve unincorporated populations. In addition, the Riverside County Library System operates an automated network that currently deploys over 350 computer/terminal workstations in the library branches of the Riverside County Library System, Riverside Public Library, Moreno Valley Library, Murrieta Public Library, Murrieta Valley High School, and College of the Desert. The network can also be accessed by Riverside County residents via the Internet. The library system manages the library catalog of the 1.3 million items in the library system and the annual checkout of over 3.5 million books, audios, and videos. For 2010, the Riverside County Library System reported a total of 681,117 'registered borrowers' utilizing County library services. (Riverside County, 2015a, pp. 4.17-65 and 4.17-66)

The Riverside County library system does not maintain a specific numerical factor to analyze the needs created by new development. However, the American Library Association suggests that an appropriate service criterion would be availability of convenient library facilities and book reserves at a rate of 0.5 square foot of library space and 2.5 volumes per capita. The County's ability to support the needs of future growth is dependent upon its ability to secure sites for, construct, and stock new libraries on a timely basis. As of 2015, there was no specific funding mechanism for expansion of library facilities. Based on 2010 reported registered borrowers (681,117) and current square footage of library facilities available (333,884), as of 2015 facilities provided approximately 0.49 square feet of space per registered borrower (not the Riverside County population as a whole). (Riverside County, 2015a, p. 4.17-66)

The nearest library servicing the proposed Project site is the Woodcrest Library, located at 16625 Krameria Avenue, Riverside, CA 92504, or approximately 3.2 miles east of the Project site (Google Earth, 2024).

E. Health Services

Public health services in Riverside County are provided by the County Department of Public Health. However, most health services are provided by the private sector. The nearest medical facility to the Project site is the Riverside Urgent Care – La Sierra located at 3480 La Sierra Avenue B, Riverside, CA, 92503, or approximately 2.9 miles northwest of the Project site (Google Earth, 2024). The Riverside Urgent Care provides a comprehensive range of emergency health services.

4.16.2 Applicable Environmental Regulations

The following is a brief description of the federal, state, and local environmental laws and related regulations related to public services.

A. State Regulations

1. Fire Protection Services Regulations and Plans

- Public Resources Code (PRC) Sections 4290-4299

These sections establish minimum statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations. (CA Legislative Info, n.d.)

As defined by CalFire, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CalFire has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CalFire every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor. (CA Legislative Info, n.d.)

- PRC Sections 4102-4127 - State Responsibility Areas (SRAs)

PRC Section 4102 specifies that "'State responsibility areas' means areas of the state in which the financial responsibility of preventing and suppressing fires has been determined by the [State Fire] Board pursuant to Section 4125, to be primarily the responsibility of the state." These areas may contain state or privately-owned forest, watershed, and rangeland. §§ 4126-4127 of the PRC further specify the standards that define what does and does not constitute an SRA. (CA Legislative Info, n.d.)

❑ California Code of Regulations (CCR) Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code which contains complete regulations and general construction building standards of State of California adopting agencies, including administrative, fire and life safety and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, "Materials and Construction Methods for Exterior Wildfire Exposure," in the 2010 California Building Code addresses fire safety standards for new construction and Section 701A.3.2 addresses "New Buildings Located in Any Fire Hazard Severity Zone." (BSC, n.d.)

❑ CCR Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.). (Westlaw, n.d.)

❑ California Government Code (CGC) Sections 51178-51179 – Very High Fire Hazard Severity Zones

Section 51178 specifies that the Director of CalFire, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria and the expected severity of fire hazard. It further specifies that VHFHSZs "shall be based on fuel loading, slope, fire weather and other relevant factors," including areas subject to Santa Ana winds which are a "major cause of wildfire spread." Section 51179 states that a local agency (such as a county) must also designate (and map) the VHFHSZs in its jurisdiction by ordinance. (See the discussion on Ordinance No. 787, below, regarding Riverside County's VHFHSZs). Other portions of the Government Code outline when a local agency may use its discretion to exclude areas from VHFHSZ requirements or add areas not designated by the State of California to its VHFHSZ areas. (CA Legislative Info, n.d.)

❑ CGC Section 51182 – Defensible Space

Pursuant to this code, a person who "owns, leases, controls, operates or maintains an occupied dwelling or occupied structure in, upon or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land or land that is covered with flammable material" in a very high fire hazard severity zone designated by the local agency pursuant to § 51179, shall at all times maintain a specified amount of "defensible space" to protect structures in high fire hazard areas. (CA Legislative Info, n.d.)

❑ PRC Section 4213 - Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual "Fire Prevention Fee" for all habitable structures within the State's Responsibility Area (SRA) to pay for fire prevention services. The SRA is the portion of the state where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city

boundaries, Tribal or federally owned land. As of 2013, the fee is up to $150 per habitable structure (i.e., a building that can be occupied for residential use, which does not include incidental buildings such as detached garages, barns, outdoor bathrooms, sheds, etc.). As a result of AB 398, California Global Warming Solutions Act of 2006, the fire prevention fee was suspended as of July 1, 2017. (FindLaw, n.d.)

2. School Services Regulations and Plans

❑ Assembly Bill (AB) 16

In 2002, AB 16 created the Critically Overcrowded School Facilities program, which supplements the new construction provisions within the School Facilities Program (SFP). The SFP provides State of California funding assistance for new facility construction projects and modernization projects. The Critically Overcrowded School Facilities program allows school districts with critically overcrowded school facilities, as determined by the California Department of Education (CDE), to apply for new construction projects in advance of meeting all SFP new construction program requirements. Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply. (CA Legislative Info, n.d.)

❑ Leroy F. Greene School Facilities Act of 1998 (Senate Bill [SB] 50)

Senate Bill 50 (SB 50) was enacted by the State Legislature in 1998, which amended existing state law governing school fees. In particular, SB 50 amended prior California Government Code (CGC) Section 65995(a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with "any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property...." (CA Legislative Info, n.d.)

The legislation also amended CGC Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act [involving] the planning, use or development of real property." Further, SB 50 established the base amount of allowable developer fees: $1.93 per square foot for residential construction and $0.31 per square foot for commercial. These base amounts are commonly called "Level 1 fees" and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years. (CA Legislative Info, n.d.)

In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. School districts can impose Level 2 fees, which are equal to 50% of land and construction costs if they: (1) prepare and adopt a school needs analysis for facilities; (2) are determined by the State Allocation Board to be eligible to impose these fees; and (3) meet at least two of the following four conditions: (CA Legislative Info, n.d.)

- At least 30% of the district's students are on a multi-track year-round schedule.
- The district has placed on the ballot within the previous four years a local school bond that received at least 50% of the votes cast.
- The district has passed bonds equal to 30% of its bonding capacity.

- Or, at least 20% of the district's teaching stations are relocatable classrooms.

Additionally, if the State of California's bond funds are exhausted, a school district that is eligible to impose Level 2 fees is authorized to impose even higher fees. Commonly referred to as "Level 3 fees," these fees are equal to 100% of land and construction costs of new schools required as a result of new developments. (CA Legislative Info, n.d.)

B. Local Regulations

1. Ordinance No. 787 - Fire Code Standards

This ordinance addresses implementation of the California Fire Code, based on the International Code Council. The codes prescribe performance characteristics and materials to be used to achieve acceptable levels of fire protection and include the wildland-urban interface (WUI) fire area building standards mentioned above. Collectively, the ordinance establishes the requirements and standards for fire hazard reduction regulations within Riverside County (including additions and deletions to the California Fire Code) to fully protect the health, safety and welfare of existing and future residents and workers of Riverside County. (Riverside County, 2015a, p. 4.13-49)

Among other things, this ordinance assures that structural and nonstructural architectural elements of the building do not: a) impede emergency egress for fire safety staffing/ personnel, equipment, and apparatus; nor b) hinder evacuation from fire, including potential blockage of stairways or fire doors. In addition, for the purposes of CFC implementation, the ordinance also adds a statement noting: "In accordance with Government Code sections 51175 through 51189, Very High Fire Hazard Severity Zones are designated as shown on a map titled Very High Fire Hazard Severity Zones, dated April 8, 2010, and retained on file at the office of the Fire Chief and supersedes other maps previously adopted by Riverside County designating high fire hazard areas." It also defines a "hazardous fire area" as: "Private or public land not designated as state or local fire hazard severity zone (FHSZ) which is covered with grass, grain, brush or forest and situated in a location that makes suppression difficult resulting in great damage. Such areas are designated on Hazardous Fire Area maps filed with the office of the Fire Chief." (Riverside County, 2015a, p. 4.13-49)

Included in Riverside County Ordinance No. 787 are the California Fire Code, Part 4, Appendix B, for establishing fire flow, duration and pressure requirements for fire flow. The requirements are based on building size, type, materials, purpose, location, proximity to other structures and the type of fire suppression systems installed. The various water districts in Riverside County are required to test fire protection capability for the various land uses per the flow requirements of the Fire Code. In addition, areas of Riverside County not served by water districts are required to meet similar requirements as outlined in PRC Sections 4290-4299. (Riverside County, 2015a, p. 4.13-49)

2. Riverside County Ordinance No. 659 (Establishing a Development Impact Fee Program)

Riverside County Ordinance No. 659 (Establishing a Development Impact Fee Program) requires that new development pay Development Impact Fees (DIF) to ensure that certain facility obligations are met in order to reasonably serve the subject development. The fees will be used to help establish new County of Riverside

facilities that are necessary to meet the increased demand that will come about due to new development. These facilities include new fire and police stations, courts, libraries, regional parks and other facilities necessary to provide services to the residents of Riverside County. (Riverside County, 2015a, p. 4.2-26)

4.16.3 Basis for Determining Significance

According to Section XIV of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to public services if the Project or any Project-related component would (OPR, 2018a):

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

    - Fire Services;
    - Sheriff Services;
    - Schools;
    - Libraries; or
    - Health Services.

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, have been updated to reflect the 2018 revisions to Appendix G to the State CEQA Guidelines, and state that the proposed Project would result in a significant impact to public services if the Project or any Project-related component would:

a. *Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection facilities;*

b. *Result in substantial adverse physical impacts associated with the provision of new or physically altered sheriff facilities or the need for new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for sheriff services;*

c. *Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services;*

d. *Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities or the need for new or physically altered library facilities, the construction of*

which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services; or

e. *Result in substantial adverse physical impacts associated with the provision of new or physically altered health care facilities or the need for new or physically altered health care facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for health care services.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified/updated per the 2018 updates to the State CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on public services.

4.16.4 Impact Analysis

Threshold a.: ***Would the Project 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, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire Protection Services?***

The Project would entail the development of 206 residential lots on the approximately 111.6-acre Project site. According to Appendix E to the Riverside County General Plan, the average household size in the LMWAP area for residential development is 3.34 persons per household (pph). Accordingly, the Project is anticipated to result in a future population on site of approximately 688 persons (206 households x 3.34 persons/household = 688.04 persons). (Riverside County, 2021a, Appendix E, Table E-2) The Project would place additional demand on the RCFD, which provides fire protection services in the Project area. Implementation of the Project would cumulatively affect the Department's ability to service the planned population.

The Project would require an "Urban – Category II" level of service as defined by the Riverside County Fire Protection Master Plan. This classification requires a fire station to be within three roadway miles of all areas of the Project and a full first alarm assignment team operating on the scene of a fire within 15 minutes of dispatch. The primary station serving the Project area (RCFD Station #82) is located approximately 1.9 roadway miles and five (5) minutes driving time to the furthest point in the Project site (Google Earth, 2024). Accordingly, the RCFD would be able meet the Urban Land Use protection goals of the Fire Protection Master Plan for the Project.

As a condition of Project approval, the proposed Project would be required to conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety. Among other items, these requirements include conformance with Chapter 7A of the California Building Code, which requires that all buildings be constructed with fire retardant roofing material. The Project would accommodate emergency access via the Project's proposed roadway system, and the Project accommodates two Emergency Vehicle Access (EVA) points to the north and south of the Project site. Additionally, the Project would be subject to the fire code standards established as part of Riverside County Ordinance No. 787 (Fire Code Standards).

Nonetheless, development of the proposed Project would impact fire services by placing an additional demand on existing County Fire Department resources and personnel. In accordance with the Riverside County Fire Protection Master Plan, a new fire station and/or appropriate fire company is required for the development of 2,000 dwelling units or more. The Project proposes the development of only 206 dwelling units, and as such, the Project would not result in the need for a new fire station in the local area. The Project would result in an increased number of emergency and public service calls due to the increased presence of structures, traffic, and residents. Although new fire protection facilities ultimately may be needed in the Project area to serve the Project and other future development in the area, it is not possible to identify environmental impacts that may be associated with the development of any new fire protection facilities until a specific proposal and design for the facility is prepared by the RCFD. Accordingly, impacts due to the construction of new or expanded fire protection facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such fire protection facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded fire protection facilities.

The Project also would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a Development Impact Fee (DIF) to assist the County in providing for fire protection facilities, including fire stations. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction. Accordingly, Project-related impacts to fire protection services would be less than significant and no mitigation beyond payment of DIF fees would be required.

Threshold b.: ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Sheriff Services?***

The Project would result in an approximate population increase of 688 residents. The incremental increase in population to the Project site could result in an incremental increase in criminal activity such as burglaries, thefts, auto thefts, vandalism, etc. However, according to the RCSD, there is not a direct correlation between population growth, the number of crimes committed, and the number of RCSD personnel needed to respond to these increases. As the population and use of an area increases, however, additional financing of equipment and manpower needs are required to meet the increased demand.

The proposed Project would result in an increase in the cumulative demand for services from the RCSD, which provides police protection services to the Project area. Specifically, the Project would generate a demand for approximately one new sworn officer (688 residents x 1.5 officers/1,000 population = 1.03 officers), based on the 1.5 per 1,000 population service standard (Riverside County, 2015a, Table 4.17-H). Staff necessary to support the additional deputies would include an appropriate level of civilian, investigation, and supervisory personnel. The proposed Project would not, however, in and of itself result in the need for new or expanded sheriff facilities.

The Project is required to adhere to Riverside County Ordinance No. 659, which requires payment of DIF fees to assist the County in providing for sheriff protection services, including new or expanded facilities. Payment of the DIF fee would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction. Accordingly, Project-related impacts to fire protection services are evaluated as less than significant and no mitigation beyond payment of DIF fees would be required.

Therefore, implementation of the Project would not result in the need for new or expanded sheriff facilities, and impacts would be less than significant. The Project's incremental demand for sheriff protection services also would be less than significant because the Project would be required to contribute DIF fees. Accordingly, a less-than-significant impact would occur with respect to sheriff protection services or facilities as a result of implementation of the proposed Project.

Threshold c.: ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for School Services?***

The Project would result in the development of 206 residential dwelling units on the Project site. The construction of 206 single-family dwelling units as planned under the proposed Project would increase the population in the County of Riverside and would consequently place greater demand on the existing public-school system by generating additional students to be served by the RUSD.

According to student generation rates published as part of the RUSD's 2024 School Fee Justification Study, and as summarized in Table 4.16-1, *Project-Related Student Generation*, the Project would generate approximately 111 students on an annual basis, including 47 elementary school students, 26 middle school students, and 38 high school students.

Table 4.16-1 Project-Related Student Generation

School Type	Grades Served	Student Generation Rate	Dwelling Units	Project-Generated Students
Elementary School	K-6	0.2264 students/du	206	47
Middle School	7-9	0.1240 students/du	206	26
High School	10-12	0.1841 students/du	206	38
		Totals:	**206 du**	**111 students**

Note: du = dwelling units.
(RUSD, 2024, Table 3)

As previously noted, the nearest schools to the Project site include Lake Matthews Elementary School, Frank Augustus Miller Middle School, and Arlington High School. According to the RUSD's 2016 Long Range Facilities Master Plan and the RUSD's April 15, 2024 Fee Justification Study, and as summarized in Table 4.16-2, *Estimated Excess School Capacity*, Lake Matthews Elementary School had an enrollment of 769 students in the 2023/2024 school year with a total capacity of 880 students; Frank Augustus Miller Middle

School had an enrollment of 842 students in the 2023/2024 school year with a total capacity of 1,200 students; and Arlington High School had an enrollment of 1,971 students in the 2023/2024 school year with a total capacity of 2,500 students. (RUSD, 2016, pp. 97, 173, and 189; RUSD, 2024, Appendix C) As shown in Table 4.16-2, with the addition of students that would be generated by the Project (and as shown in Table 4.16-1), the Lake Mathews Elementary School still would have an excess capacity of 64 students, the Frank Augustus Miller Middle School still would have an excess capacity of 332 students, and the Arlington High School still would have an excess capacity of 491 students. Accordingly, the students that would be generated by the Project would not exceed the excess available capacity at the Lake Mathews Elementary School, Frank Augustus Miller Middle School, or the Arlington High School.

Table 4.16-2 Estimated Excess School Capacity

School Type	2023/2024 Capacity	2023/2024 Enrollment	Existing Excess Capacity	Project-Generated Students	Remaining Capacity
Lake Matthews Elementary School	880 students	769 students	111 students	47 students	64 students
Frank Augustus Miller Middle School	1,200 students	842 students	358 students	26 students	332 students
Arlington High School	2,500 students	1,971 students	529 students	38 students	491 students
		Totals:	**998 students**	**111 students**	**887 students**

(RUSD, 2016, pp. 97, 173, and 189; RUSD, 2024, Appendix C)

Notwithstanding, there is a potential that existing elementary, middle, and high schools within the Project vicinity would not be able to accommodate students generated by the proposed Project in addition to students anticipated from other developments within the RUSD service area. New school facilities may be needed to either serve future students in the local area, or to shift attendance boundaries to free up capacity at one or all of the schools that may serve the Project. Although the RUSD may need to construct new school facilities to meet the growing demand within this portion of unincorporated Riverside County, there are no current publicly-available plans detailing where such facilities would be built. Although the Project may cause or contribute to the need for new or expanded school facilities, it is not possible to identify environmental impacts that may be associated with the construction of new or expanded school facilities until a specific proposal and design for the facility is prepared by the applicable school district, and an analysis of potential physical environmental impacts resulting from the construction and operation of new or expanded school facilities would be speculative in nature (see State CEQA Guidelines § 15145). Environmental effects of such school facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded school facilities. Any mitigation measures required for new or expanded school facilities could be funded, in part, from property taxes and/or through payment of school impact fees (as discussed below).

Although it is not possible to identify physical environmental effects that may result from new or expanded school facilities, the Project would be required to contribute school impact fees to the RUSD in accordance with Riverside County Ordinance No. 575. As of June 2024, the RUSD assesses $4.79 per square foot of new residential development. Pursuant to the Leroy F. Greene School Facilities Act of 1998, payment of school impact fees constitutes full and complete mitigation for project-related impacts to school services. Although the Project's demand for school services may not be accommodated by existing facilities or staffing levels,

mandatory payment of school impact fees still would be required and would ensure that the Project's impacts to school facilities and services would be less than significant.

Threshold d.: ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Library Services?***

Development of the proposed Project would increase the region's population, creating an additional demand for library facilities and services. Development of the site with 206 residential homes would result in an increase in the area's population by approximately 688 residents (Riverside County, 2021a, Appendix E, Table E-2)

Although use of the internet has resulted in decreased demand being placed on library services nation-wide, the County continues to maintain its standards for book titles and library square footage. Library services in the County of Riverside are provided by the Riverside County Public Library System (RCPLS). To attain the RCPLS level of service standard of 2.5 titles-per-capita, the Project-generated population would require an additional 1,720 book titles (2.5 titles-per-capita x 688 residents = 1,720 titles). To attain the RCPLS standard of 0.5 square foot of library space per capita, the Project would create the demand for 344 square feet of additional library space (0.5 s.f. of library space per capita x 688 residents = 344 s.f. of library space). (Riverside County, 2015a, Appendix E, Table E-2)

Development of the Project would contribute to an existing deficiency in library service standards. The provision of additional library space would be addressed through the County's compliance with the adopted level of service standards. Additionally, mandatory compliance with Riverside County Ordinance No. 659 would require the payment of DIF fees. These fees would provide funding for library books and library expansion projects. Although new library facilities may be under consideration by the RCPLS in the Project area, it is not possible to identify environmental impacts that may be associated with the development of any new library facilities until a specific proposal and design for the facility is prepared by the RCPLS. Accordingly, impacts due to the construction of new or expanded library facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such library facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. Any mitigation measures required for new or expanded library facilities could be funded, in part, from property taxes, including increased property taxes resulting from buildout of the Project site. As such, Project impacts to library facilities and resources are evaluated as less than significant.

Threshold e.: ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant***

environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for Health Services?

The nearest medical facility to the Project site is the Riverside Urgent Care – La Sierra located at 3480 La Sierra Avenue B, Riverside, CA, 92503, or approximately 2.9 miles northwest of the Project site (Google Earth, 2024). The Project would introduce approximately 688 new residents to the Project area. According to Section 4.17, *Public Facilities*, of EIR No. 521, a population of 1,000 persons generates the need for 1.9 hospital beds (Riverside County, 2015a, p. 4.17-79). Using the 1.9 hospital beds per 1,000 persons generation factor, the Project would generate the need for approximately one additional hospital bed (688 residents x 1.9 beds/1,000 population = 1.31 hospital beds).

The provision of private health care is largely based on economic factors and demand and is beyond the scope of analysis required for this EIR. However, EIR No. 521 concluded impacts associated with buildout of the General Plan would be less than significant, and further notes that: "compliance with…existing General Plan policy and existing Mitigation Measures 4.15.7A and 4.15.7B from EIR No. 441, would further reduce or avoid the insignificant impacts…" (Riverside County, 2015a, p. 4.17-18). Mitigation Measure 4.15.7A requires the County to perform periodic medical needs assessments to evaluate the current medical demand and level of medical service provided within each Area Plan every three years. Mitigation Measure 4.15.7B requires the County to fund the new construction and/or expansion of existing medical facilities according to the level of demand for medical services based on the needs assessment required as part of Mitigation Measure 4.15.7A.

Furthermore, mandatory compliance with County Ordinance No. 659 requires a DIF fee payment to the County that is partially allocated to public health services and facilities. While new or expanded health care facilities may ultimately be needed within the County due to the anticipated growth in population, it is not possible to identify environmental impacts that may be associated with the development of any new health care facilities until a specific proposal and design for the facility is prepared. Accordingly, impacts due to the construction of new or expanded health care facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). As such, impacts to public medical facilities and resources associated with the proposed Project would be less than significant.

4.16.5 Cumulative Impact Analysis

The cumulative study area for public services encompasses the service area of the RCFD, RCSD, RUSD, and/or RCPLS, and assumes full buildout of the General Plans for jurisdictions within these service areas.

Although the proposed Project would be adequately served by fire protection services, based on the response times estimated from nearby fire station facilities, the Project would nonetheless result in an incremental increase in requests for service, which would affect the fire department's ability to provide acceptable levels of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures, increased traffic volumes, and increased population. When considered in the context of on-going cumulative development throughout western Riverside County, such impacts would be cumulatively considerable. However, the proposed Project and all cumulative developments within unincorporated Riverside County would be required to contribute DIF fees pursuant to County Ordinance No. 659. Mandatory DIF fee contributions by the Project and cumulative developments would ensure that adequate

funding is provided to the Riverside County Fire Department for the acquisition of additional facilities, equipment, and personnel. Accordingly, the proposed Project's impact to the RCFD is evaluated as less-than-cumulatively considerable.

Although the Project site would be adequately served by sheriff facilities, the increased population that would be generated by the Project, when considered in conjunction with other on-going development throughout western Riverside County, has the potential to adversely affect service response times. However, the proposed Project and all cumulative developments would be required to contribute DIF fees pursuant to County Ordinance No. 659, which would help to provide for adequate equipment and personnel in the Project area. Therefore, with mandatory payment of DIF fees, Project impacts to police protection services would be less-than-cumulatively considerable.

The proposed Project would generate approximately 111 school-age children on an annual basis, and thus would result in an increase in demand for school services. As previously indicated in Table 4.16-2, students generated by the Project would not directly result in an exceedance of the existing capacity at the Lake Mathews Elementary School, Frank Augustus Miller Middle School, or the Arlington High School. Notwithstanding, the proposed Project, when considered in conjunction with on-going development throughout the service area for the RUSD, would cumulatively affect the ability of the RUSD to provide school services. However, the Project and all cumulative developments would be required to contribute fees to these school districts in accordance with Riverside County Ordinance No. 575. Pursuant to the Leroy F. Greene School Facilities Act of 1998, payment of school impact fees constitutes complete mitigation for project-related impacts to school services. Therefore, although the Project's impacts to school services would be cumulatively considerable, cumulatively-considerable impacts would be less than significant with mandatory contribution of school impact fees pursuant to Riverside County Ordinance No. 575.

The proposed Project, when considered in conjunction with on-going development throughout western Riverside County, would cumulatively affect the ability of the RCPLS to serve the local community with library services. It is not possible to identify environmental impacts that may be associated with such new or expanded library facilities until a specific proposal and design for such facilities are prepared by the RCPLS. Accordingly, impacts due to the construction of new or expanded library facilities are too speculative for evaluation in this EIR (State CEQA Guidelines § 15145). Environmental effects of such library facilities and associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded library facilities. However, the Project and all cumulative developments would contribute property taxes and would be required to contribute DIF fees to Riverside County pursuant to County Ordinance No. 659, which could be used for the purpose of acquiring book titles and/or additional library square footage. Any mitigation measures required for new or expanded library facilities also could be funded, in part, from property taxes allocated by Riverside County to such purposes. Therefore, because environmental impacts associated with new or expanded library facilities cannot be known at this time and would be determined in the future once Riverside County identifies a specific proposal for new or expanded library facilities, Project impacts to library services and facilities are evaluated as less than significant on a cumulatively-considerable basis.

The proposed Project, when considered in conjunction with on-going growth and development in western Riverside County, would cumulatively impact the ability of local medical facilities that provide health services. However, the Project and all cumulative developments would be required to comply with County Ordinance No. 659, which requires a development impact fee payment to the County that is partially allocated to public health services and facilities. With mandatory compliance with Ordinance No. 659, the Project's impacts to health services and facilities would be less than significant on a cumulatively-considerable basis.

4.16.6 Significance of Impacts Before Mitigation

Threshold a.: Less-than-Significant Impact. With payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the Riverside County Fire Department would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new fire protection facilities that could result in a significant impact to the environment.

Threshold b.: Less-than-Significant Impact. With payment of mandatory DIF fees, the proposed Project's potential direct and cumulatively-considerable impacts to the Riverside County Sheriff's Department would be reduced to less-than-significant levels, and the Project would not result in or require the construction of new police protection facilities that could result in a significant impact to the environment.

Threshold c.: Less-than-Significant Impact. The Project would generate approximately 111 students on an annual basis, but would not exceed the excess existing capacity at the Lake Mathews Elementary School, Frank Augustus Miller Middle School, or the Arlington High School. Although the RUSD may need to construct new school facilities to meet the growing demand within this part of Riverside County, the payment of mandatory school impact fees would ensure that the Project would not result in significant direct or cumulatively-considerable impacts to the ability of the RUSD to provide for school services. As such, the Project impacts would be less than significant.

Threshold d.: Less-than-Significant Impact. Although the Project would contribute to a need for new or expanded library facilities, the Project would generate tax revenue and the Project developer would be required to contribute DIF fees, which would be used in part to provide for library space and/or new book volumes. Accordingly, with payment of DIF fees, Project impacts to library services and facilities are evaluated as less than significant on both a direct and cumulatively-considerable basis.

Threshold e.: Less-than-Significant Impact. With payment of mandatory DIF fees, the Project would result in less-than-significant direct and cumulatively-considerable impacts to health services facilities, and the Project would not result in or require the construction of new health services facilities that could result in a significant impact to the environment.

4.16.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- As a condition of Project approval, the proposed Project would be required to conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety. Among other items, these requirements include conformance with the Uniform Building Code Section 1503, which requires that all buildings be constructed with fire retardant roofing material, as well as standard Riverside County Fire Department conditions of approval (COAs) for specific plans, which prohibit flag lots and require alternative/secondary access routes to neighborhoods. The alternative/secondary access routes would be required to be maintained throughout construction and buildout of the proposed Project.

- The Project would be required to adhere to Riverside County Ordinance No. 659, which requires payment of a development impact fee (DIF) to assist the County in providing for fire protection facilities (including fire stations), sheriff protection facilities (including sheriff stations), library facilities, and health facilities.

- The Project is required to comply with Riverside County Ordinance No. 575, which requires mandatory payment of school impact fees pursuant to Public Education Code § 17072.10-18.

Mitigation

Impacts would be less-than-significant; therefore, no mitigation is required.

4.17 RECREATION

This Subsection provides an overview of the existing parks and recreational facilities that exist within the Project vicinity and that could potentially be directly or indirectly physically affected by implementation of the proposed Project. The analysis herein is based in part on the Riverside County General Plan Multipurpose Open Space Element and Healthy Communities Element. Refer to Section 7.0, *References*, for a complete list of reference sources.

4.17.1 EXISTING CONDITIONS

A. Federal Parks

The nearest federal park is the Cleveland National Forest located approximately 7.6 miles southwest of the Project site. There are no other federal parks in the Project vicinity.

B. State Parks

The nearest State park is the California Citrus State Historic Park, located approximately 1.7 miles north of the Project site, which consists of an open-air museum featuring museum exhibits and interpretive features related to the historic role of the citrus industry within this portion of Riverside County. The park also offers educational programs, special events, and opportunities for recreation such as picnicking and hiking. In addition, the Chino Hills State Park, located approximately 13.9 miles northwest of the Project site, comprises 14,102 acres and offers hiking, horseback riding, biking, bird watching, and camping activities. The Lake Perris State Recreation Area comprises 9,615 acres and provides recreational activities such as hiking, horseback riding, camping and bird watching as well as numerous recreational water activities on Lake Perris. (Riverside County, 2015a, p. 4.16-8; Google Earth, 2024)

C. Regional and Local Parks

There are eight parks located within a two-mile radius of the Project site. Valencia Park, located approximately 0.2-mile north of the Project site, offers passive recreation with garden areas and walkways. Citrus Heights-Blossom Park, located approximately 0.2-mile northeast of the Project site, offers a playground, open space area, and paved walkways. Victoria Park, located approximately 0.4-mile northeast of the Project site, offers passive recreation with a gazebo and paved walkways. Splendor Park, located approximately 0.5-mile northeast of the Project site, offers a playground, open space area, and paved walkways. Victoria Grove Park, located approximately 0.5-mile west of the Project site, offers a basketball court, baseball field, playground, open space areas, and a paved walkway. Gage Park, located approximately 0.6-mile northeast of the Project site, offers a playground, open space area, and paved walkways. Lakepointe Park, located approximately 1.3 miles west of the Project site, offers a playground, open space area, and a paved walkway. (Google Earth, 2024)

D. Regional Trails and Bikeway Systems

The Lake Mathews/Woodcrest Area Plan (LMWAP) identifies the County's long-term objectives for recreational trails and bikeways within the Temescal Canyon area. As shown on LMWAP Figure 8 (Trails and Bikeway System), there is a planned Combination Trail (Regional Trail and Class I Bike Path proposed along

La Sierra Avenue and El Sobrante Road. There is a proposed Regional Trail (Urban/Suburban) proposed along McAllister Street and a Community Trail proposed in the vicinity of the Project site. An additional designated "Community Trail" is planned approximately 0.1-mile north of the Project site. (Riverside County, 2021b, Figure 8)

4.17.2 Applicable Environmental Regulations

The following is a brief description of the state and local environmental laws and related regulations related to recreation.

A. State Regulations

1. Quimby Act, California Government Code § 66477

The State of California's Quimby Act was established by the California Legislature for the purpose of preserving open space and providing park facilities for California's growing communities. The Quimby Act allows local agencies to establish ordinances requiring residential subdivisions to provide land or "in-lieu-of" fees for park and recreation purposes. This State Act requires the dedication of land and/or imposes a requirement of fees for park and recreational purposes as a condition of approval of tentative tract map or parcel map. (CA Legislative Info, n.d.)

B. Local Regulations

1. Riverside County Ordinance No. 460

Riverside County Ordinance No. 460, Section 10.35 (Park and Recreation Fees and Dedications) implements the Quimby Act by establishing a requirement for dedication of three acres of parkland per 1,000 residents, or payment of a fee in lieu of such dedication. An exception exists in cases where a Community Parks and Recreation Plan, as approved by the Board of Supervisors, applies and has determined that the amount of existing neighborhood and community park area exceeds that limit, in which case the Board may determine that the public interest, convenience, health, welfare, and safety requires that a higher standard, not to exceed five acres of land per 1,000 persons residing within the County, shall be devoted to neighborhood and community park purposes. There are no Community Parks and Recreation Plans applicable to the Project area.

4.17.3 Basis for Determining Significance

Section XVI of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects to parks and recreation, and includes the following threshold questions to evaluate a project's impacts to recreational resources (OPR, 2018b):

- Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

- Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section XVI of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact to parks and recreation if construction and/or operation of the Project would:

a. *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;*
b. *Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;*
c. *Be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees); or*
d. *Include the construction or expansion of a trail system.*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts on parks and recreation.

4.17.4 Impact Analysis

Threshold a:	***Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***
Threshold d:	***Would the Project interfere with recreational trails that connect to regional and local trails or would the project split or eliminate an existing recreational trail?***

Recreational facilities planned as part of the Project include one park with approximately 1.9 acres, 22.5 acres of open space, and an undisturbed WMWD easement on 2.5 acres. In addition, the Project proposes a 10-foot-wide community trail along one side of proposed Street A that would consist of a concrete trail with split-rail fencing separating the trail from vehicular traffic. The physical construction of the on-site recreational facilities is addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources). Under each relevant topic, the Project's impacts are determined to be less than significant, or mitigation measures are identified to reduce impacts to the maximum feasible extent. There are no components of the proposed recreational facilities that would result in physical environmental impacts that have not already been addressed and accounted for throughout this EIR. Accordingly, Project impacts due to parkland development on-site would be less than significant, requiring no mitigation beyond that which is identified in other portions of the EIR.

Threshold b:	***Would the Project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***
Threshold c:	***Is the project located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?***

The Project site is not located within the boundaries of any Community Service Areas (CSAs) and is not subject to a recreation or park district with a Community Parks and Recreation Plan. Accordingly, parkland requirements within the Project area are as set forth in Riverside County Ordinance No. 460 (Regulating the Division of Land), which specifically applies to land subdivisions. Specifically, pursuant to item C. of Section 10.35, Ordinance No. 460 establishes a parkland standard of three acres of land for each 1,000 residents, and also provides for the payment of fees in cases where adequate parkland facilities are not accommodated on site.

The Project Applicant is proposing to develop the Project site with a total of 206 single-family dwelling units. Based on the persons per household (pph) estimate provided in Appendix E to the County's General Plan, the average household size in the LMWAP area is 3.34 pph. Thus, the Project is anticipated to result in a future population on site of approximately 688 persons (206 household x 3.34 persons/household = 688.04 persons). Based on the standard of three acres of parkland per 1,000 residents, the Project would therefore result in a demand for approximately 2.1 acres of parkland (688 persons x 3.0 acres/1,000 persons = 2.06 acres). (Riverside County, 2021a, Appendix E, Tables E-1 and E-2)

As part of the Project, TTM 38927 would accommodate one park on approximately 1.9 acres, proposed in the western portion of the Project site, temporarily disturbed open space/manufactured slopes on approximately 11.2 acres, 2.5 acres consisting of a Western Municipal Water District (WMWD) easement that would not be disturbed by the Project, and approximately 11.3 acres of undisturbed open space, resulting in approximately 26.9 acres of active and passive recreational space. In addition, the Project proposes a 10-foot-wide community trail along one side of proposed Street A that would consist of a concrete trail with split-rail fencing separating the trail from vehicular traffic. The park is proposed on Lot 224 of TTM 38927 located along the east side of Street A near its intersection with proposed Street G, and would be improved to include passive amenities, including shade structures with picnic seating, a playground/tot lot, concrete pathways, and an open field play area.

The approximately 26.9 acres of active and passive recreational space, and the multi-purpose trail, proposed by the Project would exceed the requirement of Section 10.35(C) of Ordinance No. 460 to provide a minimum of 2.1 acres of parkland by approximately 24.7 acres. However, it is possible that the Riverside County Regional Park and Open Space District (RPOSD) may not credit the passive open space areas of the landscaped manufactured slopes and undisturbed open space towards the Project's required parkland dedications. In such a case, the Project Applicant would be required to pay fees pursuant to Section 10.35 of Ordinance No. 460, which would provide funding to allow Riverside County to acquire and/or improve new parkland within the County.

Accordingly, with the park, multi-purpose trail, and passive open space areas, and with payment of in-lieu fees for any parkland requirements not credited on site, the Project would not conflict with the parkland standard of 3.0 acres of parkland per 1,000 residents, as established by Ordinance No. 460. Additionally, because the Project either would accommodate adequate parkland on site, or would be conditioned to require the payment of parkland in-lieu fees, it can be concluded that future Project residents would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. That is, because the Project Applicant would be required to provide for adequate parkland either on site or through in-lieu fees, any increase in the use of existing recreational facilities within the County by future Project residents would be off-set by existing County residents utilizing the Project's proposed recreational amenities and/or the recreational amenities to be accommodated by the Project Applicant's payment of in-lieu fees pursuant to Ordinance No. 460. Thus, the Project would not include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and impacts would be less than significant.

4.17.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within two miles of the Project site. This study area was selected because any use of local recreation facilities by future Project residents likely would occur in close proximity to the Project site.

As discussed under the analysis of Thresholds a. and d., cumulatively-considerable impacts associated with the construction of the proposed parks and trails have been evaluated throughout this EIR under the appropriate subject heading (e.g., air quality, biological resources, etc.). Where cumulatively-considerable impacts have been identified associated with Project implementation, mitigation measures have been identified to reduce construction-related impacts to the maximum feasible extent. There are no components of the planned parks or trails on site that have not already been addressed and accounted for throughout this EIR for the Project site. Accordingly, cumulatively-considerable impacts due to the construction of on-site parks and trails would be less than significant.

As discussed under the analysis of Thresholds b. and c., the Project would accommodate approximately 26.9 acres of parkland and passive open space area, and a multi-purpose trail, which would exceed the Project's parkland demand of 2.1 acres. In the event that the RPOSD does not credit all or a portion of the Project's on-site recreational amenities towards the Project's parkland dedication requirements, then the Project Applicant would be required to pay fees pursuant to Section 10.35 of Ordinance No. 460, which would provide funding to allow Riverside County to acquire and/or improve new parkland within the County. Other developments within the region similarly would be required to accommodate adequate parkland on site, or to pay in-lieu fees to be used for acquiring and improving recreational resources within the County as required by Riverside County Ordinance No. 460. As such, cumulatively-considerable impacts due to a conflict with the County's parkland dedication requirements and due to the physical deterioration of existing off-site recreational resources would be less than significant.

4.17.6 Significance of Impacts Before Mitigation

Thresholds a. and d.: Less-than-Significant Impact. The physical construction of the on-site recreational facilities (i.e., one park and a 10-foot-wide multi-purpose trail) has been addressed under the relevant issue areas identified throughout this EIR (e.g., air quality, biological resources, cultural resources). Under each of these topics, Project impacts are determined to be less than significant, or mitigation measures have been identified to reduce impacts to the maximum feasible extent. There are no components of the planned recreational facilities on site that have not already been addressed and accounted for throughout this EIR. Accordingly, Project impacts due to parkland development on site would be less than significant, requiring no mitigation beyond that which is identified in other portions of this EIR.

Thresholds b. and c.: Less-than-Significant Impact. The Project would accommodate approximately 26.9 acres of parkland and passive recreational opportunities, and a multi-purpose trail, which would exceed the Project's parkland demand of 2.1 acres. In the event that the RPOSD does not credit all or a portion of the Project's on-site recreational amenities towards the Project's parkland dedication requirements, then the Project Applicant would be required to pay fees pursuant to Section 10.35 of Ordinance No. 460, which would provide funding to allow Riverside County to acquire and/or improve new parkland within the County. Thus, impacts due to a conflict with Riverside County's parkland dedication requirements would be less than significant. Additionally, because the Project Applicant would be required to provide for adequate parkland on site or through in-lieu fees, any increase in the use of existing recreational facilities within the County by future Project residents would be off-set by existing County residents utilizing the Project's proposed recreational amenities and/or the recreational amenities to be accommodated by the Project Applicant's payment of in-lieu fees pursuant to Ordinance No. 460. Thus, the Project would not include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and impacts would be less than significant.

4.17.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable County regulations and design requirements.

- Prior to the issuance of building permits, Riverside County shall verify that the Project has met the requirements of Section 10.35 of Riverside County Ordinance No. 460, which specifies requirements related to parkland dedications and payment of fees in lieu of parkland dedication.

Mitigation

Impacts to parks and recreation facilities as a result of Project implementation would be less than significant, and mitigation is not required.

4.18 TRANSPORTATION

The following analysis is based on a technical study prepared by Urban Crossroads, Inc. (herein, "Urban Crossroads") entitled "Highland Grove Vistas 4 TTM No. 38927 Vehicle Miles Traveled (VMT) Analysis" (herein, "VMT Analysis"), dated July 30, 2025, and included as *Technical Appendix M1* to this EIR (Urban Crossroads, 2025e). Additionally, and although not relied upon to evaluate the Project's potential impacts to Transportation, Urban Crossroads also prepared a traffic analysis technical study to evaluate the Project's potential contributions to traffic congestion, which identifies required circulation improvements, impact fee programs, and fair-share contributions required to achieve an acceptable Level of Service (LOS) at all study area intersections. This report is entitled, "Highland Grove Vistas 4 TTM No. 38927 Traffic Analysis" (herein, "TA"), is dated July 12, 2024, and is included as *Technical Appendix M2* to this EIR (Urban Crossroads, 2024). Refer to Section 7.0, *References,* for a complete list of reference sources.

On December 28, 2018, updates to the California Environmental Quality Act (CEQA) Guidelines were approved by the Office of Administrative Law (OAL). As part of the updates to the State CEQA Guidelines, thresholds of significant for evaluation of impacts to transportation have changed. As required by Senate Bill (SB) 743, new Threshold b. of the State CEQA Guidelines for Transportation requires an evaluation of impacts due to VMT, which replaced the Level of Service (LOS) criteria (i.e., automobile delay) that has been utilized in the past to evaluate potential effects to transportation under CEQA. Pursuant to CEQA Guidelines Section 15064.3(a), "…a project's effect on automobile delay shall not constitute a significant environmental impact."

4.18.1 EXISTING CONDITIONS

A. Existing Vehicle Miles Traveled (VMT)

VMT is obtained from the Riverside Transportation Analysis Model (RIVTAM) model using the Production/Attraction (PA) method for calculating VMT, which sums all weekday VMT generated by trips with at least one trip end in the study area (i.e., Project's Traffic Analysis Zone [TAZ]). Productions are land use types that generate trips (residences) and attractions are land use types that attract trips (employment). For the County of Riverside, the countywide average VMT per capita for residential uses is noted in the County's "Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled Guidelines" ("County Guidelines") as 15.2 VMT per capita. (Urban Crossroads, 2025e, p. 3; Riverside County, 2020, Figure 6)

B. Existing Transportation System

1. Existing Roadway System

Under existing conditions, the 111.6-acre Project site is located approximately 0.3-mile north of El Sobrante Road, approximately 0.1-mile east of McCallister Street, and approximately 0.05-mile west of Travertine Drive. The Lake Mathews/Woodcrest Area Plan (LMWAP) and Riverside County General Plan Circulation Element classify La Sierra Avenue as an "Arterial," which is a four-lane divided roadway (typically divided by a raised median or painted two-way turn-lane) with a 128-foot right-of-way and an 86-foot curb-to-curb-measurement. McCallister Street is classified as a "Collector," which is a two-lane roadway that typically has a 74-foot right-of-way and a 40-foot curb-to-curb measurement. There are no Circulation Element roadways planned within the Project site. (Urban Crossroads, 2024, p. 19)

2. Transit Service

The Project area currently is served by the Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions within Riverside County. Existing transit routes in the vicinity of the Project site are illustrated on Exhibit 3-8 of the Project's TA (*Technical Appendix M2*). As shown, there are limited transit routes in the vicinity of the Project site, with the closest being the existing RTA Route 27 which runs along Van Buren Boulevard, approximately 1.5 miles northeast of the Project site. There are existing bus stops on Van Buren Boulevard near Canyon Ridge Drive. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments, which may lead to either enhanced or reduced service where appropriate. (Urban Crossroads, 2024, p. 24)

3. Bicycle and Pedestrian Facilities

Exhibit 3-5 and Exhibit 3-6 of the Project's TA (*Technical Appendix M2)* illustrates the County and City of Riverside bike network, respectively. As shown, there is a planned Combination Trail (Regional Trail and Class I Bike Path proposed along La Sierra Avenue and El Sobrante Road. There is a proposed Regional Trail (Urban/Suburban) proposed along McAllister Street. In addition, a Community Trail is proposed in the vicinity of the Project site. Existing pedestrian facilities within the Project area are shown on Exhibit 3-7 of the Project's TA. As shown, there are pedestrian facilities in place in the vicinity of the Project site along portions of McAllister Street and El Sobrante Road. (Urban Crossroads, 2024, p. 24)

4.18.2 Applicable Regulatory Requirements

A. State Regulations

1. Assembly Bill 1358 (AB 1358) – Complete Streets Act

In September 2008, Governor Schwarzenegger signed into law Assembly Bill 1358 (AB 1358), the Complete Streets Act. AB 1358 requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. By requiring new duties of local officials, AB 1358 imposes a State-mandated local program (CA Legislative Info, 2008). AB 1358 required the Office of Planning and Research (OPR) to prepare or amend guidelines for a legislative body to accommodate the safe and convenient travel of users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the general plan, and in doing so to consider how appropriate accommodation varies depending on its transportation and land use context. AB 1358 authorized OPR, in developing these guidelines, to consult with leading transportation experts, including, but not limited to, bicycle transportation planners, pedestrian planners, public transportation planners, local air quality management districts, and disability and senior mobility planners. (CA Legislative Info, 2008b)

2. Statewide Transportation Improvement Program (STIP)

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepares the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years). (Caltrans, n.d.)

3. Senate Bill 743 (SB 743)

Senate Bill 743 (SB 743, Steinberg, 2013), which was codified in Public Resources Code Section 21099, required changes to the implementing CEQA Guidelines regarding the analysis of transportation impacts. As one appellate court explained: "During the last 10 years, the Legislature has charted a course of long-term sustainability based on denser infill development, reduced reliance on individual vehicles and improved mass transit, all with the goal of reducing greenhouse gas emissions. Section 21099 is part of that strategy…" (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 729.) Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (*Id*., subd. (b)(1); see generally, adopted CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria, OPR has proposed, and the California Natural Resources Agency (CRNA) has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the CRNA's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA as of July 1, 2020. (Public Resources Code § 21099, subd. (b)(3).) (OPR, 2018b)

4. Senate Bill 325 (SB 325) - Transportation Development Act (TDA, Mills-Alquist-Deddeh Act)

The Mills-Alquist-Deddeh Act (SB 325) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. TDA established two funding sources; the Local Transportation Fund (LTF), and the State Transit Assistance (STA) fund. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction, and maintenance. The STA funding can only be used for transportation planning and mass transportation purposes. (Caltrans, n.d.)

5. Road Repair and Accountability Act of 2017 (Senate Bill 1 (SB 1))

On April 28, 2017, Governor Brown signed Senate Bill 1 (SB 1) (Chapter 5, Statutes of 2017), known as the Road Repair and Accountability Act of 2017. SB 1 augments the base of the State Transit Assistance program essentially doubling the funding for this program. To provide for SB 1 reporting and transparency, transit agencies are asked to work with Caltrans to report on planned expenditures for these augmented funds. (Caltrans, n.d.)

B. Regional Regulations

1. SCAG Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. (SCAG, n.d.)

As a MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. SCAG's *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. The *RTP/SCS* also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. (SCAG, n.d.)

2. Riverside County Congestion Management Program (CMP)

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The Riverside County CMP became effective with the passage of Proposition 111 in 1990 and updated most recently in 2019 as part of the Riverside County Long Range Transportation Study. The Riverside County Transportation Commission (RCTC) adopted the 2019 CMP for Riverside County in December 2019. There are no Project study area intersections identified as a Riverside County CMP facility. (Urban Crossroads, 2024, p. 6)

C. *Western Riverside County Association of Governments Transportation Uniform Mitigation Fee*

The Western Riverside Council of Governments (WRCOG) established a consolidated Transportation Uniform Mitigation Fee (TUMF) program for all of western Riverside County, which commenced in 2003. The establishment of TUMF was based on the desire to establish a single, uniform fee program to mitigate the cumulative impacts of new development on the western Riverside County sub-region's arterial highway system rather than having multiple and potentially uncoordinated fee programs across the region. WRCOG is responsible for establishing and updating TUMF payment rates, based on a TUMF Program Nexus Study, which is periodically updated to consider the impact of future development on the subregion's system of highways and arterial roads. The most recent Nexus Study update was approved by the WRCOG Executive Committee in July 2017. WRCOG is preparing the 2024 Nexus Study Update, which is currently in draft form. The updated Nexus Study continues to demonstrate the relationship between the TUMF fee levels and the cost of anticipated improvements to the Regional System of Highways and Arterials (RSHA) necessitated by new development throughout western Riverside County. (WRCOG, 2022, p. 4)

D. *Local Regulations*

Ordinances specifically applicable to the circulation system are presented below (Riverside County, 2015a, p. 4.18-28):

- Ordinance No. 413 – Vehicle Parking: Ordinance No. 413 establishes regulations to vehicle parking on Riverside County roadways.

- Ordinance No. 452 – Speed Limits: Ordinance No. 452 pertains to prima facie speed limits on Riverside County roadways and establishes or amends prima facie speed limits on certain Riverside County roads.

- Ordinance No. 460 – Subdivision of Land: Ordinance No. 460, in conjunction with the Subdivision Map Act, establishes regulations for the division of land and describes procedures. The ordinance also includes the provisions for the establishment of Road and Bridge Benefit Districts and associated fees.

- Ordinance No. 461 – Road Improvement Standards and Specifications: Ordinance No. 461 adopts Road Improvement Standards and Specifications.

- Ordinance No. 499 – Encroachments in County Highways: Ordinance No. 499, subject to the control of the Board of Supervisors, delegates to the Riverside County Transportation Director the administration of the use of county highways, including county roads, for excavations and encroachments; construction, operation, and maintenance of utility facilities; planting, maintenance, and removal of trees; and the issuance, modification, and revocation of permits for such uses.

- Ordinance No. 659 – Development Mitigation Fee for Residential Development (DIF Program): Ordinance No. 659 establishes a development impact fee (DIF) for the development of infrastructure, including County roadways and the installation of traffic signals.

- Ordinance No. 671 – Consolidated Fees for Land Use and Related Functions: Ordinance No. 671 establishes a consolidated fee program for land use and related functions. This is a deposit-based fee program and provides for unused fees to be refunded to the applicant.

- Ordinance No. 748 – Mitigation of Traffic Congestion Through Signalization: Ordinance No. 748 establishes a fee program for the installation of traffic signals based on a priority list. The fee would also have a component for the installation of traffic signal interconnect, and a component for the application of intelligent transportation systems technologies.

- Ordinance No. 824 – Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program: Ordinance No. 824 establishes a TUMF program for western Riverside County. The fees are collected by Riverside County and administered by WRCOG to make roadway improvements in the WRCOG area. TUMF funds are intended for use solely for the engineering, construction, and right-of-way acquisition for regional facilities. TUMF funds may not be used to defray operational and maintenance expenses. Facilities eligible for TUMF are designated by WRCOG and updated periodically. They include streets, arterials, and road improvements as defined in the ordinance.

4.18.3 Basis for Determining Significance

A. Thresholds of Significance

Section XVII of Appendix G to the CEQA Guidelines addresses typical adverse effects related to transportation, and includes the following threshold questions to evaluate a project's impacts to transportation (OPR, 2018a):

- Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

- Would the project conflict with or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

- 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)?

- Would the project result in inadequate emergency access or access to nearby uses?

The following thresholds are derived from Riverside County's Environmental Assessment Checklist, which incorporate the current Appendix G thresholds pursuant to the 2018 changes to the CEQA Guidelines, in order to evaluate the significance of the proposed Project's impacts on transportation. The proposed Project would result in a significant impact to transportation if the Project or any Project-related component would:

a. *Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;*

b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*

c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);*

d. *Cause an effect upon, or a need for new or altered maintenance of roads;*

e. *Cause an effect upon circulation during the project's construction;*

f. *Result in inadequate emergency access or access to nearby uses;*

g. *Include the construction or expansion of a bike system or bike lanes; or*

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified/updated per the 2018 updates to the CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts on transportation.

B. Thresholds of Significance for Vehicle Miles Traveled (VMT)

1. Project Level Screening

The County Guidelines state that a project may be determined to have a less-than-significant impact and screen from the need to prepare a project-level VMT analysis if it meets one or more eligible screening criteria. The County's adopted VMT screening criteria are described in Table 4.18-1, *Screening for Land Use Projects Exempt from VMT Calculations*, along with a determination of each screening criteria's applicability to the Project. As shown, the Project does not meet any of the screening criteria. As such, a Project-specific analysis of potential impacts to VMT was conducted. (Urban Crossroads, 2025e, pp. 1-2)

2. VMT Metric and Significance Threshold

As outlined in the County Guidelines, residential land uses should be evaluated based on the efficiency metric VMT per capita and utilize an impact threshold of existing countywide average VMT per capita. For the County of Riverside, the countywide average VMT is noted in the County Guidelines as 15.2 VMT per capita. To estimate Project-generated VMT, land use information must be converted into a RIVTAM compatible dataset. The RIVTAM model utilizes socio-economic data (SED) instead of land use information. The Project includes 206 dwelling units and would result in the generation of 688 persons (as discussed in EIR subsection 3.6.2.A). (Urban Crossroads, 2025e, p. 3)

C. Methodology for Estimating VMT

The County Guidelines identifies RIVTAM as the appropriate tool for conducting VMT analysis for land development projects in unincorporated Riverside County. RIVTAM estimates VMT based on interaction between different land uses from socio-economic data such as population, households, and employment.

RIVTAM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. (Urban Crossroads, 2025e, p. 2)

Table 4.18-1 Screening for Land Use Projects Exempt from VMT Calculations

Screening Criteria	Description	Result
Small Projects Screening	Projects that generate fewer than 110 daily vehicle trips or projects that are below 3,000 Metric Tons of Carbon Dioxide Equivalent ($MTCO_2e$) per year.	Does not meet.
High Quality Transit Areas (HQTA) Screening	High quality transit provides a viable option for many to replace automobile trips with transit trips resulting in an overall reduction in VMT.	Does not meet.
Local Serving Retail	The introduction of new Local serving retail has been determined to reduce VMT by shortening trips that will occur.	Not Applicable.
Affordable Housing	Lower-income residents make fewer trips on average, resulting in lower VMT overall.	Does not meet.
Local Essential Service	As with Local-Serving Retail, the introduction of new Local Essential Services shortens non-discretionary trips by putting those goods and services closer to residents, resulting in an overall reduction in VMT.	Not Applicable.
Map-Based Screening	This method eliminates the need for complex analyses, by allowing existing VMT data to serve as a basis for the screening of smaller developments. Note that screening is limited to residential and office projects.	Does not meet.
Redevelopment Project	Projects with lower VMT than existing on-site uses, can under limited circumstances, be presumed to have a non-significant impact. In the event this screening does not apply, projects should be analyzed as though there is no existing uses on site (project analysis cannot take credit for existing VMT).	Not Applicable.

(Urban Crossroads, 2025e, Table 1)

4.18.4 Impact Analysis

Threshold a: ***Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?***

This response provides an analysis of the Project's potential to result in a conflict with plans, programs, ordinances, or policies that address the circulation system, including transit, roadway, bicycle, and pedestrian facilities. A project that generally conforms with, and does not obstruct, applicable plans, programs, ordinances, and policies is considered to be consistent with such plans, programs, ordinances, and policies. The transportation plans, policies, programs, ordinances, and standards that are relevant to the Project are identified in the analysis below.

❑ SCAG Connect SoCal Consistency Analysis

The fundamental goals of SCAG's *Connect SoCal* are to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income class. As indicated in EIR Table 4.11-3, *Analysis of Consistency with Connect SoCal Goals*, in EIR Subsection 4.11, *Land Use and Planning*, implementation of the Project would not conflict with any of the goals or policies included in SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). As such, Project impacts would be less than significant.

❑ Riverside County Congestion Management Program

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2019 as part of the Riverside County Long Range Transportation Study. The Riverside County Transportation Commission (RCTC) adopted the 2019 CMP for the County of Riverside in December 2019. There are no intersections within the Project's study area that are identified as a Riverside County CMP intersection (Urban Crossroads, 2024, p. 6). Accordingly, the Project would not result in a conflict with the Riverside County CMP and no impact would occur.

❑ Riverside County General Plan Circulation Element

The Riverside County General Plan Circulation Element establishes several goals and policies related to transportation network that are applicable to development projects. An analysis of the Project's consistency with the General Plan Circulation Element goals previously is provided in EIR *Technical Appendix J*. As indicated in *Technical Appendix J*, the Project would be consistent with, or otherwise would not conflict with, any of the goals included in the General Plan Circulation Element. Accordingly, Project impacts to transportation due to a conflict with the General Plan Circulation Element goals would be less than significant.

Threshold b: ***Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

As previously noted, changes to the State CEQA Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based LOS as the measure for identifying transportation impacts for land use projects. This Statewide mandate went into effect July 1, 2020, consistent with Senate Bill 743 (SB 743). To comply with SB 743, the County of Riverside adopted their "Transportation Analysis Guidelines for Level of Service, Vehicle Miles Traveled" ("County Guidelines"). The adopted County Guidelines have been utilized to evaluate the Project's potential impacts due to VMT. (Urban Crossroads, 2025e; Riverside County, 2020)

As previously noted, the County Guidelines state that a project may be determined to have a less-than-significant impact and screen from the need to prepare a project-level VMT analysis if it meets one or more eligible screening criteria. However, as previously shown in Table 4.18-1, the Project does not meet any of

the screening criteria. As such, a Project-specific analysis of potential impacts to VMT was conducted. (Urban Crossroads, 2025e, pp. 1-2)

As described previously, County Guidelines requires that residential land uses be evaluated utilizing the efficiency metric VMT per capita. VMT per capita is calculated by first obtaining home-based (HB) VMT from the Production/Attraction (PA) matrices and skim distance matrices and then dividing by the Project's population (i.e., residents) from the RIVTAM base year model. Table 4.18-2, *Baseline Project VMT per Capita* presents baseline PA HB VMT, resulting in baseline PA HB VMT per capita values for the Project, and a comparison to the County's significance threshold of 15.2 VMT per capita. As shown, Project generated HB VMT per capita would be 21.2, which is 39.5% above the County's significance threshold of 15.2 HB VMT per capita. Accordingly, prior to mitigation, the proposed Project would result in a significant impact due to VMT. (Urban Crossroads, 2025e, p. 4)

Table 4.18-2 Baseline Project VMT per Capita

	Baseline
PA HB VMT	14,557
Population	688
PA HB VMT per Capita	21.2
County Threshold	15.2

(Urban Crossroads, 2025e, Table 3)

Threshold c: ***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)?***

Roadway improvements proposed as part of the Project would be limited to a new connection to El Sobrante Road (via Street A), a new connection onto Travertine Drive, and the construction on on-site roadways. All physical improvements planned as part of the Project would be in conformance with applicable Riverside County standards, and there are no components of the Project's proposed improvements that would create hazards due to a geometric design feature. The Project would involve low-density residential development within an area that is characterized by and/or planned for residential uses. As such, the land uses proposed by the Project would not comprise an incompatible use with existing land uses in the surrounding area. During the County's review process of GPA240072, CZ2400026, and TTM38927, the County reviewed the proposed design plans to ensure that no hazardous roadway features would be implemented. Accordingly, the proposed Project would not create or substantially increase safety hazards due to incompatible use. Therefore, the Project would not substantially increase hazards due to incompatible uses, and impacts would be less than significant.

Threshold d: ***Would the Project cause an effect upon, or a need for new or altered maintenance of roads?***

Implementation of the proposed Project would generate traffic along local roadways, and therefore would incrementally increase the need for maintenance of local roadway facilities. Although the Project would result in the increased maintenance of roadways and would increase traffic on existing and planned roadways, any incremental increase in the need to maintain public roadway facilities would be offset by tax revenue generated by the Project's proposed land use. There are no components of the proposed Project that would result in or

require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, Project impacts would be less than significant.

Threshold e: ***Would the Project cause an effect upon circulation during the project's construction?***

Under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect existing traffic along El Sobrante Road or along Travertine Drive. Accordingly, the Project would not cause an effect upon circulation during the Project's construction phase, and impacts would be less than significant.

Threshold f: ***Would the Project result in inadequate emergency access or access to nearby uses?***

Under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect access to nearby uses or emergency access along Travertine Drive or El Sobrante Road. In addition, and in accordance with Riverside County Fire Department (RCFD) requirements, the Project also accommodates two points of Emergency Vehicle Access (EVA), from Travertine Drive to the north and from El Sobrante Road to the south, which would ensure adequate ingress and egress to/from the Project site in the event of an emergency (e.g., wildfires). The Project's proposed roadway connections also would serve to improve local emergency access in the local area by providing a new connection between Travertine Drive and El Sobrante Road. Accordingly, the Project would not result in inadequate emergency access or access to nearby uses, and impacts would be less than significant.

Threshold g: ***Would the Project include the construction or expansion of a bike system or bike lanes?***

No construction or expansion of facilities for bicycles is proposed as part of the Project, although sidewalks are proposed throughout the development and along proposed Street A (including along the proposed 10-foot-wide multi-purpose trail), which would connect to Travertine Drive and El Sobrante Road. Impacts associated with proposed improvements to proposed on-site roadways have been evaluated throughout this EIR, and impacts were determined to be less than significant or would be reduced to less-than-significant levels with the incorporation of mitigation measures. There are no impacts to the environment associated with the Project's road construction that have not already been evaluated and addressed under the appropriate topical subheadings within this EIR. As such, the Project would not include the construction or expansion of a bike system or bike lanes that could result in physical environmental impacts not already addressed by this EIR, and impacts would therefore be less than significant.

4.18.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development that would occur with buildout of the Riverside County

General Plan and the general plans of local jurisdictions within the County, and that are within the study area identified by the Project's TA (*Technical Appendix M2*).

The analysis of Threshold a. demonstrates that the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Specifically, there are no components of the Project that would conflict with Connect SoCal, the Riverside County CMP, or the Riverside County General Plan Circulation Element. Accordingly, the Project has no potential to result in cumulatively-considerable impacts due to a conflict with a program, plan, ordinance, or policy addressing the circulation system.

As indicated under the analysis of Threshold b., the PA HB VMT per capita for the Project's proposed residential uses would be 21.2, which would exceed the County's threshold of 15.2. Other cumulative developments within the Project region also have the potential to exceed the County's thresholds of significance for VMT. Accordingly, the Project's impacts due to VMT would be cumulatively considerable.

As indicated under the analysis of Threshold c., the Project would involve low-density residential development within an area that is characterized by and/or planned for residential uses. As such, the land use proposed by the Project would not comprise an incompatible use with existing or planned land uses in the surrounding area. Additionally, during the County's review process of GPA240072, CZ2400026, and TTM38927, the County reviewed the proposed design plans to ensure that no hazardous roadway features would be implemented. Other cumulative developments would similarly be required to demonstrate that no hazards would occur due to incompatible land uses or due to a geometric design feature. As such, cumulatively-considerable impacts would be less than significant.

As indicated under the analysis of Threshold d., there are no components of the proposed Project that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, cumulatively-considerable impacts would be less than significant.

As indicated under Threshold e., under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect existing traffic along El Sobrante Road or along Travertine Drive. Accordingly, Project impacts upon circulation during the Project's construction phase would be less than significant on a cumulatively-considerable basis.

As indicated under the analysis of Threshold f., under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect access to nearby uses or emergency access along Travertine Drive or El Sobrante Road. In addition, and in accordance with RCFD requirements, the Project also accommodates two points of EVA, from Travertine Drive to the north and from El Sobrante Road to the south, which would ensure adequate ingress and egress to/from the Project site in the event of an emergency

(e.g., wildfires). The Project's proposed roadway connections also would serve to improve local emergency access in the local area by providing a new connection between Travertine Drive and El Sobrante Road. Accordingly, the Project would not result in inadequate emergency access or access to nearby uses, and impacts would be less than significant on a cumulatively-considerable basis.

As discussed under the analysis of Threshold g., no construction or expansion of facilities for bicycles is proposed as part of the Project, although sidewalks are proposed throughout the development along with a 10-foot-wide multi-purpose trail proposed along Street A. Cumulatively-considerable impacts associated with proposed roadway and trail improvements have been evaluated throughout this EIR, and cumulatively-considerable impacts were determined to be less than significant or would be reduced to less-than-significant levels with the incorporation of mitigation measures. As such, the Project would not result in any cumulatively-considerable impacts due to the construction or expansion of a bike system or bike lanes.

4.18.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The proposed Project would be fully consistent with Connect SoCal, the Riverside County CMP, and the Riverside County General Plan Circulation Element. There are no components of the proposed Project that would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, or pedestrian facilities. Impacts would be less than significant.

Threshold b.: Significant Direct and Cumulatively-Considerable Impact. Buildout of the residential uses proposed as part of the Project would result in a PA HB VMT per capita for the Project's proposed residential uses of 21.2, which would exceed the County's threshold of 15.2. Therefore, the Project would conflict with or be inconsistent with CEQA Guidelines § 15064.3(b), which represents a significant impact of the proposed Project.

Threshold c.: Less-than-Significant Impact. All physical improvements planned as part of the Project would be in conformance with applicable Riverside County standards, and the Project's residential land uses are compatible with land uses in the surrounding area. The Project would not substantially increase hazards due to a geometric design feature or due to incompatible land uses. Impacts would be less than significant.

Threshold d.: Less-than-Significant Impact. Although the Project would result in the increased maintenance of roadways and would increase traffic on existing and planned roadways, any incremental increase in the need to maintain public roadway facilities would be offset by tax revenue generated by the Project's proposed land use. There are no components of the proposed Project that would result in or require a substantial increase in expenditures by Riverside County for public road maintenance such that environmental impacts would result. As such, Project impacts would be less than significant.

Threshold e.: Less-than-Significant Impact. Under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect existing traffic along El Sobrante Road or along

Travertine Drive. Accordingly, the Project would not cause an effect upon circulation during the Project's construction phase, and impacts would be less than significant.

Threshold f.: Less-than-Significant Impact. Under existing conditions, there are no improved roadways on the Project site. As part of the Project, new roadways would be constructed on site and would connect to El Sobrante Road to the south (via Street A) and Travertine Drive to the northeast. Improvements proposed as part of the Project are not anticipated to adversely affect access to nearby uses or emergency access along Travertine Drive or El Sobrante Road. In addition, and in accordance with RCFD requirements, the Project also accommodates two points of EVA, from Travertine Drive to the north and from El Sobrante Road to the south, which would ensure adequate ingress and egress to/from the Project site in the event of an emergency (e.g., wildfires). The Project's proposed roadway connections also would serve to improve local emergency access in the local area by providing a new connection between Travertine Drive and El Sobrante Road. Accordingly, the Project would not result in inadequate emergency access or access to nearby uses, and impacts would be less than significant.

Threshold g.: Less-than-Significant Impact. No construction or expansion of facilities for bicycles is proposed as part of the Project, aside from proposed sidewalks throughout the development and a proposed multi-purpose trail along proposed Street A. Impacts associated with proposed improvements to roadways and trails have been evaluated throughout this EIR, and impacts were determined to be less than significant or would be reduced to less-than-significant levels with the incorporation of mitigation measures.

4.18.7 Applicable Regulations, Design Requirements, and Mitigation

Applicable Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable Riverside County regulations and design requirements.

- Prior to issuance of building permits, the Project Applicant shall pay appropriate Development Impact Fee Program (DIF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 659.

- Prior to final building inspection, the Project Applicant shall pay appropriate Western Riverside County Transportation Uniform Mitigation Fee Program Ordinance (TUMF) fees at the rates then in effect in accordance with Riverside County Ordinance No. 824.

- Prior to final building inspection for each phase of the proposed Project, the Project Applicant shall make fair-share contributions towards required transportation improvements, in accordance with Table 1-3 of the Project's Traffic Analysis (*Technical Appendix M2* to this EIR).

Mitigation

MM 4.18-1 Prior to issuance of building permits for the proposed development, Riverside County shall review the building plans to ensure that the following measures have been accommodated by the Project:

- The Project shall provide pedestrian and bicycle network improvements within the development to connect to existing off-site facilities.
- Where applicable, the Riverside County Transportation Department shall ensure design of key intersections and roadways encourage the use of walking, biking, and transit.
- The Project Applicant shall collaborate with the Riverside Transit Authority (RTA) to determine the feasibility of providing new or re-routing existing transit services to the site.

4.18.8 Significance of Impacts After Mitigation

Threshold b: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. As noted by the County Guidelines, Transportation Demand Management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant through use of the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhous Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021 Handbook). For residential land use projects, the 2021 Handbook provides a list of Neighborhood Design measures that reduce VMT. However, the maximum achievable reduction for these measures as noted in the 2021 handbook is limited to 10%. Therefore, even with implementation of all feasible trip reduction measures, including those listed in Mitigation Measure MM 4.18-1, the Project would be unable to reduce its VMT impact to below the impact threshold. It is also recognized that as the Project area and surrounding communities develop as envisioned under the County of Riverside's General Plan, new residential, retail, and other development would be implemented. These actions could collectively alter transportation patterns, improve the region's jobs/housing ratio, reduce VMT, and support implementation of new or alternative TDM measures. There are no means currently, however, to quantify any VMT reductions that could result from such future growth patterns. Accordingly, even with implementation of Mitigation Measure MM 4.18-1, Project impacts due to VMT would remain significant and unavoidable.

4.19 TRIBAL CULTURAL RESOURCES

The analysis in this Subsection is based on a Cultural Resources Assessment Update (herein, "CRA") prepared by BFSA Environmental Services (herein "BFSA"), entitled "A Cultural Resources Assessment Update for the Willow Creek Project, TTM 38927" dated April 29, 2024, and included as *Technical Appendix D* to this EIR (BFSA, 2024a). All references used in this Subsection are included in EIR Section 7.0, *References*.

It should be noted that confidential information has been redacted from *Technical Appendix D* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the County of Riverside, and BFSA is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.19.1 EXISTING CONDITIONS

Refer to EIR subsection 4.5.1 for a complete description of the cultural setting, existing site conditions, and the archaeological and historical resources assessment.

4.19.2 APPLICABLE REGULATORY REQUIREMENTS

The following is a brief description of the State environmental laws and related regulations addressing Tribal Cultural Resources (TCRs). Refer also to EIR subsection 4.5.2 for a complete description of federal, State, and local environmental laws and regulations governing the protection of archaeological and tribal cultural resources.

A. Traditional Tribal Cultural Places Act (Senate Bill 18, "SB 18")

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. (OPR, 2005)

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government. (OPR, 2005)

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically

mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)

B. Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017a)

§ 21074 of the Public Resources Code defines "tribal cultural resources." In brief, in order to be considered a "tribal cultural resource," a resource must be either:

(1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or

(2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)

4.19.3 Basis for Determining Significance

Section XVIII of Appendix G to the State CEQA Guidelines addresses typical adverse effects on tribal cultural resources, and includes the following threshold question to evaluate the Project's impacts to tribal cultural resources (OPR, 2018a):

- Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, as modified based on the 2018 updates to Section XVIII of Appendix G to the State CEQA Guidelines, and indicate significant impacts would occur if the Project or any Project-related component would:

a. *Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is*

   1. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k); or*
   2. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

4.19.4 IMPACT ANALYSIS

Threshold a: ***Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defines 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:***

1. ***Listed or eligible for listing in the California Register of Historical resources or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or;***
2. ***A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying for the criteria set forth in (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe;***

Changes in the California Environmental Quality Act, effective July 2015, require that the County address another category of cultural resources – Tribal Cultural Resources (TCRs). TCRs are those resources with inherent tribal values that are difficult to identify through the same means as archaeological resources. These resources can be identified and understood through direct consultation with the tribes who attach tribal value to the resource. Tribal cultural resources may include Native American archaeological sites, but they may also include other types of resources such as a cultural landscape. Also relevant is the category termed "traditional cultural property" (TCP) which is typically associated with cultural resource management performed under federal auspices. "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. A TCP can be defined, generally, as one that is eligible for inclusion in the National Register of Historic Places (NRHP) because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. A landscape can be a TCP and by extension a TCR, provided the cultural landscape meets the criteria and that the landscape is geographically defined in terms of the size and scope. The appropriate treatment of tribal cultural resources is determined through consultation with tribes.

In compliance with Assembly Bill 52 (AB52), notices regarding this Project were mailed to all requesting tribes on May 28, 2024. AB52 consultations were requested by the Pechanga Band of Indians (Pechanga), the Soboba Band of Luiseño Indians (Soboba), Rincon Band of Luiseño Indians (Rincon) and the Agua Caliente Band of Cahuilla Indians (Agua Caliente). No response was received from Cabazon Band of Mission Indians, Augustine Band of Cahuilla Indians, Ramona Band of Cahuilla, Cahuilla Band of Indians, Colorado River Indian Tribes (CRIT), Quechan Indian Nation, or the Santa Rosa Band of Cahuilla Indians. The Pala Band of Mission Indians responded on Jane 4, 2024 deferring consultation to closer tribes.

The Pechanga Band of Indians requested to consult in an email dated March 24, 2023. In the letter, Pechanga stated that Project is within a Traditional Cultural Property and contains additional TCRs, the Tribe requested that all efforts to preserve sensitive TCRs be made as early in the development process as possible. Project documents were provided to the tribe on June 26, 2023, October 09, 2023, and March 15, 2024. Consultation meetings were held on March 18, 2025, and April 29, 2025. Pechanga provided information that the project is within a Traditional Cultural Place/ TCR Landscape that was identified as part of the Mid-County Parkway-Cajalco Road Project. Pechanga considers the project area to be extremely sensitive and mitigation measures are proposed to mitigate any impacts to resources located on this property (refer to Mitigation Measures MM 4.5-1 through MM 4.5-10, presented in EIR Subsection 4.5, *Cultural Resources*). Consultation was concluded on July 28, 2025.

Soboba requested to consult in an emailed letter dated February 23, 2023. The letter stated that the Project area is considered sensitive by the people of Soboba, as there are existing sites in the surrounding areas. Project documents were provided to the tribe on June 26, 2023, October 09, 2023, March 15, 2024, and January 22, 2025. Meetings were held on January 22, 2025, and May 07, 2025. During consultation, Soboba provided the information that the project area is very sensitive and that there are Placenames in the area and mitigation measures are proposed to mitigate any impacts to resources located on this property (refer to Mitigation Measures MM 4.5-1 through MM 4.5-10, presented in EIR Subsection 4.5, *Cultural Resources*). Consultation was concluded on June 30, 2025.

Agua Caliente requested to consult in an emailed letter dated March 06, 2023. The letter stated that the Project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. Project documents were provided to the tribe on June 26, 2023, October 09, 2023, and March 15, 2024. On January 30, 2025, a meeting was held in which this project was discussed. On February 10, 2025, a letter was received from the tribe stating that "*at this time the concerns of the ACBCI THPO have been addressed and proper mitigation measures have been proposed to ensure the protection of tribal cultural resources".* The letter concluded consultation that day, February 10, 2025.

Rincon requested to consult in an emailed letter dated July 18, 2024. Rincon stated that the Project is within their Traditional Use Area and that the band is culturally and traditionally affiliated with the Project area. Project documents were provided to the tribe on December 26, 2024, and January 17, 2025. This Project was discussed during a meeting held January 14, 2025. During the meeting the band expressed concerns for subsurface resources being found during grading and recommends avoidance of all the resources on the property. Rincon sent an emailed letter dated January 17, 2025. The letter stated that the Rincon Band has reviewed the provided documents, will defer all further consultation to the Pechanga Band of Indians and Soboba Band of Luiseño Indians as they are located closer to the project site. Please note that the Rincon Band supports all efforts to completely avoid cultural resources as preferred mitigation. In a letter, Rincon deferred consultation to the Pechanga Band of Luiseno Indians and the Soboba Band of Luiseno Indians. Consultation was concluded that day, January 17, 2025.

CEQA requires lead agencies to address any unanticipated cultural resources discoveries during Project construction. Therefore, because the Project has the potential to result in significant impacts to previously-

undiscovered Tribal Cultural Resources, a potentially significant impact would occur for which mitigation would be required.

4.19.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within western Riverside County. This study area was selected for evaluation because it encompasses a broad region with similar geological, biological, and climatic conditions.

As indicated under the analysis of Threshold a., the Project has the potential to result in impacts to previously-unidentified Tribal Cultural Resources that may be present beneath the ground surface of the Project site. Other developments envisioned with buildout of the Riverside County General Plan and the general plans of cities within the County also have the potential to result in impacts to Tribal Cultural Resources, including sites or resources that may be buried beneath the ground surface. As such, Project impacts to Tribal Cultural Resources would be cumulatively considerable prior to mitigation.

4.19.6 Significance of Impacts Before Mitigation

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The Project has the potential to result in significant impacts to previously-undiscovered Tribal Cultural Resources. As such, Project impacts to Tribal Cultural Resources represent a potentially significant impact for which mitigation would be required.

4.19.7 Mitigation

The following are regulatory and design requirements. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with regulatory and design requirements.

- Unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code Section 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code Section 6254 (r).

Mitigation

Mitigation Measures MM 4.5-1 through MM 4.5-10 shall apply (refer to EIR Subsection 4.5, *Cultural Resources*). The mitigation measures included in EIR Subsection 4.5 have been drafted to include all of the mitigation requirements requested during the Project's Tribal Consultation process. No additional mitigation measures are required.

4.19.8 Significance of Impacts After Mitigation

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. Implementation of EIR Mitigation Measures MM 4.5-1 through MM 4.5-10 (refer to EIR Subsection 4.5, Cultural Resources) would ensure monitoring of ground-disturbing activities by an Archaeological Monitor and Tribal Monitor and further would ensure the appropriate treatment of any Tribal Cultural Resources that may be identified during Project-related ground-disturbing activities. Implementation of the required mitigation would reduce potential Project impacts to Tribal Cultural Resources to below a level of significance.

4.20 Utilities and Service Systems

This Subsection 4.20 evaluates the Project's potential to result in impacts on existing utilities and service systems and/or impacts to the environment that could result from the Project's proposed utilities and service system improvements. The analysis is based in part upon the Western Municipal Water District (WMWD) 2020 Urban Water Management Plan (UWMP), dated May 18, 2021, which is herein incorporated by reference and is available for public review online at: https://www.wmwd.com/215/Urban-Water-Management-Plan. The analysis in this Subsection also relies on letters issued by the WMWD indicating the availability of water and sewer services in the local area, which are included as *Technical Appendix N* to this EIR. Refer to Section 7.0, *References*, for a complete list of reference sources.

4.20.1 Existing Conditions

The Project site is located within the boundaries of WMWD for water and sewer services, Southern California Edison for electricity service, Southern California Gas Company for natural gas, and numerous service providers for cable television and telephone services. Waste disposal for the Project site and surrounding area is provided by Waste Management of the Inland Empire (WMIE).

A. Water Service and Supply

Water service to the Project area is provided by the WMWD. WMWD provides potable water, recycled water, and wastewater services to an area of approximately 527 square miles and nearly one million people in a wholesale and retail capacity that spans from the northern Riverside County boundary to the southern Riverside County boundary. WMWD provides wholesale water to eight retail water agencies in the WMWD wholesale service area, including Western Retail. The Western Retail service area provides water to nearly 25,000 customer connections within the Riverside Retail System, the Murrieta Retail System, and the Rainbow Retail System. The Project site is located within the Western Retail service area. (WMWD, 2022, pp. 3-1 to 3-4)

WMWD purchases imported water from Metropolitan Water District (MWD) and sells to wholesale customers within WMWD's service area, including WMWD's Western Retail service area. MWD delivers supply to member agencies from the Colorado River Aqueduct (CRA) and the State Water Project (SWP). WMWD receives wholesale treated imported water from MWD's Mills Water Treatment Plant (WTP) and Skinner WTP, in addition to raw water which is delivered directly to wholesale customers from various connections to MWD's systems. WMWD owns and operates the Mills Gravity Line, which distributes treated water from the Mills WTP to the WMWD Retail Riverside system and several other wholesale customers. (WMWD, 2022, p. 4-8)

WMWD retail's local water sources include groundwater, desalinated groundwater, and recycled water. In 2020, WMWD retail obtained approximately 60 percent of its total supply as imported water from MWD. The Riverside service area receives treated imported water from the Mills WTP, delivered through the Mills Gravity Line. WMWD may also purchase untreated water from MWD for non-potable uses. WMWD uses imported water to meet the balance of demands not met by local sources. (WMWD, 2022, p. 9-2)

WMWD extracts groundwater from the Riverside-Arlington basin and operates the Arlington Desalter. WMWD owns shares in Elsinore Valley Municipal Water District (EVMWD)'s Meeks and Daly Water Company, which entitles WMWD to 226.52 acre-feet per year (AFY) of water from the San Bernadino Basin (SBBA). This water is conveyed by the City of Riverside and is used in the Riverside WMWD retail system. Additionally, groundwater is extracted from the Temecula Valley Basin, with WMWD extracting 399 AFY of potable water in 2020. Additionally, the City of Riverside and WMWD retail have a Cooperative Agreement for Long-Term Wheeling and Surplus Water Sales, which provides WMWD up to 2,000 AFY of City of Riverside surplus water and 4,600 AFY of leased Meeks and Daley Water Company Water until 2027. WMWD retail also purchases non potable water from the Riverside-Arlington basin from the City of Riverside EVMWD's Palm Well, which is delivered through the Riverside Canal. Western Retail also owns 3,534 AFY of capacity in the Chino II Desalter. However, Western Retail does not currently use this source and as a result leases it to Jurupa Community Services District. As indicated in Table 4.20-1, *WMWD 2020 Water Supply* WMWD had approximately 26,743 AFY of potable and non-potable water available in 2020. (WMWD, 2022, p. 9-2 through 9-11)

Table 4.20-1 WMWD 2020 Water Supply

SUPPLY SOURCE	SUPPLY, AFY
POTABLE	**21,834**
Metropolitan	12,004
Groundwater (San Bernardino Basin, Western Meeks and Daley)	226.52
Groundwater (San Bernardino Basin, Leased Meeks and Daley)	4,208
Groundwater (RPU Surplus)	3,163
Groundwater (Temecula Valley Basin)	399
Eastern (Murrieta)	1,834
NON-POTABLE	**4,909**
Metropolitan	1,819
EVMWD (Riverside-Arlington Groundwater)	944
RPU (Riverside-Arlington Groundwater)	388
WWRF	1,758
TOTAL SUPPLY	**26,743**

(WMWD, 2022, Table 9-4)

Table 4.20-2, *Western Retail Historic and Current Water Use* provides the breakdown of water use from 2013 to 2020 by WMWD customers. Total water demand in 2020 was approximately 25,134 AFY. There was a notable decline of water use in 2015 following the State's 2014 declaration of a drought emergency and implementation of a statewide mandatory demand reduction. After Statewide restrictions ended in 2016, demands rebounded slightly but have not returned to 2013 levels, despite adding nearly 1,600 new customer connections. The data in Table 4.20-1 and Table 4.20-2 indicates that WMWD had a surplus of water supply of approximately 1,607 AFY for the year 2020. (WMWD, 2022, p. 10-3)

Table 4.20-3, *Projected Water Supply*, presents the projected water supply available to WMWD. As shown, WMWD projects that approximately 52,900 AFY of potable and non-potable water will be available to retail service customers in 2045.WMWD indicates that there are adequate resources for normal, dry, and multiple dry years. Table 4.20-4, *Total Projected Demands for* Water, illustrates the projected water demands in five-

Table 4.20-2 Western Retail Historic and Current Water Use

WESTERN RETAIL TOTAL	2013	2014	2015	2016	2017	2018	2019	2020
POTABLE								
Agriculture	510	532	449	432	453	487	454	397
Commercial	2,897	3,019	2,345	2,050	2,273	2,450	2,371	1,328
Single-Family	16,362	16,010	12,600	12,830	14,058	14,344	13,332	14,973
Landscape	2,360	2,538	1,883	1,898	2,285	2,313	2,011	2,563
Industrial	2,487	2,258	1,814	1,338	1,245	1,305	1,565	940
Military	290	234	237	234	237	274	266	132
Multi-Family	1,265	1,179	1,036	1,033	1,089	1,162	1,193	731
Temporary	53	223	41	204	274	378	315	159
Fireline	2	11	2	7	6	7	37	6
TOTAL POTABLE	**26,226**	**26,003**	**20,406**	**20,025**	**21,919**	**22,720**	**21,545**	**21,230**
NON-POTABLE								
Agriculture – Non-Potable	1,896	2,036	1,603	1,553	1,696	1,758	1,421	1,538
Landscape – Non-Potable	1,619	1,862	1,502	1,850	2,135	2,070	1,835	2,366
TOTAL NON-POTABLE	**3,515**	**3,898**	**3,106**	**3,403**	**3,831**	**3,828**	**3,256**	**3,904**
TOTAL DEMAND	**29,741**	**29,900**	**23,512**	**23,429**	**25,750**	**26,548**	**24,801**	**25,134**

(WMWD, 2022, Table 10-1)

Table 4.20-3 Projected Water Supply

SUPPLY SOURCE	2025	2030	2035	2040	2045
POTABLE	**27,073**	**30,199**	**33,686**	**37,574**	**41,821**
Metropolitan[1]	14,680	19,306	22,293	26,181	31,928
Chino Desalter[2]	3,534	3,534	3,534	3,534	3,534
Temecula Valley Basin Groundwater [3]	1,452	1,452	1,452	1,452	1,452
Leased Meeks and Daley[4]	4,680	4,680	4,680	4,680	4,680
Western Owned Meeks and Daley[5]	226.52	226.52	226.52	226.52	226.52
City of Riverside Surplus[6]	2,000				
Eastern North Perris Agreement[7]	500	1,000	1,500	1,500	
NON-POTABLE	**7,031**	**8,066**	**8,964**	**9,966**	**11,079**
Metropolitan[8]	1,671	1,300	1,300	1,300	1,681
Riverside-Arlington Basin Groundwater[9]	2,500	3,131	3,104	3,465	4,100
WWRF[10]	1,940	2,598	3,481	4,032	4,032
WRCWRA[11]	920	997	1,079	1,169	1,266
TOTAL SUPPLY	**34,104**	**38,265**	**42,650**	**47,540**	**52,900**

[1]Available supply from Metropolitan determined as the remaining demand not met by local supply sources with a 10% buffer.
[2]Western's shares of the Chino Desalter, currently leased to Jurupa Community Services District.
[3]Planned groundwater extractions to serve the Murrieta service area. [4]Agreement with EVMWD to lease Meeks and Daley groundwater rights. [5]Western-owned Meeks and Daley groundwater rights.
[6]Based on the 2017 Agreement, surplus water sales. Additional surplus supply may be available in the future but is not guaranteed.
[7]Eastern Perris North Project.
[8] Non-potable supply from Metropolitan is assumed to meet the remaining demand not met by local supply sources. [9]Expected supply used from local non-potable groundwater and delivered through the Riverside Canal, including Western's planned non-potable well and purchases from RPU and EVMWD's Palm Well.
[10]Projected 2030 WWRF effluent determined in the Riverside Non-Potable Facilities Master Plan. The rate of growth was calculated between 2030 and average 2017-2019 data (2018 used to determine rate of growth) and applied for years 2025 and 2030-2045. Based on this growth rate, the WWRF is expected to reach buildout between 2035 and 2040.
[11]WRCWRA supply is not currently available to Western Retail customers as no infrastructure currently exists to convey recycled water from the plant to Western Retail. This supply is currently considered surplus supply but Western is evaluating opportunities to make use of it.
(WMWD, 2022, Table 9-5)

Table 4.20-4 Total Projected Demands for Water

PROJECTED WATER USE	2025	2030	2035	2040	2045
POTABLE					
Agriculture	443	494	551	615	685
Commercial	1,481	1,652	1,843	2,056	2,288
Single-Family	16,703	18,632	20,783	23,182	25,803
Landscape	2,859	3,189	3,557	3,968	4,417
Industrial	1,049	1,170	1,305	1,456	1,620
Military	148	165	184	205	228
Multi-Family	815	909	1,015	1,132	1,260
Temporary	177	198	220	246	274
Fireline	6	7	8	9	10
Losses - Potable	930	1,037	1,157	1,289	1,435
TOTAL POTABLE	**24,612**	**27,454**	**30,624**	**34,158**	**38,019**
NON-POTABLE*					
Agriculture – Non-potable	1,779	2,058	2,296	2,561	2,857
Landscape – Non-potable	2,737	3,166	3,532	3,940	4,396
Losses – Non-potable	1,039	1,202	1,340	1,495	1,668
TOTAL NON-POTABLE	**5,555**	**6,426**	**7,168**	**7,997**	**8,921**
TOTAL DEMAND	**30,167**	**33,879**	**37,792**	**42,155**	**46,940**

*Non-potable demands include demand met by recycled water. Western cannot distinguish between recycled water and non-potable deliveries as its system is combined.
(WMWD, 2022, Table 10-4)

year increments from 2025 to 2045. As indicated, the projected demand for WMWD customers in the year 2045 is 46,940 AFY. Thus, comparing the data from Table 4.20-3 and Table 4.20-4 shows that WMWD is projected to have a surplus of water supply of 5,960 AFY for the year 2045. (WMWD, 2022, pp. 9-11 to 9-12, 10-11)

B. *Sewer Service and Treatment*

As discussed in EIR Subsection 3.2.3.F, WMWD would provide sewer services to the proposed Project. Sewer flows generated by the project would ultimately be treated at the Western Riverside County Regional Wastewater Authority (WRCRWA) Treatment Plant, located at 14634 River Road, approximately 10.4 miles northwest of the Project site. This facility can treat up to 14 million gallons of wastewater per day. Wastewater is treated at the tertiary level and the resulting recycled water is discharged to the Santa Ana River. (WMWD, n.d.)

C. *Stormwater Drainage*

Under existing conditions, the Project site consists of vacant, undeveloped land with rolling hills and two streams, with one stream along the eastern boundary of the site and one drainage that runs along the southwestern boundary and through the northwestern portion of the site. Under existing conditions, the Project site is bisected by a ridgeline running from east to west close to the center of the property assemblage. From the ridge line the existing flows travel north and south into two natural drainage courses that bound the north and south edges of the Project site. The northerly tributary flows from east to west along the northerly project boundary, while the southerly tributary flows from east to west along the westerly Project boundary and then bisects a small portion of the project site flowing from the south to the northeast corner of the site. Each of these two natural drainage courses ultimately convey flows northwesterly to a point of confluence at the most

northwest corner of the Project site before being conveyed northerly beyond the Project site through a development to the north of the Project site, known as Tramonte, and finally into the Harrison Dam facility. Refer to EIR Subsection 4.10, *Hydrology and Water Quality*, for a more detailed description of the existing drainage on site. (Adkan, 2024a, p. 6)

D. Solid Waste Collection and Disposal

Solid waste collection and disposal is provided by the Riverside County Department of Waste Resources (RCDWR) through a franchise agreement with Waste Management of the Inland Empire (WMIE). Waste within the Project area is sent directly to the El Sobrante Landfill, which is southwest of the Project site. Other landfills within the County that could handle solid waste generated by the Project include the Lamb Canyon Landfill and the Badlands Landfill.

- El Sobrante Landfill, The El Sobrante Landfill is located in the southeast area of the City of Corona at 10910 Dawson Canyon Road and accessed from Interstate 15 (I-15) at Temescal Canyon Road. The landfill is operated and owned by USA Waste Services of California, Inc. of which WMIE is a subsidiary. The existing landfill encompasses 1,322 acers, of which 468 acres are permitted for refuse disposal. The landfill is currently permitted to receive 16,054 tons per day (tpd). Data available from CalRecycle shows that in May 2024, the El Sobrante Landfill received an average of approximately 10,190.84 tons per day (tpd) requiring disposal. As of April 2018 (the most recent date for which data are available), the landfill had a total remaining disposal capacity of 143,977,170 cubic yards. The El Sobrante Landfill is projected to reach capacity in January 2051. (CalRecycle, 2024a; RCDWR, 2024a)

- Lamb Canyon Landfill. The Lamb Canyon Landfill is located between the City of Beaumont and the City of San Jacinto at 16411 Lamb Canyon Road (State Route 79), south of Interstate 10 and north of Highway 74. The landfill is owned and operated by RCDWR. The landfill encompasses approximately 703.4 acres, of which approximately 144.6 acres are permitted for waste disposal. The Lamb Canyon Landfill is currently permitted to receive 5,000 tpd. Data available from CalRecycle shows that in April 2024, the Lamb Canyon Landfill received an average of 2,015.94 tpd requiring disposal. The Lamb Canyon Landfill has an estimated total disposal capacity of approximately 39.7 million cubic yards. As of January 8, 2015 (the most recent date for which data are available), the landfill had a total remaining capacity of approximately 19.2 million cubic yards. The current landfill remaining disposal capacity is estimated to last until approximately April 2032. (CalRecycle, 2024b; RCDWR, 2024b)

- Badlands Landfill. The Badlands Landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue and accessed from State Highway 60 at Theodore Avenue. The landfill is owned and operated by RCDWR. The existing landfill encompasses 811 acres, of which 409 acres are permitted for refuse disposal. The Badlands Landfill has an existing daily capacity of 5,000 tpd. Data available from CalRecycle shows that in April 2024, the Badlands Landfill received an average of 3,279.36 tpd requiring disposal. As of December 18, 2020 (the most recent date for which data are available), the landfill had a total remaining disposal capacity of approximately 7.8 million cubic yards. The Badlands Landfill is projected to reach capacity at the earliest in January 2059. (CalRecycle, 2024c; RCDWR, 2024c)

4.20.2 Applicable Environmental Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to utilities and service systems.

A. Federal Regulations

1. Applicable Water Supply Regulations

❑ Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2024b)

❑ Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorizes EPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary (health-related) standards. The 1996 amendments to SDWA require that EPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for EPA, also encourage attainment of secondary standards (nuisance-related). Under the Act, EPA also establishes minimum standards for state programs to protect underground sources of drinking water from endangerment by underground injection of fluids. (EPA, 2023d)

2. Applicable Energy Conservation Regulations

❑ United States Department of Energy/Federal Energy Regulatory Commission

The United States Department of Energy (DOE) is the federal agency responsible for establishing policies regarding energy conservation, domestic energy production and infrastructure. The Federal Energy Regulatory Commission (FERC) is an independent federal agency, officially organized as part of the DOE which is responsible for regulating interstate transmission of natural gas, oil and electricity, reliability of the electric grid and approving of construction of interstate natural gas pipelines and storage facilities. The Energy Policy Act of 2005 has also granted FERC with additional responsibilities of overseeing the reliability of the nation's

electricity transmission grid and supplementing state transmission siting efforts in national interest electric transmission corridors.

FERC has authority to oversee mandatory reliability standards governing the nation's electricity grid. FERC has established rules on certification of an Electric Reliability Organization (ERO) which establishes, approves and enforces mandatory electricity reliability standards. The North American Electric Reliability Corporation (NERC) has been certified as the nation's ERO by FERC to enforce reliability standards in all interconnected jurisdictions in North America. Although FERC regulates the bulk energy transmission and reliability throughout the United States, the areas outside of FERC's jurisdictional responsibility include state level regulations and retail electricity and natural gas sales to consumers which falls under the jurisdiction of state regulatory agencies.

The Federal Communications Commission (FCC) requires all new cellular tower construction to be approved by the state or local authority for the proposed site and comply with FCC rules involving environmental review. Additionally, the Telecommunications Act of 1996 requires construction of new cellular towers to comply with the local zoning authority. (FERC, n.d.)

B. State Regulations

1. Applicable Water Supply Regulations

- Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance had not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the "model" ordinance drafted by the State of California shall apply within the affected jurisdiction. (CA Legislative Info, 2016a)

- Water Recycling in Landscaping Act

In 2000, Senate Bill 2095 (Water Recycling in Landscaping Act) was approved by Governor Davis requiring any local public or private entity that produces recycled water and determines that within 10 years it will provide recycled water within the boundaries of a local agency, to notify the local agency of that fact. In turn, local agencies are required to adopt and enforce within 180 days a specified recycled water ordinance, unless the local agency adopted a recycled water ordinance or other regulation requiring the use of recycled water in its jurisdiction prior to January 1, 2001. (CA Legislative Info, 2000)

- Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) was proposed and adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to

develop Urban Water Management Plans (UWMPs) over a 20-year planning horizon, and further required UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA. (DWR, 2021)

The UWMPs provide a framework for long term water planning and inform the public of a supplier's plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and
- Water shortage contingency planning. (DWR, 2021)

The UWMP Act has been modified over the years in response to the State's water shortages, droughts, and other factors. A significant amendment was made in 2009, after the drought of 2007-2009 and as a result of the governor's call for a statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as SB X7-7. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020. Beginning in 2016, retail water suppliers are required to comply with the water conservation requirements in SB X7-7 in order to be eligible for State water grants or loans. Retail water agencies are required to set targets and track progress toward decreasing daily per capita urban water use in their service area, which will assist the State in meeting its 20 percent reduction goal by 2020. (DWR, 2021)

❑ Government Code § 66473.7(b)(2) (Senate Bill 221)

Under Senate Bill (SB) 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. SB 221 is intended as a 'fail safe' mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs before construction begins. SB 221 requires the legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove a tentative map, must include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply must be requested by the subdivision applicant or local agency, at the discretion of the local agency, and id based on written verification from the applicable public water system within 90 days of a request. SB 221 does not apply to any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households. (CA Legislative Info, n.d.)

❑ California Senate Bill 610

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over

the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. For the purposes of SB 610, "project" means any of the following:

(1) A proposed residential development of more than 500 dwelling units.
(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
(4) A proposed hotel or motel, or both, having more than 500 rooms.
(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
(6) A mixed-use project that includes one or more of the projects specified in this subdivision.
(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project. (CA Legislative Info, n.d.)

Because the Project proposes 206 residential units, a Water Supply Assessment was not required.

❑ CA. Water Code § 10610 et seq. (Senate Bill 901)

Signed into law on October 16, 1995, Senate Bill (SB) 901 required every urban water supplier to identify as part of its urban water management plan, the existing and planned sources of water available to the supplier over a prescribed 5-year period. The code requires the water service purveyor to assess the projected water demand associated with a proposed project under environmental review. Later provisions of SB 901 required compliance in the event that the proposed Project involved the adoption of a specific plan, amendment to, or revision of the land use element of a general plan or specific plan that would result in a net increase in the state population density. Upon completion of the water assessment, cities and counties may agree or disagree with the conclusions of the water service purveyors, but cannot approve projects in the face of documented water shortfalls without first making certain findings. (CA Legislative Info, n.d.)

❑ Executive Order B-29-15

Executive Order (EO) B-29-15 ordered the State Water Resources Control Board (SWRCB) to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016; directed the California Department of Water Resources (DWR) to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes; and directed the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. (SWRCB, 2020)

❑ Executive Order B-37-16

Signed on May 9, 2016, EO B-37-16 established a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation

measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans. (SWRCB, 2020)

❑ Executive Order B-40-17

Signed on April 7, 2017, EO B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including the Department of Water Resources (DWR), released a plan to continue making water conservation a way of life. (SWRCB, 2020)

❑ Sustainable Groundwater Management Act (SGMA)

The Sustainable Groundwater Management Act (SGMA) established a new structure for managing California's groundwater resources at a local level by local agencies. SGMA required, by June 30, 2017, the formation of locally-controlled groundwater sustainability agencies (GSAs) in the State's high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016. (DWR, n.d.)

❑ Senate Bill 606 (SB 606)

SB 606 would require an urban retail water supplier to calculate an urban water use objective no later than November 1, 2023, and by November 1 every year thereafter, and its actual urban water use by those same dates. The bill would require an urban retail water supplier to submit a report to the department for these purposes by those dates. SB 606 would authorize the board to issue information orders, written notices, and conservation orders to an urban retail water supplier that does not meet its urban water use objective, as specified. The bill would authorize the board to waive these requirements for a period of up to 5 years, as specified. SB 606 would impose civil liability for a violation of an order or regulation issued pursuant to these provisions, as specified. The bill would also authorize the board to issue a regulation or informational order requiring a wholesale water supplier, urban retail water supplier, or distributor of a public water supply to provide a monthly report relating to water production, water use, or water conservation. (SWRCB, n.d.)

❑ Assembly Bill 1668 (AB 1668)

AB 1668 requires the State Water Resources Control Board, in coordination with the Department of Water Resources, to adopt long-term standards for the efficient use of water, as provided, and performance measures for commercial, industrial, and institutional water use on or before June 30, 2022. The bill, until January 1, 2025, establishes 55 gallons per capita daily as the standard for indoor residential water use. Beginning January 1, 2025, the bill establishes the greater of 52.5 gallons per capita daily or a standard recommended by the State Water Resources Control Board and beginning January 1, 2030, the bill establishes the greater of 50 gallons

per capita daily or a standard recommended by the State Water Resources Control Board. AB 1668 imposes civil liability for a violation of an order or regulation issued pursuant to these provisions, as specified. (SWRCB, n.d.)

❑ California Plumbing Code

Title 24, Part 5 of the California Code of Regulations establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2019 California Plumbing Code, which is based on the 2018 Uniform Plumbing Code, was published by the California Building Standards Commission and went into effect on January 1, 2019. (BCS, n.d.)

❑ California Code of Regulations (CCR) Title 20 and 24

Title 20 includes state and federal minimum efficiency requirements for energy and water use in regulated appliances. These appliances include, but are not limited to, water heaters, furnaces, heat pumps, air conditioners, refrigerators, pumps, lamps and ballasts, computers, spray sprinkler bodies and showerheads. Manufacturers are responsible for certifying regulated appliances to the California Energy Commission's Modernized Appliance Efficiency Database System. This serves as the manufacturer's claim that it has met all applicable requirements, including testing, and marking products. (Westlaw, n.d.)

Title 24 of the California Code of Regulations is a broad set of requirements for energy conservation, green design, construction and maintenance, fire and life safety, and accessibility that apply to the structural, mechanical, electrical, and plumbing systems in a building. Title 24 was published by the California Building Standards Commission and applies to all buildings in California. Title 24 receives updates every three years with the latest revisions being in 2019. Title 24 energy compliance requirements apply to new construction and any new installations or retrofits in existing buildings. Older buildings do not have to upgrade their systems, but if they choose to renovate, their new systems must meet Title 24 standards. (BCS, n.d.)

❑ California Water Plan

The California Water Plan is the State's strategic plan for sustainably managing and developing water resources for current and future generations. Required by Water Code Section 10005(a), it presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The plan is updated every five years; provides a way for various groups to collaborate on findings and recommendations and make informed decisions regarding California's water future; can't mandate actions or authorize spending for specific actions; doesn't make project- or site-specific recommendations nor include environmental review or documentation as would be required by CEQA; and requires policy- and law-makers to take definitive steps to authorize the specific actions proposed in the plan and appropriate funding needed for their implementation.

California Water Plan Update 2023 (Update 2023) provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision-makers to overcome California's most pressing water resource challenges. It reaffirms State government's unique role

and commitment to sustainable, equitable, long-term water resource management; it also introduces implementation tools to inform sound decision-making. The plan's broad and diverse portfolio of recommended actions address California's critical, systemic, and institutional challenges. (DWR, 2023)

❑ California Water Action Plan

The California Water Action Plan is a roadmap for the State's journey towards sustainable water management. The first California Water Action Plan was released in January 2014 under Governor Brown's administration and updated in 2016. The California Water Action Plan discusses the challenges to water in California: uncertain water supplies, water scarcity/drought, declining groundwater supplies, poor water quality, declining native fish species and loss of wildlife habitat, floods, supply disruptions, and population growth and climate change further increasing the severity of these risks. (CDFW, n.d.)

2. Applicable Solid Waste Regulations

❑ California Solid Waste Integrated Waste Management Act (AB 939, 1989)

The Integrated Waste Management Act (IWMA) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (CIWMB) and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal (it should be noted that the CIWMB no longer exists, and its duties have been assumed by CalRecycle). As part of the IWMA, the CIWMB was given a purpose to mandate the reduction of disposed waste. (CalRecycle, n.d.) The IWMA also required:

- the establishment of a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element. (CalRecycle, n.d.)
- each city, by July 1, 1991, to prepare, adopt and submit a SRRE to the county which includes the following components: waste characterization; source reduction; recycling; composting; solid waste facility capacity; education and public information; funding; special waste (asbestos, sewage sludge, etc.); and household hazardous waste. (CalRecycle, n.d.)
- each county, by January 1, 1991, to prepare a SRRE for its unincorporated area, with the same components described above, and a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction which cannot be reduced or recycled for a 15-year period.
- each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP), which includes all of the elements described above. (CalRecycle, n.d.)
- each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities. (CalRecycle, n.d.)
- the CIWMB to review the implementation of each SRRE at least once every two years. (CalRecycle, n.d.)

- The IWMA required the CIWMB, in conjunction with an inspection conducted by a Lead Enforcement Agency (LEA), to conduct at least one inspection per year of each solid waste facility in the state. (CalRecycle, n.d.)

Additionally, the IWMA established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities. (CalRecycle, n.d.)

❑ Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued. (CalRecycle, n.d.)

❑ Mandatory Commercial Recycling Program (AB 341)

Assembly Bill (AB) 341 (Chapter 476, Statutes of 2011 [Chesbro, AB 341]) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB-341 was designed to help meet California's recycling goal of 75% by the year 2020. AB 341 requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, n.d.)

❑ 2022 California Green Building Standards Code (CAL Green; Part 11 of Title 24, California Code of Regulations)

California Code of Regulations, Title 24, Part 11 is referred to as the California Green Building Standards Code (CALGreen Code). The current version of CALGreen became effective January 1, 2023, and is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including residential structures and elementary schools). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Section 5.408.3 of the CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code. (CEC, 2022)

❑ Senate Bill 1374 (SB 1374)

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in Public Resources Code Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills. The model ordinance was adopted by CalRecycle on March 16, 2004. (CA Legislative Info, 2002)

❑ Assembly Bill 1826 (AB 1826)

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction is to identify a multitude of information, including barriers to siting organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines "organic waste" as food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a "business" as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multifamily residential dwelling consisting of five or more units. As of January 1, 2017, businesses that generate 4 cubic yards or more of organic waste per week are subject to this requirement. Commencing January 1, 2019, businesses that generate 4 cubic yards or more of commercial solid waste per week also are required to arrange for organic waste recycling services. CalRecycle may reduce this triggering threshold for organics recycling to 2 cubic yards or more of commercial solid waste per week as of January 1, 2020. (CA Legislative Info, 2014)

❑ Zero Waste California

Zero Waste California is a state program launched by CalRecycle in 2002 to promote a new vision for the management of solid waste by maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies. (CalRecycle, n.d.)

3. Applicable Energy Conservation Regulations

❑ California Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CA. Code Regs. 6)

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. In 1975 the Department of Housing and Community Development adopted rudimentary energy conservation standards under their State Housing Law authority that were a precursor to the first generation of the Standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the Energy Commission (formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement the Standards. The Energy Commission's statute created separate authority and specific direction regarding what the Standards are to address, what criteria are to be

met in developing the Standards, and what implementation tools, aids, and technical assistance are to be provided. (CEC, 2022)

The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Standards that contain data and other information that helps builders comply with the Standards. (CEC, 2022)

The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2022 Energy Code builds on California's technology innovations, encouraging energy efficient approaches to encourage building decarbonization, emphasizing in particular on heat pumps for space heating and water heating. This Energy Code also extends the benefits of photovoltaic and battery storage systems and other demand flexible technology to work in combinations with heat pumps to enable California buildings to be responsive to climate change, and strengthens ventilation standards to improve indoor air quality. This update provides crucial steps in the state's progress toward 100 percent clean carbon neutrality by midcentury. The 2022 Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. (CEC, 2022)

Public Resources Code Section 25402.1 also requires the Energy Commission to support the performance standards with compliance tools for builders and building designers. The Alternative Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Standards establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance with the Standards. From this, the Energy Commission develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes provisions for private firms seeking to develop compliance software for approval by the Energy Commission, which further encourages flexibility and innovation. (CEC, 2022)

❑ California Solar Rights and Solar Shade Control Acts

The Solar Rights Act sets parameters for establishing solar easements, prohibits ordinances and private covenants which restrict solar systems, and requires communities to consider passive solar and natural heating and cooling opportunities in new construction. This Act is applicable to all California cities and counties. California's solar access laws appear in the state's Civil, Government, Health and Safety, and Public Resources Codes. California Pub Res Code § 25980 sets forth the Solar Shade Control Act, which encourages the use of

trees and other natural shading except in cases where the shading may interfere with the use of active and passive solar systems. (EPIC, 2014; EPIC, 2010)

❑ Alternative Fuels Plan

On September 24, 2009, the California Air Resources Board (CARB) adopted amendments to the "Pavley" regulations that reduce greenhouse gas (GHG) emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments will cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments will also prepare California to harmonize its rules with the federal rules for passenger vehicles. (CARB, n.d.)

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles On June 30, 2009. The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005, and was denied by the U.S. EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the Clean Air Act requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions." (CARB, n.d.)

The ARB's Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, n.d.)

The regulations had been threatened by automaker lawsuits and were stalled by the U.S. EPA's delay in reviewing and then initially denying California's waiver request. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. (CARB, n.d.)

The CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, n.d.)

❑ California Independent System Operator (ISO)

The California ISO is an independent public benefit corporation responsible for operating California's long-distance electric transmission lines. The California ISO is led by a five-member board appointment by the Governor and is also regulated by FERC. While transmission owners and private electric utilities own their lines, the California ISO operates the transmission system independently to ensure that electricity flows comply with federal operational standards. The California ISO analyzes current and future electrical demand and plans for any needed expansion or upgrade of the electric transmission system. (California ISO, n.d.)

❑ California Public Utilities Commission (PUC)

The CPUC establishes policies and rules for electricity and natural gas rates provided by private utilities in California such as Southern California Edison (SCE) and Southern California Gas Company (SoCalGas). Public owned utilities such as the Los Angeles Department of Water and Power (LADWP) do not fall under the CPUCs jurisdiction. The Digital Infrastructure and Video Competition Act of 2006 (DIVCA) established the CPUC as the sole cable/video TV franchising authority in the State of California. DIVCA took effect January 1, 2007.

The CPUC is overseen by five commissioners appointed by the Governor and confirmed by the state Senate. The CPUC's responsibilities include regulating electric power procurement and generation, infrastructure oversight for electric transmission lines and natural gas pipelines and permitting of electrical transmission and substation facilities. (CPUC, n.d.)

❑ California Energy Commission (CEC)

The CEC is a planning agency which provides guidance on setting the state's energy policy. Responsibilities include forecasting electricity and natural gas demand, promoting and setting energy efficiency standards throughout the state, developing renewable energy resources and permitting thermal power plants 50 megawatts and larger. The CEC also has regulatory specific regulatory authority over publicly owned utilities to certify, monitor and verify eligible renewable energy resources procured. (CEC, n.d.)

❑ Senate Bill 1389 (SB 1389)

Senate Bill (SB) 1389 (Public Resources Code Sections 25300–25323), adopted in 2002, requires the development of an integrated plan for electricity, natural gas, and transportation fuels. Under the bill, the CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. In 2018, the CEC decided to write the Integrated Energy Policy Report in two volumes. The Volume I, which was published on August 1, 2018, highlights the implementation of California's innovative policies and the role they have played in moving toward a clean energy economy. Volume II, which was adopted in February 2019, identifies several key energy issues and actions to address these issues and ensure the reliability of energy resources. (CA Legislative Info, n.d.)

4.20.3 Basis for Determining Significance

Section XIX of Appendix G to the CEQA Guidelines addresses typical adverse effects on utilities and service systems and includes the following threshold questions to evaluate a project's impacts on utilities and service systems (OPR, 2018a):

- Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

- Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

- Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

- 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?

- Would the project fail to comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

The following thresholds are derived from Riverside County's Environmental Assessment Checklist, as modified by the 2018 updates to Appendix G to the CEQA Guidelines, in order to evaluate the significance of the proposed Project's impacts on utilities and service systems. The proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would:

a. *Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage systems, whereby the construction or relocation would cause significant environmental effects;*

b. *Have insufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years;*

c. *Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects;*

d. *Result in a determination by the wastewater treatment provider that serves or may service the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments;*

e. *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;*

f. *Fail to comply with federal, State, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan);*

g. *Impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects:*

    a. *Electricity;*

    b. *Natural gas;*

    c. *Communications systems;*

d. Street lighting;

e. Maintenance of public facilities, including roads; or

f. Other governmental services.

The significance thresholds set forth in Riverside County's Environmental Assessment Checklist, as modified per the 2018 updates to the CEQA Guidelines, were used to evaluate the significance of the proposed Project's impacts to utilities and service systems.

4.20.4 IMPACT ANALYSIS

Threshold a: ***Would the Project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?***

A. Water Service and Facilities

As discussed in EIR subsection 3.5.3, potable water service to the Project would be provided from WMWD. As part of the Project, and as previously depicted on EIR Figure 3-8, under existing conditions there are no water lines or water-related improvements on the Project site, aside from two existing groundwater wells located within the western portion of the Project site that are proposed to be abandoned as part of the Project. The nearest existing WMWD facility is an 8-inch water line that occurs within Travertine Drive, immediately north of the Project site. As part of the Project, an 8-inch water line would be constructed within Street A on and off site that would connect to the existing 8-inch water line within Travertine Drive. This 8-inch water line would connect to a proposed 30-inch water line that would provide a future connection to adjacent developments at the Project's southern boundary. A series of 8-inch water lines would be constructed within the remaining streets on site to provide water service to individual lots. It is anticipated that WMWD would construct a connection between the proposed on-site 30-inch water line and McAllister Street in the future, and that the WMWD ultimately would connect the proposed on-site 30-inch water line to the existing reservoir located to the east of the Project site; however, the proposed Project does not rely upon or require these additional water line improvements, and as such impacts associated with the construction of these off-site connections are not considered to be part of the Project evaluated within this EIR. Impacts associated with the Project-related water facilities described above are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water improvements. As such, with the mitigation measures specified in this EIR, Project impacts due to water improvements would be less than significant.

B. Wastewater Facilities

As described in EIR subsection 3.5.3, under existing conditions the nearest existing WMWD sewer line is an existing 8-inch sewer line located within Travertine Drive to the north of the Project site. As part of the Project,

a series of 8-inch sewer lines are proposed to be constructed within all of the proposed roadways on site, and an 8-inch sewer line would be installed within Street A to connect to the existing sewer line within Travertine Drive. Impacts associated with the proposed sewer system are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements that have not already been addressed by this EIR. As such, with the mitigation measures specified in this EIR, Project impacts due to sewer improvements would be less than significant.

C. *Wastewater Treatment*

Sewer flows generated by the Project ultimately would be treated by the WRCRWA Treatment Plant, located at 14634 River Road, approximately 10.4 miles northwest of the Project site. The WRCRWA Treatment Plant is capable of providing tertiary treatment of 14 mgd of wastewater (WMWD, n.d.). As shown in Table 4.20-5, *Project-Related Wastewater Generation*, the proposed Project is anticipated to generate approximately 47,380 gpd of wastewater requiring treatment, based on the rates used in EIR No. 521, which was prepared in conjunction with Riverside County's 2015 General Plan Update. As shown, the Project's demand for wastewater treatment would represent approximately 0.34% of the RWQCP's current total capacity (47,380 gpd ÷ 14,000,000 gpd x 100 = 0.338%). Accordingly, the Project would not result in or require the expansion of the existing facilities at the RWQCP, and impacts would therefore be less than significant. (Riverside County, 2015a, Table 4.19-BJ)

Table 4.20-5 Project-Related Wastewater Generation

Land Use	Dwelling Units	Generation Factors	Wastewater Generation (gpd)
Residential	206 du	230 gpd/dwelling unit	47,380
		Total:	**47,380**

(Riverside County, 2015a, Table 4.19-BJ)

D. *Stormwater Drainage*

As part of the Project, a series of catch basins are proposed throughout the proposed on-site roadways. The Project's proposed storm drain system has been designed to route first flush runoff to one of two extended detention basins proposed in the western and northeastern portions of the Project site, which would discharge flows to the north following water quality treatment. Impacts associated with the above-described Project-related drainage facilities are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed drainage improvements. As such, with the mitigation measures specified throughout this EIR, Project impacts due drainage improvements would be less than significant.

Threshold b: ***Would the Project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?***

WMWD is responsible for supplying the region with its potable and non-potable water needs. On June 16, 2021, the WMWD Board of Directors adopted the 2020 UWMP. The UWMP provides information on WMWD's projected supplies and demands in five-year increments through the year 2045. WMWD's UWMP identifies current and future water demands and supplies, and provides a planning framework for water-related management decisions (WMWD, 2022, pp. 1-3 and 2-7)

The WMWD UWMP bases its growth assumptions, in part, based on the land use designations of general plans within the WMWD's service area. At the time the 2020 UWMP was adopted by the WMWD, the Project site was designated by the Riverside County General Plan as "Rural Community – Very Low Density Residential (RC-VLDR)" and "Rural Community – Low Density Residential (RC-LDR)" land uses. The Project's proposed General Plan Amendment No. 240072 would reconfigure the existing land use designation of RC-VLDR and RC-LDR to match the proposed development in the post development conditions. Portions of the RC-LDR and RC-VLDR would be swapped to match the proposed lot configuration, but the acreage of areas proposed to be designated for RC-LDR and RC-VLDR would match the existing acreages for these land use designations, resulting in no changes to the maximum number of dwelling units allowed on site as compared to the site's existing General Plan land use designations. As such, the Project would not result in an increase in the number of dwelling units on the Project site as compared to the number of dwelling units evaluated in and accommodated by the UWMP for the Project site.

The WMWD UWMP evaluated supply reliability during a single dry year, multiple dry years, and a multiple year drought that could potentially occur through 2045. In all cases, WMWD's supplies were sufficient to meet demand without any supply shortages. Since the Project would reconfigure the land use designations of the Project site but would not result in an increase in the maximum number of dwelling units on site, the Project would be consistent with the growth assumptions of the WMWD UWMP. Therefore, because the WMWD UWMP demonstrates that there would be sufficient water supplies through 2045 to serve existing and planned developments, and because the Project is consistent with the growth assumed by the UWMP for the Project site, it can be concluded that the WMWD would have sufficient water supplies available to serve the project from existing entitlements and resources. Therefore, impacts would be less than significant.

Threshold c: ***Would the Project require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?***

Threshold d: ***Would the Project result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

No septic systems are proposed as part of the Project. As discussed under the analysis of Threshold a., the Project would be provided sanitary sewer service by the WMWD. A description of proposed sewer improvements is provided in EIR Subsection 3.5.3. As discussed therein, under existing conditions the nearest existing WMWD sewer line is an existing 8-inch sewer line located within Travertine Drive to the north of the

Project site. As part of the Project, a series of 8-inch sewer lines are proposed to be constructed within all of the proposed roadways on site, and an 8-inch sewer line would be installed within Street A to connect to the existing sewer line within Travertine Drive. Impacts associated with the Project's proposed sewer improvements are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements that have not already been addressed in pertinent sections of this EIR. As such, with the mitigation measures specified in this EIR, Project impacts due to proposed sewer improvements would be less than significant.

Sewer flows generated by the Project ultimately would be treated by the WRCRWA Treatment Plant, located at 14634 River Road, approximately 10.4 miles northwest of the Project site. As previously shown in Table 4.20-5, the Project's 206 dwelling units are anticipated to generate approximately 47,380 gpd of wastewater requiring treatment. As previously noted, the RWQCP has a total capacity of 14 mgd (WMWD, n.d.). Thus, the Project's 47,380 gpd of wastewater would represent only approximately 0.34% of the WRCRWA Treatment Plant total daily treatment capacity (47,380 gpd ÷ 14,000,000 gpd x 100 = 0.338%). Therefore, it can be concluded that the WRCRWA Treatment Plant would have adequate capacity to treat sewer flows generated by the Project, and the Project would not result in a determination by the wastewater treatment provider that serves or may service the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Accordingly, because adequate treatment capacity exists at the WRCRWA Treatment Plant to treat the Project's sewer flows, Project impacts to wastewater treatment capacity would be less than significant.

Threshold e: ***Would the Project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?***

Solid waste generated by the Project would be disposed of at the El Sobrante Landfill, although the Lamb Canyon Landfill and the Badlands Landfill also could handle solid waste generated by the Project. The El Sobrante Landfill is permitted to receive 16,054 tpd. Data from May 2024 shows that the El Sobrante Landfill received an average of 10,190.84 tpd. The Lamb Canyon Landfill is permitted to receive 5,000 tpd. Data from April 2024 shows that the Lamb Canyon Landfill received an average of 2,015.94 tpd. The Badlands Landfill is permitted to receive 5,000 tpd. Data from April 2024 shows that the Badlands Landfill received an average of 3,279.36 tpd. (CalRecycle, 2024a; CalRecycle, 2024b; CalRecycle, 2024c; RCDWR, 2024a; RCDWR, 2024b; RCDWR, 2024c)

As shown in Table 4.20-6, *Project-Related Solid Waste Generation*, buildout of the proposed Project is expected to produce approximately 0.23 tpd of solid waste, or approximately 84.5 tpy, based on the rates used in EIR No. 521, which was prepared in conjunction with Riverside County's 2015 General Plan Update. Based on data available from CalRecycle, the El Sobrante Landfill has a daily capacity to receive 16,054 tpd and received an average of only 10,190.84 tpd in May 2024, resulting in an excess daily capacity of approximately 5,863.16 tpd. The Lamb Canyon Landfill has a daily capacity for 5,000 tpd of solid waste and received an average of only 2,015.94 in April 2024, resulting in an excess daily capacity of 1,928.43 tpd. The Badlands

Landfill has a daily capacity for 5,000 tpd and received an average of only 3,279.36 tpd, resulting in an excess daily capacity of 1,720.64 tpd. The Project's 0.23 tpd of solid waste would represent approximately 0.004% of the excess daily capacity at El Sobrante Landfill, approximately 0.01% of the excess daily capacity at the Badlands Landfill, and approximately 0.01% of the excess daily capacity at the Lamb Canyon Landfill. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for the El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill, it is anticipated that these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. As such, because regional solid waste facilities would have adequate capacity to handle solid waste generated by the Project's construction and operational phases, impacts would be less than significant.

Table 4.20-6 Project-Related Solid Waste Generation

Land Use	Dwelling Units	Generation Factors	Total Solid Waste Generated (tpy)	Average Solid Waste per Day (tpd)
Residential	206	0.41 tons/du	84.5 tpy	0.23 tpd
Totals:	**206**	**--**	**84.5 tpy**	**0.23 tpd**

(Riverside County, 2015a, Table 4.17-N)

Threshold f: ***Would the Project comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?***

The proposed Project would be regulated by the Riverside Countywide Integrated Waste Management Plan (CIWMP) (RCWRMD, 1996). The CIWMP outlines goals, policies, and programs Riverside County and its cities would implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. Additionally, AB 341 made a legislative declaration that it is the policy goal of the State that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, although the California Department of Resources Recycling and Recovery may not establish or enforce a diversion rate greater than the 50% as set forth by the CIWMP (per Public Resources Code § 41780.01[b]).

The proposed Project would be regulated by the RCDWR and would be required to comply with the CIWMP's requirement to divert up to 50% of its solid waste from area landfills. In conformance with the CIWMP, the Project Applicant is required to work with future contract refuse haulers to implement recycling and waste reduction programs for solid wastes. Implementation of a waste disposal strategy for the proposed Project would assist Riverside County in achieving the mandated goals of the IWMA by developing feasible waste programs that encourage source reduction, recycling, and composting. The RCDWR is specifically charged with the responsibility of implementing programs that ensure that unincorporated Riverside County achieves 50% diversion of solid waste from landfill disposal as well as monitoring and reporting unincorporated Riverside County's compliance with the CIWMP and AB 939. Additionally, the Project would be subject to the requirements of SB 1383, which includes requirements related to organics recycling in order to reduce the amount of solid waste that ends up in area landfills. With mandatory compliance to AB 939, AB 341, SB 1383, and RCDWR's programs and policies, the Project would result in a less-than-significant impact due to a

conflict with federal, State, and local management and reduction statutes and regulations related to solid wastes, including the CIWMP.

Threshold g: ***Would the project require or result in the construction of any of the following facilities or the expansion of the following existing facilities, the construction of which could cause significant environmental effects:***

Electricity?

Natural gas?

Communications systems?

Storm water drainage?

Street lighting?

Maintenance of public facilities, including roads?

Other governmental services?

Conflict with any adopted energy conservation plans?

Electric service is currently available to the proposed Project site through Southern California Edison. Existing facilities would need to be expanded as necessary to provide service to the Project. However, the Project area already is served by existing electrical lines; therefore, the construction of electricity facilities as necessary to serve the Project would occur within the areas already planned for impact by the Project. Therefore, the construction of electrical facilities necessary to serve the proposed Project would not result in any significant impacts to the environment that are not already addressed by this EIR. No additional mitigation would be required.

There are no anticipated capacity restrictions which could limit the ability of the SoCal Gas Company to provide service to the proposed Project. Points of connection to SoCal Gas Company main lines would be resolved as the proposed Project and other projects planned for the area commence their utility design and interconnection plans. It is anticipated that construction of any off-site natural gas utility connections would occur within existing disturbed public rights-of-way. As such, the construction of these utility connections is evaluated under the appropriate subject headings within this EIR, and no new impacts would occur specifically related to natural gas service that have not already been addressed.

Due to long-range planning efforts by the energy purveyors, Project implementation is not anticipated to result in the need for the construction or expansion of off-site gas generation facilities, although some new distribution lines would be necessary (as discussed above). Any future need for regional energy facilities related to cumulative growth in the service areas of SoCal Gas would be determined by the service agencies as part of their long-range growth projections. Accordingly, provision of gas service to the proposed Project site would not result in any significant environmental impacts not already addressed under relevant sections of this EIR.

Points of connection to telecommunication facilities would be resolved as the proposed Project and other projects planned for the area commence their utility design and interconnection plans. It is anticipated that any off-site construction of communication utility connections would occur within existing disturbed public rights-of-way. As such, the construction of communication utility connections is evaluated under the appropriate subject headings within this EIR. No environmental impacts would occur from the provision of these utilities, as all lines would be installed within the disturbance areas of existing roadway rights-of-way and/or on site within areas already planned for physical impacts as part of the Project.

The Project would require a number of drainage features on site, including the construction a series of catch throughout the proposed on-site roadways, storm drain lines, and two extended detention basins proposed in the western and northeastern portions of the Project site. Following water quality treatment, runoff from the Project site would be discharged to the north via existing natural drainage channels. Proposed drainage improvements would be located in on-site or off-site improvement areas, impacts to which have been evaluated throughout this EIR, and mitigation is identified where necessary to reduce impacts to a level below significance. Therefore, the construction of stormwater drainage facilities needed to serve the Project would not result in any impacts to the environment beyond what is evaluated, disclosed, and mitigated by other sections of this EIR. Additional mitigation would not be required.

The Project would provide street lighting as required by Riverside County in accordance with Ordinance No. 461 (Roadway Standards) and Ordinance No. 460 (Subdivision of the Land). All physical environmental impacts associated with street lighting and maintenance would occur within the boundaries of the on- and off-site improvement areas, the impacts of which are described throughout this EIR. Therefore, no additional impacts to the environment would occur that are not already addressed by this EIR, and additional mitigation would not be required.

Roadway improvements proposed as part of the Project would be limited to a new connection to El Sobrante Road (via Street A), a new connection onto Travertine Drive, and the construction on on-site roadways. These improved public roadways would require maintenance by Riverside County. Maintenance of the public roadways to be improved as part of the Project would not result in any significant impacts to the environment. Impacts associated with the proposed improvements to these roadways already are evaluated in appropriate sections of this EIR, and any identified impacts have been mitigated to the maximum feasible extent. Maintenance of the major roadway facilities within the Project site would be funded through the Project developer's payment of Development Impact Fees (DIF) and future building owners' payment of property taxes. Therefore, the maintenance of roadways proposed by the Project would not result in any new impacts to the environment beyond that which is already disclosed and mitigated by this EIR, and a less-than-significant impact would occur.

No known other facilities would require off-site construction or maintenance as a result of the proposed Project.

Based on the foregoing analysis, impacts associated with the construction or expansion of utility facilities would be less than significant or otherwise mitigated to the maximum feasible extent by this EIR. No additional mitigation would be required.

4.20.5 Cumulative Impact Analysis

The cumulative study area used for the analysis of water and wastewater includes areas within WMWD's service area for water service and areas within the WRCRWA's wastewater system, and is based on the buildout of the Riverside County General Plan, the City of Riverside General Plan, and the general plans of other cities within WMWD's service area. The cumulative study area for solid waste comprises western Riverside County, as all areas of western Riverside County are served by the WMIE, and the cumulative analysis is based on the buildout of the Riverside County General Plan and the general plans of cities within western Riverside County. For the remaining issue areas, the cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development in the vicinity of the Project site.

As discussed under the analysis of Threshold a., the Project would require a number of improvements related to water, wastewater treatment, and storm drainage systems, although such improvements are inherent to the Project's construction phase. Cumulatively-considerable impacts associated with the Project's construction phase have been evaluated throughout this EIR, and where necessary mitigation measures have been identified to reduce the Project's cumulatively-considerable effects to the maximum feasible extent. There are no components of the Project's proposed water, wastewater, or storm drainage systems that could result in impacts not already evaluated by other sections of this EIR. Accordingly, impacts associated with the construction of new or expanded water, wastewater treatment, and stormwater drainage systems would be less-than-cumulatively considerable.

As analyzed under Threshold b., the Project would be consistent with the growth assumptions included in the WMWD UWMP, which concluded that the WMWD would have sufficient water supplies during a single dry year, multiple dry years, and a multiple year drought through at least 2045. Because the WMWD evaluates the water demands of both the Project and other cumulative developments within WMWD's service area, and because the Project's anticipated water demand already is accounted for by the UWMP, it can be concluded that the WMWD would have sufficient water supplies to serve the Project and other cumulative developments based on existing or already planned entitlements and resources. Accordingly, cumulatively-considerable impacts to water supply would be less than significant.

The discussion under Threshold c. and d. indicates that a number of improvements to provide sewer service to the Project would be required, although impacts associated with such improvements are inherent to the Project's construction phase. Cumulatively-considerable impacts associated with Project construction activities have been evaluated throughout this EIR, and where necessary mitigation measures have been identified to reduce the Project's cumulatively-considerable effects to the maximum feasible extent. There are no components of the Project's proposed wastewater improvements that would result in impacts not already evaluated by other sections of this EIR. Accordingly, impacts associated with the construction of new or expanded wastewater treatment conveyance facilities would be less-than-cumulatively considerable.

As also discussed under the analysis of Thresholds c. and d., although the Project would increase sewer flows requiring treatment at the WRCRWA Treatment Plant, the Project's incremental increase in demand comprises only 0.34% of the WRCRWA Treatment Plant's total daily capacity. As such, because adequate treatment

capacity exists at the WRCRWA Treatment Plant to treat the Project's sewer flows, cumulatively-considerable impacts to wastewater treatment capacity would be less than significant.

As previously discussed in the analysis provided under Threshold e., solid waste generated by construction and operation of the Project would represent nominal proportions of the daily disposal capacity at the El Sobrante Landfill, Lamb Canyon Landfill, and/or Badlands Landfill. The landfills are currently projected to remain open until as far into the future as 2051 (Badlands Landfill) and have sufficient daily capacity to handle solid waste generated by the Project and other cumulative developments both during construction and long-term operation. The Project would not directly result in the need for expanded solid waste disposal facilities, as the El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill have sufficient existing capacity to handle solid waste generated by the Project. Rather, the Project's incremental contribution to solid waste generation may contribute to an ultimate need for expanding the solid waste disposal facilities that would serve the Project and/or the construction of additional solid waste disposal facilities. Moreover, it is possible that as other developments in the region are proposed, the RCDWR and WMIE may opt to construct new solid waste disposal facilities to serve those developments, and such facilities may or may not receive solid waste generated by the Project. Although the Project has the potential to cumulatively contribute to the demand for new or expanded solid waste disposal facilities, the construction of which could significantly impact the environment, it is too speculative for evaluation in the absence of a proposed expansion or development plan (CEQA Guidelines, 14 CCR § 15145). Therefore, the Project's cumulatively-considerable impacts to solid waste disposal facilities would be less than significant.

The Project would adhere to regulations set forth by local and State regulations (including AB 341 and AB 939) during both construction and long-term operations. Other cumulative developments would also be required to comply with such regulations. As such, the Project as well as other cumulative developments in the area would not result in cumulative impacts with respect to compliance with federal, State, and local statutes and regulations related to solid wastes. Impacts would be less-than-cumulatively considerable.

Cumulatively-considerable impacts associated with the provision of facilities for electricity, natural gas, communications systems, stormwater drainage, street lighting, maintenance of facilities, construction of off-site sewer and water lines, and other governmental services are evaluated throughout the appropriate issue areas in this EIR. In all cases, where cumulatively-considerable impacts associated with any Project component are identified, mitigation measures have been imposed to reduce such impacts to the maximum feasible extent. Accordingly, cumulatively-considerable impacts associated with the provision of utility facilities to serve the proposed Project would be less than significant.

4.20.6 Significance of Impacts Before Mitigation

Threshold a.: Less-than-Significant Impact. Although the Project would require construction of new or expanded water, wastewater conveyance, and stormwater drainage systems, impacts associated with the construction of such facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed water, sewer, and

drainage improvements that have not already been addressed. As such, with the mitigation measures specified in this EIR, Project impacts due to water, sewer, and drainage improvements would be less than significant. Additionally, the Project's wastewater generation would represent approximately 0.34% of the WRCRWA Treatment Plant's daily capacity. Accordingly, the Project would not result in or require the expansion of the existing facilities at the WRCRWA Treatment Plant, and impacts would be less than significant.

Threshold b.: Less-than-Significant Impact. The WMWD UWMP evaluated supply reliability during a single dry year, multiple dry years, and a multiple year drought that could potentially occur through 2045. In all cases, WMWD's supplies were determined to be sufficient to meet existing and projected demands without any supply shortages. The Project would reconfigure the land use designations of the Project site, but would not affect the total acreage on site for RC-VLDR and RC-LDR land uses. As such, the Project would not result in an increase in the number of dwelling units allowed on site in comparison to the site's existing land use designations. Therefore, because the WMWD UWMP demonstrates that there would be sufficient water supplies through 2045 to serve existing and planned developments, and because the Project is consistent with the growth assumed by the UWMP for the Project site, it can be concluded that the WMWD would have sufficient water supplies available to serve the project from existing entitlements and resources. Therefore, impacts would be less than significant.

Thresholds c. and d.: Less-than-Significant Impact. Impacts associated with the Project's proposed sewer improvements are inherent to the Project's construction phase, and impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum feasible extent. There are no environmental impacts that would occur specifically related to the Project's proposed sewer improvements that have not already been addressed in pertinent sections of this EIR. As such, with the mitigation measures specified in this EIR, Project impacts due to proposed sewer improvements would be less than significant. With respect to sewer treatment capacity, the Project's 47,380 gpd of wastewater would represent only approximately 0.34% of the WRCRWA Treatment Plant's total daily treatment capacity. Therefore, it can be concluded that the WRCRWA Treatment Plant would have adequate capacity to treat sewer flows generated by the Project, and the Project would not result in a determination by the wastewater treatment provider that serves or may service the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Accordingly, because adequate treatment capacity exists at the RWQCP to treat the Project's sewer flows, Project impacts to wastewater treatment capacity would be less than significant.

Threshold e.: Less-than-Significant Impact. The Project's 0.23 tpd of solid waste would represent approximately 0.004% of the excess daily capacity at El Sobrante Landfill, approximately 0.01% of the excess daily capacity at the Badlands Landfill, and approximately 0.01% of the excess daily capacity at the Lamb Canyon Landfill. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for the El Sobrante Landfill, Lamb Canyon Landfill, and Badlands Landfill, it is anticipated that these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. Therefore, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, and would not otherwise impair the attainment of solid waste reduction goals, and impacts would be less than significant.

Threshold f.: Less-than-Significant Impact. With mandatory compliance to AB 939, AB 341, and RCDWR's programs and policies, the Project would not result in a significant impact due to noncompliance with regulations related to solid waste. A less-than-significant impact would occur.

Threshold g.: Less-than-Significant Impact. Impacts associated with the construction or expansion of utility facilities would be less than significant or otherwise mitigated to the maximum feasible extent by this EIR. No additional mitigation would be required.

4.20.7 County Regulations, Design Requirements, and Mitigation

Applicable County Regulations and Design Requirements

The following are applicable regulations and design requirements within Riverside County. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable county regulations and design requirements.

- The Project is required to comply with the provisions of the California IWMA of 1989 (AB 939) which mandates a reduction of disposed waste throughout California.

- The Project is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act (AB 1327) which developed a model ordinance for adoption of recyclable materials in development projects. AB 1327 requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued.

- The Project is required to comply with the provisions of the Mandatory Commercial Recycling Program (AB 341): AB 341 made a legislative declaration that it is the policy goal of the State that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, and required by the California Department of Resources, Recycling, and Recovery, by January 1, 2014, to provide a report to the Legislature that provides strategies to achieve that policy goal and also includes other specified information and recommendations.

- The Project would be subject to the following applicable standard conditions of approval imposed on the Project by the RCDWR:
    - Prior to issuance of a building permit, a Waste Recycling Plan (WRP) shall be submitted to the Riverside County Department of Waste Resources for approval. At a minimum, the WRP must identify the materials (i.e., cardboard, concrete, asphalt, wood, etc.) that will be generated by construction and development, the projected amounts; the measures/methods that will be taken to recycle, reuse, and/or reduce the amount of material; the facilities and/or haulers that will be utilized; and the targeted recycling or reduction rate. During Project construction, the Project site shall have, at a minimum, two bins: one for waste disposal and the other for the recycling of

Construction and Demolition (C&D) materials. Additional bins are encouraged to be used for further source separation of C&D recyclable materials. Accurate record keeping (receipts) for recycling of C&D recyclable materials and solid waste disposal must be kept. Arrangements can be made through the franchise hauler.

- Prior to final building inspection, evidence (i.e., receipts or other type of verification) to demonstrate Project compliance with the approved WRP shall be presented by the Project proponent to the Planning Division of the Riverside County Department of Waste Resources in order to clear the project for occupancy permits. Receipts must clearly identify the amount of waste disposed and Construction and Demolition (C&D) materials recycled.
- Hazardous materials are not accepted at Riverside County landfills. In compliance with federal, State, and local regulations and ordinances, any hazardous waste generated in association with the Project shall be disposed of at a permitted Hazardous Waste disposal facility. Hazardous waste materials include, but are not limited to, paint, batteries, oil, asbestos, and solvents.

Mitigation

The mitigation measures identified throughout this EIR for Project-related construction impacts (e.g., air quality, biological resources, etc.) shall apply. Project impacts to utilities and service systems would be less than significant; therefore, no additional mitigation is required related to utilities and service system improvements proposed as part of the Project.

4.21 WILDFIRE

Information in this Subsection is based in part on a technical studyfor wildfire protection titled, "Fire Behavior Report, Willow Creek,Tentative Tract 38927" (herein, "FBR"), prepared by Firesafe Planning Solutions (herein, "Firesafe"), dated April 23, 2024, and included as *Technical Appendix L* to this EIR (Firesafe, 2024). Refer to EIR subsection 3.5.3.D for a description of the Project's proposed Fuel Managmeent Plan, whch also is depicted conceptually on EIR Figure 3-7. Refer also to Section 7.0*, References*, for a complete list of reference sources.

4.21.1 EXISTING CONDITIONS

A. Fire Hazard Classification

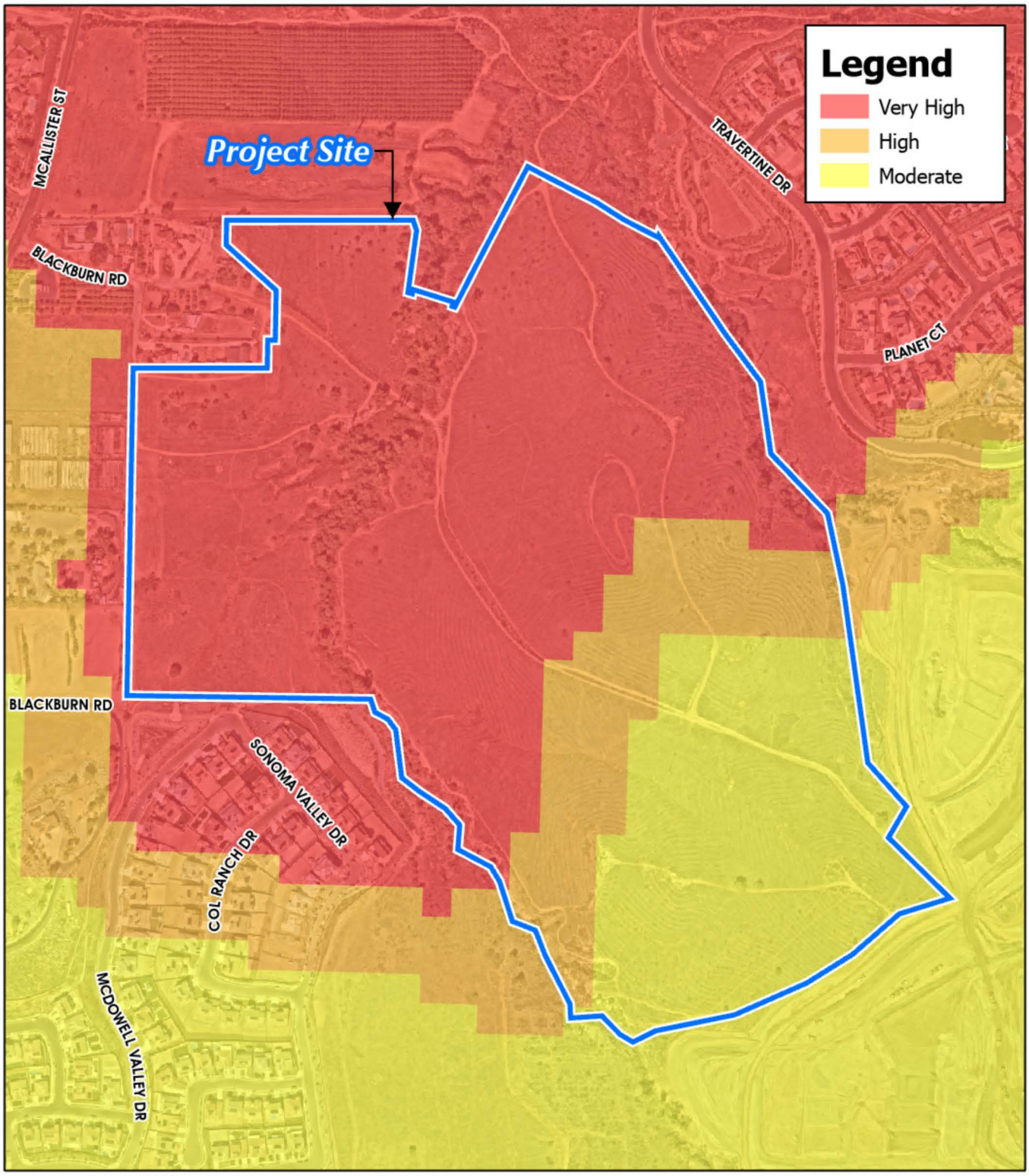
Under existing conditions, the Project site consists of vacant and undeveloped land that was previously used for agricultural production. Land to the northeast of the Project site consists of single-family residential uses. To the southeast of the Project site is undeveloped vacant land and a 0.54-acre freshwater pond. To the south of the Project site is undeveloped vacant land. Further south are agricultural and commercial uses. West of the Project site are single-family residential and agricultural uses. To the north of the Project site is undeveloped vacant land and agricultural uses, beyond which is single-family residential use. According to Riverside County GIS, and as shown on Figure 4.21-1, *Wildfire Susceptibility*, the entire Project site is within a Fire Hazard Severity Zone. The northern portion of the Project site is classified as having a "Very High" susceptibility to wildland fire hazards, the central portion of the Project site is classified as having a "High" susceptibility to wildland fire hazards, and the southern portion of the Project site is classified as having a "Moderate" susceptibility to wildland fire hazards.

B. Topography

As previously shown on EIR Figure 2-7, the Project site consists of a relatively flat property that is bisected by an existing stream. Lands to the east and west of the existing stream generally slope downward in elevation towards the stream, with the northeastern portions of the Project site draining to a separate drainage that traverses along the northeastern boundary of the Project site. Elevations range from approximately 1,180 feet above meal sea level (amsl) near the north central portion of the Project site to 1,348 feet amsl near the southeast corner of the Project site. (Google Earth, 2024)

C. Climate

Weather has a dramatic influence on wildland fire behavior. The most critical weather pattern to the Project area is a hot, dry offshore wind, typically called a Santa Ana. Such wind conditions are usually associated with strong (>50 MPH), hot, dry winds with very low (<15%) relative humidity. Santa Ana winds originate over the dry desert land and can occur anytime of the year; however, they generally occur in the late fall (September through November). This is also when non-irrigated vegetation is at its lowest moisture content. Riverside County is one of the areas in southern California that is strongly influenced by powerful Santa Ana winds.



Source(s): Cal Fire (April 2024), ESRI, Nearmap Imagery (October 2025)

Figure 4.21-1

Wildfire Susceptibility

D. Vegetation

The predominant fuels in or near the Project site are grasses, grass/scrub mixtures, and shrubs. At the bottom of each of the main drainages are willow trees, scrub, and nonnative vegetation, such as palm trees and ornamentals. Fuels within the Project site and adjacent to the Project site are relatively sparse in most areas. Grasses will grow between the scrubs on wet years, but most years will have limited fine fuels to carry the fire from one group of scrubs to the next. Since the area has had no large fire history and little evidence is shown onsite of fire activity, it is safe to assume that this is the fuel configuration that will be present on the site. (Firesafe, 2024, p. 11)

E. Fire History

The fire history for the Project site and surrounding area is shown on Figure 5 of the Project's FBR (*Technical Appendix L*). The Project site has no recorded fire history in the CalFire database, which records fires 300-acres and greater. In 1978, a non-named fire burned through a small area southeast of the Project site, but no other fires have come within ¼ of a mile of the Project site. Of particular note, none of the historical fires occurred northeast or northwest of the Project site, which has the strongest wind directions. (Firesafe, 2024, p. 6)

All but three of the adjacent fires occurred over 30 years ago. In 1978, two fires (without names) occurred; the first burned 2,157.16 acres, and the second burned 507.21 acres. In 1979, the Steele Fire started on July 9th and burned 107.41 acres. In 1980, the Quail Fire started on July 6th and burned 200.85 acres, and the Pierce Fire started on July 9th and burned 985.28 acres. There was not another fire adjacent to the Project site for 11 years until June 28, 2001, when the Cajalco Fire burned 224.96 acres. In 2005, the Knoll Fire, which started on April 20th burned 19.57 acres, and in May 2012, the Lakepointe Fire, which was over 1.5 miles away at its closed point, burned 256 acres. There have been no large fires near the Project site since 2001 (over twenty years). Clearly historic fire corridors exist to the southeast and southwest of the Project site, but none have impacted the Project site during the time covered by the CALFIRE database. (Firesafe, 2024, p. 6)

F. Project Area Fire Risk Assessment

The Project site is mostly grass and grass/shrub mixtures with smaller pockets of shrubs and trees. Areas to the northeast and southwest of the Project site are developed, or planned for development, prior to the Project site being developed. The development of the area to the northeast of the Project site has reduced the wildland interface between the development and the Project site to a thin strip of riparian drainage that bisects the two areas. This is true to a lesser degree for the southwest area planned for development, although a similar drainage exists to the west, southwest, and south of the Project site (mixed interface but still fragmented from a wildland fuel perspective). (Firesafe, 2024, pp. 9-11)

The new developments, El Sobrante Road, and the location of Lake Mathews combine to create a mosaic of fuel beds to the south, southwest, and west of the Project Site. Large expansive runs of fuels are not as common and will continue to decline as more of the area is ultimately developed. The current conditions represent the worst-case scenario. (Firesafe, 2024, p. 11)

The predominant fuels on or near the Project site are grasses, grass/scrub mixtures, and shrubs. At the bottom of each of the main drainages are willow trees, scrub, and nonnative vegetation, such as palm trees/ornamentals. Photographs of the predominant vegetation on the Project site are shown in *EIR Technical Appendix L*. While all of the existing vegetation would be removed from the Project site, the drainages and areas adjacent to the Project site to the north and east would be maintained as habitat/open space areas with little to no management, other than the possible removal of nonnative species. (Firesafe, 2024, p. 11)

G. *Critical Wildfire Concerns*

1. *Slope*

Slope can influence the direction of travel, intensity, and rate of spread of a fire more than anything other than wind (within a given fuel type). The majority of the Project site interface with moderate fuel loading is the riparian drainage that runs on both sides (north and south) of the Project site. For fire modeling purposes, the slope is averaged over 30-meter grids. Figure 12 of the Project's FBR (EIR *Technical Appendix L*), provides a graphic of the slope averages from the Landfire database. It should be noted that no areas within the Project site exceed 18% slope when averaged over the 30-meter grid. For the worst-case scenario, a slope of 50% will be used. Small areas of slope greater than 50% do exist on the banks of the riparian drainage but not in an amount sufficient enough to greatly impact fire behavior above the 50% impact being used for the modeling. (Firesafe, 2024, p. 15)

2. *Aspect*

Aspect is important, especially when it aligns with the fuel, wind, and slope. Figure 13 of the Project's FBR (EIR *Technical Appendix L*) provides the slope aspects for the same 30-meter grids used in the slope and vegetation graphics. While there are areas where the aspect aligns with the wind, these areas are within the fuel modification zones and lack significant slope in the interface areas beyond the fuel modification zones, except in the riparian drainages. The limited slope (18%) reduces the overall impact of the aspect, as shaded areas on the northern faces are not created, and this does not produce conditions that increase fuel moisture due to the aspect. (Firesafe, 2024, p. 15)

3. *Wind Patterns and Weather Inputs*

After a review by Firesafe of the local PWS (Private Weather Station) and RAWS (Remote Automated Weather Station) data, the most extreme wind patterns and speeds relating to wildfires were entered into the modeling programs (Behave and Wind Ninja). Lesser wind patterns and wind speeds normally produce less fire intensity based on a fire in wildland fuels and, as such, are not considered in the worst-case calculations. (Firesafe, 2024, p. 16)

Several PWS are available in the area of the Project site, but most have limited data. The closest PWS, with reliable data, is located 2.8 miles north of the Project site (KCRIVER18). KCARIVER18 was not in service at the time of FBR report, but historical data was available and was used to illustrate some of the historical weather observations which are relevant to this analysis. (Firesafe, 2024, p. 16)

A summary graph (Figure 15 of the Project's FBR (EIR *Technical Appendix L*)) shows the predominant wind direction from the west at that location. The occasional Santa Ana Wind event brings a north or northeast wind. Note the higher wind gusts are associated with the east and northeast wind events. The maximum wind for the 7+year period shown was 27 mph with a 31-mph wind gust. (Firesafe, 2024, p. 16)

The Lake Mathews RAWS has a large data set and is located 3.7 miles southwest of the Project Site. An 11-year period was used for the data analysis (Jan 2013 to Dec 2023). The results of the data analysis are provided in Figure 16 of the Project's FBR (EIR *Technical Appendix L*). While the dataset shows a wind gust of 84 mph, it occurred only once in 11 years. Wind gusts greater than 50 mph occurred only seven times in this same period, which represents over 0.001% of the data points in the dataset. Sustained wind (Wind in this dataset) is the average wind speed of over two minutes, whereas wind gusts are a burst of wind that lasts less than 20 seconds. (Firesafe, 2024, p. 17)

When the wind data is analyzed by direction, it is clear that the stronger winds are from the north, north-by-northeast, and northeast, as shown in Figure 17 and Figure 18 of the Project's FBR (EIR *Technical Appendix L*). The predominant wind is from the north-northwest and northwest. This is likely due to the influence of Temescal Canyon, which is west of the RAWS site. (Firesafe, 2024, p. 17)

Viewing the wind data by time of year (Figure 19 of the Project's FBR (EIR *Technical Appendix L*)), it shows that the day/night patterns for the wind in the area of the Project site are different in the fall. Wind from the northeast increases, especially during the daytime period. This is consistent with the stronger winds shown in Figure17 of the FBR. For the purposes of the modeling to produce the worst-case scenario, offshore winds are assumed to be 50 mph and the onshore winds 30 mph. (Firesafe, 2024, p. 19)

The four-month series shows the daytime/nighttime diurnal shift in wind flow and the increase in northeast flow (north-northeast, northeast, east-northeast) associated with the Santa Ana wind events that occur each fall (they can and do happen all year long but are most impactful in the fall). Stronger daytime winds during the daytime are very pronounced in the November/December timeframe at this location (for this ten-year period 2005-2015) and are consistent with the current winds data from the RAWS site. (Firesafe, 2024, p. 20)

❑ South Wind

The south wind is prominent in the nighttime periods of the database. The impacts on the Project site are provided in Figure 21 of the Project's FBR. Impact areas are primarily in the southeast interface. Wind acceleration occurs in the red areas of the Wind Ninja output (overlayed onto the Project site). The blue areas are wind-sheltered (lower wind) and this occurs along the riparian drainage to the south for its entire length (interface). The topography does not channel the wind (change the direction) mostly due to the lack of significant changes in the elevation or large steep slope areas. (Firesafe, 2024, p. 22)

❑ North Wind

The majority of the interface is wind-sheltered on the north side of the Project site (Figure 22 of the Project's FBR). These riparian drainages are significantly lower than the adjacent areas in most of the interface. The development to the northeast is higher than the project site along the majority of the riparian drainage. The

east end of this interface is flatter, and the wind is less sheltered at this point but most of this interface is or will be developed. This entire interface (northeast) abuts the fuel modification zones of the development to the north (Citrus Heights). The amount of wildland fuel in this interface is limited. The north wind takes fire away from the majority of the Project site. The north wind does run across the drainage to the north in a manner that intersects with a larger fuel bed. The area is wind sheltered but still bears potential for increased fire behavior. (Firesafe, 2024, p. 22)

❑ Northeast Wind

The northeast wind (Figure 23 of the Project's FBR) also impacts the Project site mainly from the development area to the north and also has a large amount of wind sheltering along the riparian drainage for the same reasons as the north wind. The riparian area on the north (center of Project site) has yellow arrows. While the wind is not accelerated, it is also not sheltered either. This area (entire drainage) is potentially the largest risk for the Project site (Figure 24 of the Project's FBR). (Firesafe, 2024, p. 23)

For the balance of the project site, the winds either take fire away from the side or run parallel to the project site structures. Impacts are lessened in this configuration. Santa Ana winds (hot and dry) will normally come from this direction. These winds generally start from the north and move around to the ENE as they subside, with the NE flow being the strongest in most cases. The strongest winds measured at the Lake Mathews RAWS came from these Santa Ana conditions. (Firesafe, 2024, p. 23)

❑ East Wind

East winds occur occasionally and are likely at the end of a Santa Ana wind event. These winds do not tend to be problematic for the Project site as they either come from existing fuel modification areas or areas of low to moderated wildland fuels, as shown in Figure 25 of the Project's FBR. (Firesafe, 2024, p. 23)

Much of the interface that has the denser fuel loading is wind-sheltered by the drainage itself or by the adjacent topography. To the north and northeast, the existing development (Citrus Heights) presents both a wind obstruction and a fuel break to the riparian interface that would remain. To the east and southeast, the future development would remove most of the wildland fuels in this interface. This provides a condition where a fire cannot burn into the Project site from that direction as a "line of fire" as the fuels simply do not exist. A fire in this area must originate from an ember or brand and then progress in size as the fuels are available. (Firesafe, 2024, p. 25)

4.21.2 Applicable Regulatory Requirements

The following is a brief description of the federal, State, and local environmental laws and related regulations related to wildfire hazards.

A. Federal Regulations

1. Healthy Forests Restoration Act of 2003

On August 22, 2002, President Bush established the Healthy Forests Initiative, directing the Departments of Agriculture and the Interior, and the Council on Environmental Quality, to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of catastrophic wildland fires. On June 5, 2003, the Departments of Agriculture and the Interior adopted two new categorical exclusions from documentation in an environmental assessment or environmental impact statement (EIS): an exclusion for hazardous-fuel reduction and another for rehabilitation of resources and infrastructure damaged by wildfire (68 FR 33814). (DOI, n.d.)

B. State Regulations

1. Public Resources Code (PRC) Sections 4290-4299

These sections establish minimum statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations. (CA Legislative Info, n.d.)

As defined by CalFire, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CalFire has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CalFire every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor. (CA Legislative Info, n.d.)

2. PRC Section 4213 – Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual "Fire Prevention Fee" for all habitable structures within SRAs to pay for fire prevention services. SRAs are the portions of California where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or federally owned land. As a result of AB 398, California Global Warming Solutions Act of 2006, the fire prevention fee was suspended as of July 1, 2017. (CA Legislative Info, n.d.)

3. California Government Code (CGC) Section 51178

This section specifies that the Director of CalFire, in cooperation with local fire authorities, shall identify areas that are Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRAs), based on

consistent statewide criteria, and the expected severity of fire hazard. Per CGC § 51178, a local agency may, at its discretion, exclude from the requirements of § 51182 an area within its jurisdiction that has been identified as a VHFHSZ, if it provides substantial evidence in the record that the requirements of § 51182 are not necessary for effective fire protection within the area. Alternatively, local agencies may include areas not identified as VHFHSZ by CalFire, following a finding supported by substantial evidence in the record that the requirements of § 51182 are necessary for effective fire protection within the new area. According to § 51182, such changes made by a local agency shall be final, and shall not be rebuttable by CalFire. (CA Legislative Info, n.d.)

4. California Code of Regulations (CCR) Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design, and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.). (Westlaw, n.d.)

5. CCR Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, "Materials and Construction Methods for Exterior Wildfire Exposure," in the 2010 California Building Code addresses fire safety standards for new construction. In addition, Section 701A.3.2, "New Buildings Located in Any Fire Hazard Severity Zone," states: (BSC, n.d.)

> "*New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*"

C. Local Regulations

1. Riverside County Ordinance No. 787 – Fire Code Standards

Riverside County Ordinance No. 787 addresses implementation of the California Fire Code, based on the International Code Council. The codes prescribe performance characteristics and materials to be used to achieve acceptable levels of fire protection and include the Wildland-Urban Interface (WUI) fire area building standards mentioned above. Collectively, the ordinance establishes the requirements and standards for fire hazard reduction regulations within Riverside County (including additions and deletions to the California Fire Code) to fully protect the health, safety, and welfare of existing and future residents and workers of Riverside County. (Riverside County, n.d.4)

Among other things, this ordinance assures that structural and nonstructural architectural elements of the building do not: a) impede emergency egress for fire safety staffing/ personnel, equipment, and apparatus; nor b) hinder evacuation from fire, including potential blockage of stairways or fire doors. In addition, for the purposes of California Fire Code implementation, the ordinance also adds a statement noting: "In accordance with Government Code sections 51175 through 51189, Very High Fire Hazard Severity Zones are designated as shown on a map titled Very High Fire Hazard Severity Zones, dated April 8, 2010, and retained on file at the office of the Fire Chief and supersedes other maps previously adopted by Riverside County designating high fire hazard areas." It also defines a "hazardous fire area" as: "private or public land not designated as State or local fire hazard severity zone (FHSZ) which is covered with grass, grain, brush or forest and situated in a location that makes suppression difficult resulting in great damage. Such areas are designated on Hazardous Fire Area maps filed with the office of the Fire Chief." (Riverside County, 2015a, p. 4.13-49)

2. Riverside County Ordinance No. 695 – Hazardous Vegetation

Hillsides throughout Riverside County are predominantly mapped as having a substantial fire risk; thus, much of Riverside County is subject to PRC Sections 4291-4299 and Riverside County Ordinance No. 695. This ordinance requires property owners in such areas to reduce fire danger through mowing and other fuel modification methods. This ordinance affects anyone who "owns, leases, controls, operates, or maintains any building or structure in, upon, or adjoining any mountainous area or forest-covered lands, brush-covered lands, or grass-covered lands or any land covered with flammable material." (Riverside County, 2015a, p. 4.13-50)

Among other measures, Ordinance No. 695 requires the abatement of "hazardous vegetation," which is defined in the ordinance as vegetation that is flammable and endangers the public safety by creating a fire hazard. The type of abatement can depend on the location, terrain, and vegetation present, but typically includes the mowing or discing (plowing up) of vegetation, such as seasonal and recurrent weeds, stubble, brush, dry leaves, and tumbleweeds. Abatement is generally required along roadways and habitable structures either on or adjacent to the property. (Riverside County, 2015a, pp. 4.13-50 to 4.13-51)

Prior to development, Riverside County requires a development within a high fire hazard area (SRA or Very High FHSZ Local Responsibility Area [LRA]) to design and implement fuel modification programs for the interface between developed and natural areas within and adjacent to the proposed project area. Such fuel modification plans shall be subject to approval by the Riverside County Fire Department (RCFD). The fuel modification programs shall be achieved through graduated transition from native vegetation to irrigated landscape. The program shall also establish parameters for the percent, age, extent, and nature of native plant removal necessary to achieve Riverside County fire prevention standards to protect human lives and property, while preserving as much natural habitat as practicable. (Riverside County, 2015a, p. 4.13-51)

3. Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan

In April 2023 the County of Riverside Emergency Management Department (EMD) published a Multi-Jurisdictional LHMP for the purposes of identifying the County's hazards, reviewing and assessing past disaster occurrences, estimating the probability of future occurrences, and setting goals to reduce or eliminate potential risks to people and property from natural and human-caused hazards, including wildfire. Regarding the topic of Wildland Fire, the LHMP recognizes that wildfire poses a significant risk to the people of

California and their homes, and the most significant risk is predominantly associated with wildland-urban interface (WUI) areas. WUI is a general term that applies to development interspersed within or adjacent to landscapes that support wildland fire. The LHMP includes a set of fire hazard strategies (Strategies 4.1 through 4.26) recommended for implementation. (Riverside EMD, 2023)

4. Riverside County Ordinance No. 457

Every three years, Riverside County's Building and Fire Codes are adapted from the California Building Standards Code (CCR Title 24), which includes both building and fire codes. These codes establish site-specific investigation requirements, construction standards and inspection procedures to ensure that development authorized by the County of Riverside does not pose a threat to the health, safety or welfare of the public. The California Building Standards Code contains minimum baseline standards to guard against unsafe development. This ordinance also adopts, in some cases with modification to a stricter standard, a number of California State's Title 24 codes (fire, building, plumbing, electrical, etc.). The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing these codes. Riverside County Ordinance No. 457 (Building Codes and Fees Ordinance) regulates grading, buildings and structures within Riverside County. (Riverside County, 2015a, p. 4.12-35)

4.21.3 Basis for Determining Significance

Section L of Appendix G to the State CEQA Guidelines addresses typical adverse effects due to wildfire hazards, and includes the following threshold questions to evaluate the Project's impacts due to wildfire hazards (OPR, 2018a).

- *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations for a wildfire or the uncontrolled spread of a wildfire?*
- *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associate3d 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?*
- *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

Significance thresholds are set forth in Riverside County's Environmental Assessment Checklist, are derived from Section L of Appendix G to the State CEQA Guidelines (listed above), and state that the proposed Project would have a significant impact due to wildfires if construction and/or operation of the Project would:

a. *If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, substantially impair an adopted emergency response plan or emergency evacuation plan;*

b. *If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, 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. *If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;*

d. *If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, 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; or*

e. *If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.*

The significance thresholds set forth in Riverside County's standard Environmental Assessment Checklist were used to evaluate the significance of the proposed Project's impacts due to wildfire hazards.

4.21.4 METHODOLOGY

A. *Fire Prediction Modeling*

Firesafe used a computer software program titled "BehavePlus Fire Modeling System 6.0.0" to predict the level of wildfire intensity for a fire approaching the Project site. BehavePlus, is a fire behavior prediction and fuel modeling system and is one of the most accurate methods for predicting wildland fire behavior. The BehavePlus fire behavior computer modeling system is utilized by wildland fire experts nationwide. Vegetative fuels are recognized as fuel models within the BehavePlus program. The fuel models in the computer program are also referenced from the book titled, "*Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model.*" The fuel models were designed to aid in determining fuel types and are used in calculating and estimating fire behavior. Firesafe used BehavePlus to measure the intensity of a fire moving toward the Project site.

The fire model describes the fire behavior only within the flaming front of the fire. The primary moving force in the fire is dead fuel less than ¼" in diameter. These are the finest fuels that carry the fire. Fuels larger than ¼" contribute to fire intensity but not necessarily to fire spread as much as the fine fuels. The BehavePlus fire model describes a wildfire spreading through surface fuels, which are burnable materials within 6' of the ground and contiguous to the ground.

1. Wildland Interface Fuel Types

For the purposes of modeling, the following fuel models were used:

- **Model GR1 (101)** Dry Climate Grass is short, patchy, and possibly heavily grazed. Spread rate moderate; flame length low. Dynamic. Moisture of extinction is 15%. Fuel bed depth is 0.4 feet.
- **Model GR2 (102)** Dry Climate - Moderately coarse continuous grass, average depth about 1 foot. Spread rate high; flame length moderate. Dynamic. Moisture of extinction is 15%. Fuel bed depth is 1.0 feet.
- **Model GS1 (121)** Dry Climate - Shrubs are about 1-foot high, low grass load. Spread rate moderate; flame length low. Dynamic. Moisture of extinction is 15%. Fuel bed depth is 0.9 feet.
- **Model GS2 (122)** Dry Climate - Shrubs are 1 to 3 feet high, moderate grass load. Spread rate high; flame length moderate. Dynamic. Moisture of extinction is 15%. Fuel bed depth is 1.5 feet.
- Fuel **Model SH5 (145)** Dry Climate - Heavy shrub load, depth 4 to 6 feet. Spread rate very high; flame length very high. Moisture of extinction is 15%. Fuel bed depth is 6.0 feet.
- Fuel **Model TL3 (183)** Fuelbed does not include coarse fuels. Moderate load conifer litter. Spread rate very low; flame length low. Moisture of extinction is 20%. Fuel bed depth is 0.3 feet.
- **Model TL6 (186)** Fuelbed not recently burned. Fuelbed composed of broadleaf (hardwood) litter. Moderate load, less compact. Spread rate moderate; flame length low. Moisture of extinction is 25%. Fuel bed depth is 0.3 feet.

In addition to the models from the Landfire database, one custom Southern California fuel model was also considered in the modeling:

- **Model SCAL18** is a southern California-specific model for coastal sage scrub and northern mixed chaparral with an average fuel depth of 3 feet. This has been used in place of the SH7 (147) as a more specific model in the worst-case scenario.

Projecting winds onto the topography has been accomplished using Wind Ninja software, downloaded from the US Forest Service site (Missoula Fire Sciences Laboratory at the Rocky Mountain Research Station (RMRS) within the Fire, Fuel, and Smoke Science (FFS) Program). Version 3.8.1 has been used for the Project's FBR.

4.21.5 IMPACT ANALYSIS

Threshold a.: ***If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?***

According to mapping information available from the State Board of Forestry and Fire Protection, (BFFP) the Project site is located fully within a State Responsibility Area (SRA) (Cal Fire, 2023). In April 2023, the Riverside County Emergency Management Department (EMD) published a Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). The purpose of the LHMP is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and human-caused hazards. The LHMP describes the County's plans for a variety of potential hazards, ranging from wildfires to tornados. However, the LHMP does not identify any emergency management facilities on the Project site, does not identify any specific evacuation routes within the Project area, and does not identify any policies or requirements specific to the Project site or surrounding areas. Rather, the LHMP provides a series of policies to be enacted by the various agencies and jurisdictions within the County in the event of emergency situations. As noted by the LHMP, "[t]here has been no development within Riverside County unincorporated areas that have increased hazard risk or vulnerability since the previous plan was adopted in 2018" (Riverside EMD, 2023, p. 49). Therefore, it can be concluded that developments within Riverside County that adhere to the applicable provisions of County ordinances, including design measures related to emergency access, would not result in a conflict with the LHMP.

The proposed Project would be required to comply with all applicable provisions of County policies and ordinances related to public safety, including but not limited to Ordinance No. 457, which establishes the County's building and fire protection regulations and includes measures requiring the provision of adequate emergency access and other measures to address fire hazard safety. During construction and long-term operation of the Project, adequate emergency access for emergency vehicles would be required to be maintained along public streets that abut the Project site including along Street A (both on- and off-site portions), internal roadways, and Travertine Drive. Furthermore, implementation of the Project has been determined by the Project's Traffic Analysis report (refer to *Technical Appendix M1*) to not cause or significantly contribute to traffic congestion that would adversely affect traffic operations in the local area. As part of the County's discretionary review process, Riverside County staff reviewed the Project's application materials to ensure that appropriate emergency ingress and egress would be available to and from the Project site inclusive of the individual warehouse and public park components of the Project and determined that the Project's design provides adequate ingress and egress for emergency vehicles. Moreover, the Project's implementation includes planned improvements to Street A (both on and off site), internal roadways, and Travertine Drive, which would help improve access in the local area. For example, the Project would provide a new roadway connection between Travertine Drive to the northeast and El Sobrante Road to the south, thereby providing area residents with an additional local evaluation route. Furthermore, the LHMP does not identify any emergency management facilities on the Project site, does not identify any specific evacuation routes within the Project area, and does not identify any policies or requirements specific to the Project site or

surrounding areas. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and impacts would be less than significant.

Threshold b.:	***If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, 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?***
Threshold e.:	***If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?***

As previously noted, the Project site is located fully within a State Responsibility Area (SRA) (Cal Fire, 2023). Additionally, and as previously noted, the entire Project site is within a Fire Hazard Severity Zone. The northern portion of the Project site is classified as having a "Very High" susceptibility to wildland fire hazards, the central portion of the Project site is classified as having a "High" susceptibility to wildland fire hazards, and the southern portion of the Project site is classified as having a "Moderate" susceptibility to wildland fire hazards. (RCIT, n.d.). In order to address the Project's potential exposure to wildfire hazards, a Fuel Modification Plan has been included as part of TTM 38927, which previously was depicted on EIR Figure 3-7, *Conceptual Fuel Modification Plan*, and previously was described in detail in EIR subsection 3.5.3.D, which also includes conceptual illustrations of the typical FMZs proposed for most residential lots within the proposed development. As discussed in EIR subsection 3.5.3.D, most lots within the Project would be subject to compliance with the Fuel Modification Zones (FMZs) 0 through 2, while lots where the required minimum 100-foot FMZ width cannot be accommodated would be protected by radiant heat walls proposed between individual lots and on-site riparian areas or off-site areas containing natural (flammable) vegetation.

Based on the results of the Project-specific FBR (EIR *Technical Appendix L*), the modeling determined that flame lengths of approximately 40 feet (39.4 feet) are possible in the Project area under perfect conditions within the fuels which are currently available on the project site. This scenario is possible in small areas on the Project site at the site boundaries and within the riparian area interfaces. Fuels evaluated in the SCAL18 Model[1] exist or are expected to be present in wet years if not abated by discing or other mitigation measures. This fuel (SCAL18) is probable in the riparian areas. Six-foot fuel beds required for the SH5 fuel are not present except at the bottom of the riparian areas and are not expect to be present in the future in any of the other interface areas[2]. (Firesafe, 2024, p. 37)

[1] Model SCAL18 is a southern California-specific model for coastal sage scrub and northern mixed chaparral with an average fuel depth of 3 feet. This has been used in place of the SH7 (147) as a more specific model in the worst-case scenario

[2] Fuel Model SH5 (145) Dry Climate - Heavy shrub load, depth 4 to 6 feet. Spread rate very high; flame length very high. Moisture of extinction is 15%. Fuel bed depth is 6.0 feet.

Provided below is a discussion of potential wildfire hazards associated with lots where the minimum required 100-foot-wide FMZs can be accommodated, followed by a discussion of wildfire hazards for lots where the minimum 100-foot-wide FMZs cannot be achieved.

1. Analysis of Typical Fuel Management Zones

For the majority of the Project, a flanking fire of twelve feet or less is expected at the property line of the lots within the development or at the base of the fuel modification zones or radiant heat walls. However, the fire defense system has been developed to ensure it works in all conditions. For this reason, FMZs were used in all areas where the interface has a direct impact on the adjacent structures. The distances vary depending on the adjacent fuels and the topography of the interface. Using a minimum 2x ratio of flame length to separation distance between the structures and the native fuels, a 50-foot zone is more than adequate in some areas, whereas 65-foot or 75-foot is more appropriate in other areas. All areas within this development area (perimeter) would have a fuel modification zone that starts at the edge of the pad. For lots where the minimum 100-foot-wide FMZs can be achieved, defensible space would begin with the structure and move outwards to a distance of 100 feet or the property line in accordance with the Public Resources Code (PRC) Section 4291. Fuel Modification is a part of defensible space. (Firesafe, 2024, p. 38)

Regardless of the modeling, when 100 feet is available to comply with the requirement of the PRC, the prescriptive level of protection should be applied as this provides for an additional level of protection beyond the level of protection provided by meeting the criteria in this report. Therefore, ahd nwith exception of proposed lots that cannot achieve the minimum required 100-foot FMZ (i.e., Lots 1-2, 30-31, 44-45, 58-59, 68, 74-80, 90-104, 133-134, 163-166, and 189), implementation of the Project's proposed Conceptual Fuel Management Plan would ensure that the Project does not exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. For lots that can achieve the minimum required 100-foot FMZs, implementation of the FMZs also would ensure that the Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Accordingly, and with exception of lots that cannot achieve the minimum required 100-foot FMZs (as discussed below), Project impacts due to wildfire hazards would be less than significant. (Firesafe, 2024, p. 38)

2. Alternative Fuel Management

Fuel modification zone distances can be reduced by up to 50% in areas where a radiant heat fence is used as a physical barrier between the wildland and the development, but the overall distances between the native fuels and the structures should not be reduced without specific mitigation to achieve the "same practical effect" as the 100 feet required by the PRC. Lots 1-2, 30-31, 44-45, 58-59, 68, 74-80, 90-104, 133-134, 163-166, and 189 of proposed TTM 38927 would not be able to achieve the required 100-foot FMZ width, either due to distance to the Project boundary and off-site areas containing flammable vegetation, or due to the presence of preserved riparian habitat on site in close proximity to the proposed lots. For these lots, Fuel Modification Zones 0 through 2 shall be implemented to the extent feasible. In order to allow for reduced FMZs for these lots, radiant heat walls would be constructed at the edge of on-site open space areas and at the perimeter of the Project site, as previously depicted on EIR Figure 3-7. (Firesafe, 2024, p. 38)

In all cases where 100 feet of defensible space cannot be provided, the wall shall be placed where the fuels are below or above the structures when in alignment with the Santa Ana winds or the predominant wind (west or southwest; refer to EIR Figure 3-7). The entire perimeter of the area west of the center riparian drainage would be provided with radiant heat walls between the project site and current or future development areas and will achieve a full 100' distance on the riparian side. Within this area, the south and west interfaces would be located along the Project boundary with only defensible space requirements on the lots themselves as this area abuts existing, nonnative lots. On the north interface for this area, a forty-foot-wide onsite buffer shall be provided across the entire interface west of the center drainage. (Firesafe, 2024, p. 38)

All other locations for radiant heat walls would be in the typical configuration shown in Figure 4.21-2, *Alternative FMZs with Radiant Walls Abutting Riparian Open Space*, with a radiant heat wall (consisting of block walls or tempered glass over block walls) on the riparian side of a 40' or wider street with a minimum setback distance from the street on the structure side of 10' (it would be larger in most cases). In all of these locations, the riparian area would be lower in elevation than or level with the adjacent street, and would provide for adequate fire protection for adjacent lots. (Firesafe, 2024, pp. 39-40)

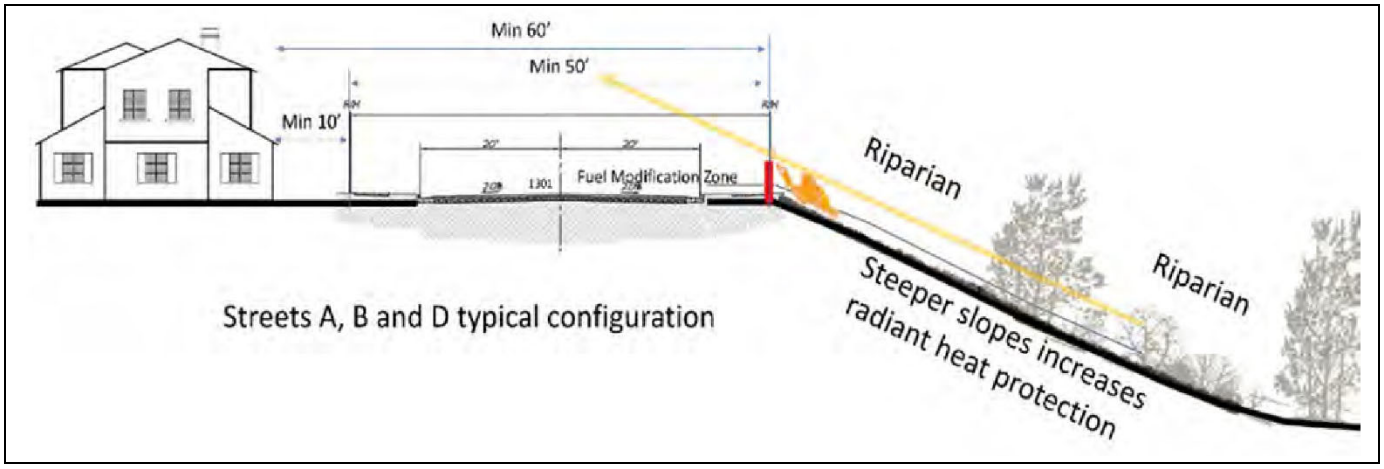


Figure 4.21-2 Alternative FMZs with Radiant Walls Abutting Riparian Open Space

Radiant heat walls such as those proposed for portions of the Project site are incredibly effective when used at the top of the slope in light to moderate fuels. The extreme fire behavior that can be produced by high winds also bends the fire over making it travel more parallel to the ground. The harder the wind, the greater the flame angle will be and the more effective the radiant heat wall can become. Radiant heat walls cannot protect from extremely large flame lengths, radiant heat that is not shielded from impacting the structure, or embers/brands that are produced by upwind fire behavior. When placed strategically and appropriately, radiant heat walls are very effective in protecting structures from direct flame contact radiant heat and provide a "hard stop" on fire progression when utilized with fuel modification zone and fire resistive vegetation. (Firesafe, 2024, p. 40)

The area adjacent to Lot 105 requires a 100' fuel modification zone to the east and 40' to the north. This would require either a change to the riparian boundary or a redesign of the lot configuration to provide for this distance. The northeasterly wind (strong Santa Ana wind potential) aligns with the slope, aspect and fuels to create an interface which does not allow for other mitigations. The 40' buffer on the top of this row of lots

would provide for adequate fire protection because the fuel loading is much less (GS2) and does not produce a flame length greater than 20 feet. (19.2 in GS2 running upslope with the wind). The requirements for this interface are provided below in Figure 4.21-3, *Alternative FMZs for Lots 101-104*.



Figure 4.21-3 Alternative FMZs for Lots 101-104

For the southeast interface within the proposed development (i.e., along the southern and eastern perimeter), two potential scenarios were evaluated in the Project's FBR. First is that an adjacent development that recently received entitlements is constructed prior to development of the Project. Planned landscaping at this interface would provide for fire protection for both the Project and the adjacent development. It would ensure that each completed the required installation and maintenance which would overlap and provide the needed safeguards.

The second scenario is that Willow Creek needs to provide its fuel modification before the adjacent development has completed its grubbing or grading. In this second scenario, and as depicted on EIR Figure 3-7, an off-site fuel management zone of 100 feet would be accommodate off site, with portions consisting of the improved off-site portions of Street A (refer to EIR Figure 3-7).

Accordingly, and based on the foregoing analysis and the analysis presented in the Project's FBR, implementation of the alternative fuel management conditions described above would ensure that future lots within the Project site that cannot meet the minimum required 100-foot FMZ width would not substantially exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or

the uncontrolled spread of a wildfire. The alternative FMZs described above also would ensure that the proposed Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3. Conclusion

Based on the analysis presented above, implementation of the Project's proposed FMZs and alternative FMZs and radiant walls would ensure that the Project does not substantially exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Implementation of the FMZs and alternative FMZs and radiant walls also would ensure that the Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant impact of the proposed Project for which mitigation would be required.

Threshold c.: ***If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, 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?***

As previously noted, the Project site is located fully within a State Responsibility Area (SRA) (Cal Fire, 2023). Additionally, and as previously noted, the entire Project site is within a Fire Hazard Severity Zone. The northern portion of the Project site is classified as having a "Very High" susceptibility to wildland fire hazards, the central portion of the Project site is classified as having a "High" susceptibility to wildland fire hazards, and the southern portion of the Project site is classified as having a "Moderate" susceptibility to wildland fire hazards. (RCIT, n.d.).

As discussed in EIR subsection 3.5.3.D and above under the analysis of Thresholds b. and e. (refer in particular to EIR Figure 3-7), the Project would implement 100-foot-wide FMZs where feasible, and for lots where the minimum 100-foot FMZs cannot be achieved an alternative FMZ would be implemented that includes the construction of radiant walls between the development lots and areas containing flammable vegetation (i.e., between residential lots and areas on-site to preserved as riparian habitat and/or areas off-site that are not under the control of the Project Applicant and where FMZs cannot be maintained).

The above-described fire abatement features are inherent to the Project's construction phase, and impacts associated with Project-related construction activities are evaluated under the appropriate subheadings within this EIR. Where significant impacts are identified, mitigation measures are identified to reduce impacts to below a level of significance. There are no environmental impacts associated with the above-described fuel management features that have not already been evaluated and addressed by this EIR. Moreover, and as discussed under the analysis of Thresholds b. and e., the Project would not exacerbate fire risks in the local area, as the Project's proposed improvements would reduce the risk of wildfires in the local area as compared to existing conditions. Accordingly, the Project would not 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 not already addressed by this EIR, and impacts would therefore be less than significant.

Threshold d.:	***If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the Project 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?***

As previously noted, the Project site is located fully within a State Responsibility Area (SRA) (Cal Fire, 2023). Additionally, and as previously noted, the entire Project site is within a Fire Hazard Severity Zone. The northern portion of the Project site is classified as having a "Very High" susceptibility to wildland fire hazards, the central portion of the Project site is classified as having a "High" susceptibility to wildland fire hazards, and the southern portion of the Project site is classified as having a "Moderate" susceptibility to wildland fire hazards. (RCIT, n.d.).

As discussed under the analysis of Thresholds b. and e., above, the Project would implement 100-foot-wide FMZs for most residential lots within the development, and would implement alternative FMZs with radiant heat walls for lots where the required 100-foot-wide FMZs cannot be achieved. Implementation of the fuel management measures proposed as part of the Project would reduce the risk of wildfire at this site and would improve the ability of firefighters to fight fires on the properties and protect property and neighboring resources, irrespective of the cause or location of ignition. Although during extreme fire conditions there still would remain a potential for wildland fires to affect future buildings on site, implementation of the required enhanced construction features provided by the applicable building codes and the fuel modification requirements described in EIR subsection 3.5.3.D would reduce the site's vulnerability to wildfire to less-than-significant levels.

Based on the site's hydrologic conditions, the Project site would not be subject to flood hazards associated with fire events. With development of the Project as proposed, runoff on the site would be controlled by the Project's proposed drainage system, thereby precluding fire-related flooding impacts downstream. While fires within the on-site riparian areas to be preserved as part of the Project and in off-site open space areas containing natural vegetation would eliminate the existing vegetative cover, the riparian areas all occur at a lower elevation than adjacent development lots. In addition, areas surrounding the Project site exhibit little topographic variation, and there are no prominent hillsides surrounding the Project site that could expose future residential uses on site to , while off-site areas containing flammable vegetation occur at elevations that are downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Therefore, with implementation of the Project's FMZs and alternative FMZs and radiant heat walls, the proposed 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. However, a potentially significant impact could occur if the Project were to fail to implement the required

FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant impact of the proposed Project for which mitigation would be required.

4.21.6 Cumulative Impact Analysis

The cumulative study area for the issue of wildfire includes areas within a five-mile radius of the Project site. This study area is appropriate for analysis because fire events located more than five miles from the Project site are unlikely to affect the Project, and any fires starting in the Project area likely would not affect lands located more than five miles away.

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route, and the Project would not serve as an evacuation route under long-term conditions. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Other cumulative developments similarly would be required to accommodate emergency access and facilities. As such, cumulatively-considerable impacts would be less than significant.

As indicated under the analysis of Thresholds b. and e., the Project is designed to provide appropriate setbacks from undeveloped areas containing natural vegetation that could expose the Project site to wildfire hazards, and the Project would implement radiant walls to protect lots where the minimum 100-foot-wide FMZs cannot be achieved. Assuming implementation of the Project's FMZs, alternative FMZs, and radiant heat walls, there are no components of the proposed Project that would exacerbate wildland fire hazards in the local area, and implementation of the FMZs, alternative FMZs, and radiant heat walls would ensure the Project does not expose people or structures to a significant risk of loss, injury, or death involving wildland fire hazards. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant cumulatively-considerable impact of the proposed Project for which mitigation would be required.

As discussed under the analysis of Threshold c., the Project is designed to include FMZs, alternative FMZs, and radiant heat walls. The Project's fire abatement features are inherent to the Project's construction phase, and impacts associated with Project-related construction activities are evaluated under the appropriate subheadings within this EIR. Where significant cumulatively- considerable impacts are identified, mitigation measures are identified to reduce impacts to below a level of significance. There are no cumulatively-considerable environmental impacts associated with the Project's fuel management features that have not already been evaluated and addressed by this EIR. Accordingly, the Project would not result in cumulatively-considerable impacts associated with the installation or maintenance of 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, and cumulatively-considerable impacts would be less than significant.

As discussed under the analysis of Threshold d., due to the lower elevations associated with the on-site riparian areas and the general lack of topographic variation or prominent hillsides in the local area, with implementation of the Project's FMZs and alternative FMZs and radiant heat walls, the proposed 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. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Other developments in the local area also have the potential to contribute to post-development flooding or landslides due to fire if appropriate fuel abatement measures are not incorporated. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a cumulatively-considerable impact of the proposed Project for which mitigation would be required.

4.21.7 Significance of Impacts Before Mitigation

Threshold a.: Less-than-Significant Impact. The Project site and surrounding areas are not identified as evacuation routes, and the Project has no potential to conflict with the Riverside County LHMP. During construction and at Project build-out, the proposed Project would be required to maintain adequate access for emergency vehicles. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and impacts would be less than significant.

Threshold b. and e.: Significant Direct and Cumulatively-Considerable Impact. Implementation of the Project's proposed FMZs and alternative FMZs and radiant walls would ensure that the Project does not substantially exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Implementation of the FMZs and alternative FMZs and radiant walls also would ensure that the Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant impact of the proposed Project for which mitigation would be required.

Threshold c.: Less-than-Significant Impact. Impacts associated with Project implementation, including implementation of the recommended block wall/radiant heat walls and FMZs, is evaluated within appropriate subject headings throughout this EIR, and in all cases impacts were determined to be less than significant, or would be reduced to less-than-significant levels with the implementation of mitigation measures. Accordingly, the Project would not include the installation or maintenance of infrastructure that may exacerbate fire risk, and the Project would not result in temporary or ongoing impacts to the environment beyond what is already evaluated and disclosed by this EIR. Impacts would be less than significant.

Threshold d.: Significant Direct and Cumulatively-Considerable Impact. With implementation of the Project's FMZs and alternative FMZs and radiant heat walls, the proposed 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. However, a potentially significant impact could occur if the Project were to fail to implement the required FMZs, alternative FMZs, and radiant walls. Accordingly, prior to mitigation, Project impacts due to wildfire hazards would represent a significant impact of the proposed Project for which mitigation would be required.

4.21.8 Applicable Regulations, Design Requirements, and Mitigation

MM 4.21-1 Prior to issuance of building permits, the Riverside County Fire Department (RCFD) and Riverside County Building & Safety Department shall review the proposed building plans to ensure that Fuel Management Zones (FMZs), alternative FMZs, and radiant walls have been incorporated into the site design. The Project's FMZs, alternative FMZs, and radiant walls are described in subsection 3.5.3.D of the Project's Environmental Impact Report ("EIR"; State Clearinghouse No. 2024050835), and are conceptually depicted on Figure 3-7 of the Project's EIR. Prior to final building inspection, the RCFD and/or Building & Safety Department shall ensure that the required FMZs, alternative FMZs, and radiant heat walls have been installed, or that other measures have been incorporated into the development to provide for adequate fire protection in accordance with Riverside County, RCFD, and State of California requirements.

MM 4.21-2 Prior to final building inspection, the Project Applicant shall provide the RCFD and/or Building & Safety Department with copy of the Project Homeowners Association's (HOA) proposed Covenants, Conditions, and Restrictions (CC&Rs). The Project's CC&Rs shall include a provision that identifies future homeowner responsibilities for maintaining FMZs within individual development lots, and shall identify the responsibilities of the HOA with respect to maintenance of FMZs within common areas. A copy of the Project's Fire Behavior Report" (herein, "FBR"), prepared by Firesafe Planning Solutions, dated April 23, 2024, and included as *Technical Appendix L* to the Project's EIR, also shall be made available to all potential homebuyers, and all perspective homebuyers shall be provided with education materials related to fire safety, as identified in Section 9.0 of the Project's FBR.

4.21.9 Significance of Impacts After Mitigation

Thresholds b. and e.: Less-than-Significant Impact with Mitigation Measures Incorporated. Implementation of Mitigation Measures MM 4.21-1 and MM 4.21-2 would ensure that FMZs, alternative FMZs, and radiant heat walls are incorporated into the design of the proposed development. Implementation of the Project's proposed FMZs and alternative FMZs and radiant walls would ensure that the Project does not substantially exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Implementation of the FMZs and alternative FMZs and radiant walls also would ensure that the Project does not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Accordingly, with implementation of the required mitigation, Project impacts would be reduced to less-than-significant levels.

Threshold d.: Less-than-Significant Impact with Mitigation Measures Incorporated. Implementation of Mitigation Measures MM 4.21-1 and MM 4.21-2 would ensure that FMZs, alternative FMZs, and radiant heat walls are incorporated into the design of the proposed development. With implementation of the Project's FMZs and alternative FMZs and radiant heat walls, the proposed 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, and Project impacts would be reduced to less-than-significant levels.

5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The California Environmental Quality Act (CEQA) Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines § 15126[b]). As described in detail in Section 4.0 of this EIR, the proposed Project is anticipated to result in one impact to the environment that cannot be reduced to below a level of significance after the implementation of relevant standard conditions of approval, compliance with applicable laws and regulations, and application of feasible mitigation measures. The significant environmental effect of the proposed Project that cannot be feasibly mitigated is as follows:

- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Buildout of the residential uses proposed as part of the Project would result in a vehicle miles traveled (VMT) per capita that is 39.5% above the County's significance threshold of 15.2 home-based (HB) VMT per capita. As noted by the County Guidelines, Transportation Demand Management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant through use of the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhous Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021 Handbook). For residential land use projects, the 2021 Handbook provides a list of Neighborhood Design measures that reduce VMT. However, the maximum achievable reduction for these measures as noted in the 2021 handbook is limited to 10%. Therefore, even with implementation of all feasible trip reduction measures, including those listed in Mitigation Measure MM 4.18-1, the Project would be unable to reduce its VMT impact to below the impact threshold. It is also recognized that as the Project area and surrounding communities develop as envisioned under the County of Riverside's General Plan, new residential, retail, and other development would be implemented. These actions could collectively alter transportation patterns, improve the region's jobs/housing ratio, reduce VMT, and support implementation of new or alternative TDM measures. There are no means currently, however, to quantify any VMT reductions that could result from such future growth patterns. Accordingly, even with implementation of Mitigation Measure MM 4.18-1, Project impacts due to VMT would remain significant and unavoidable on a direct and cumulatively-considerable basis.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL IMPACTS WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (CEQA Guidelines § 15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project generally would commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any

potential environmental accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources in the form of construction materials and energy resources would be used in the construction of the proposed Project, but development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Construction and operation of the proposed Project would not involve the use of large sums or sources of non-renewable energy. Additionally, the Project is required by law to comply with the California Green Building Standards Code (CALGreen), compliance with which reduces a building operation's energy volume that is produced by fossil fuels. The Project would be subject to regulations to reduce the Project's reliance on non-renewable energy sources. The Project also would be subject to the Energy Independence and Security Act of 2007, which contains provisions designed to increase energy efficiency and availability of renewable energy. The Project also would be subject to California Energy Code, or Title 24, which contains measures to reduce natural gas and electrical demand, thus requiring less non-renewable energy resources. As more fully documented in EIR Subsection 4.6, *Energy*, the Project would avoid the inefficient, wasteful, and unnecessary consumption of energy during Project construction, operation, maintenance, and/or removal. With mandatory compliance to the energy efficiency regulations and mitigation measures, the Project would not involve the use of large sums or sources of non-renewable energy.

EIR Subsection 4.9, *Hazards and Hazardous Materials*, provides an analysis of the proposed Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage. As concluded in the analysis, compliance with federal, State, and local regulation related to hazardous materials would be required of all contractors working on the property during the Project's construction, and the residential uses proposed as part of the Project are not associated with the generation or transport of hazardous materials or substances. As such, construction and long-term operation of the proposed Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

5.3 Growth Inducing Impacts of the Proposed Project

CEQA requires a discussion of the ways in which the proposed Project would be growth inducing. The State CEQA Guidelines identify a project as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (State CEQA Guidelines § 15126.2(d)). New employees and new residential developments represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and including additional economic activity in the area.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environments where population or employment growth

results in increased demand for service and commodity markets responding to the new population of residents or employees. Economic growth would likely take place as a result of the proposed Project's operation as a residential development. The Project's construction-related employees and operational-related residents and employees would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services needs would be marginal, accommodated by existing goods and service providers, and highly unlikely to result in any new physical impacts to the environment. Therefore, while the Project would create economic opportunities caused by introducing new residents to the Project site, this change would not induce substantial new growth in the region.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Southern California Association of Governments (SCAG). Significant growth impacts also could occur if a project provides 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 is some other way.

The area surrounding the Project site primarily is characterized by rural residential uses, with newer single-family residential communities occurring to the northeast and southwest of the Project site. Development of the Project site with residential land uses would not directly induce surrounding properties to develop, because large portions of the area surrounding the Project site already are developed with, are currently being developed with, or already are planned for development with residential uses. Accordingly, the growth-inducing impacts of the Project would be less than significant. The Project is not expected to induce growth of land uses changes on the other parcels in the vicinity, as other lands surrounding the site are either already developed or planned to be developed consistent with their General Plan land use designations.

Furthermore, the proposed Project's improvements to the public infrastructure, including roads, drainage infrastructure, and other utility improvements are consistent with Riverside County's General Plan and would not indirectly induce substantial and unplanned population growth in the local area.

5.4 Effects Founds Not To Be Significant During The Initial Study Process

An Initial Study was not prepared and was not required for the Project. In accordance with CEQA requirements, this Project EIR evaluates all of the environmental topics contained in Appendix G to the State CEQA Guidelines, as well as the supplemental topics and thresholds of significance included in Riverside County's Environmental Assessment Checklist.

6.0 ALTERNATIVES

CEQA Guidelines § 15126.6(a) describes the scope of analysis that is required when evaluating alternatives to proposed projects, as follows:

> *"An EIR shall 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. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."*

As discussed in EIR Section 4.0, *Environmental Analysis*, the proposed Project would result in one significant adverse environmental effect that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impact is as follows:

- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Buildout of the residential uses proposed as part of the Project would result in a vehicle miles traveled (VMT) per capita that is 39.5% above the County's significance threshold of 15.2 home-based (HB) VMT per capita. As noted by the County Guidelines, Transportation Demand Management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant through use of the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhous Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021 Handbook). For residential land use projects, the 2021 Handbook provides a list of Neighborhood Design measures that reduce VMT. However, the maximum achievable reduction for these measures as noted in the 2021 handbook is limited to 10%. Therefore, even with implementation of all feasible trip reduction measures, including those listed in Mitigation Measure MM 4.18-1, the Project would be unable to reduce its VMT impact to below the impact threshold. It is also recognized that as the Project area and surrounding communities develop as envisioned under the County of Riverside's General Plan, new residential, retail, and other development would be implemented. These actions could collectively alter transportation patterns, improve the region's jobs/housing ratio, reduce VMT, and support implementation of new or alternative TDM measures. There are no means currently, however, to quantify any VMT reductions that could result from such future growth patterns. Accordingly, even with implementation of Mitigation Measure MM 4.18-1, Project impacts due to VMT would remain significant and unavoidable on a direct and cumulatively-considerable basis.

6.1 ALTERNATIVES UNDER CONSIDERATION

State CEQA Guidelines § 15126.6(e) requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., "no project" alternative). For development projects that include a revision to an existing land use plan, the "no project" alternative is considered to be the continuation of the existing land use plan into the future. For projects other than a land use plan, such as a development project on an identifiable property, the "no project" alternative is considered to be a circumstance under which the project does not proceed (CEQA Guidelines § 15126.6(e)(3)(A-B). For the alternatives analysis in this EIR, the potential scenario where the Project site remains in its current undeveloped condition is considered to be the "No Development Alternative (NDA)," while the potential scenario where the existing General Plan land use plan is implemented is considered to be the "No Project Alternative."

The following scenarios are identified by the County of Riverside as potential alternatives to implementation of the proposed Project. The Reduced Project Alternative (RPA) is considered the Environmentally Superior Alternative pursuant to State CEQA Guidelines § 15126.6.

6.1.1 NO DEVELOPMENT ALTERNATIVE (NDA)

The No Development Alternative (NDA) considers no development on the Project site beyond that which occurs under existing conditions. As such, the Project site would continue to consist of 111.6 acres of partially-disturbed undeveloped lands that are routinely disced for fire abatement purposes. Under the NDA, no improvements would be made to the Project site and none of the Project's roadway, utility, or other infrastructure improvements would occur. This alternative was selected by the lead agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

6.1.2 NO PROJECT ALTERNATIVE (NPA)

The No Project Alternative (NPA) assumes development of the Project site in accordance with the site's existing General Plan and land uses, and based on the mid-point densities of the site's existing land use designations as specified by Appendix E to the Riverside County General Plan. Thus, the NPA would not result in the reconfiguration of the Project site's existing RC-VLDR and RC-LDR land use designations. As summarized in Table 6-1, *No Project Alternative*, based on the site's existing General Plan land use designations and the mid-point densities specified in Table E-1 of Appendix E to the General Plan, the NPA would allow for development of the 111.6-acre property with up to 162 dwelling units. In addition, it is assumed that a 1.6-acre park would be constructed on site to meet the recreational needs of future residents under the NPA. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site's existing General Plan and Lake Mathews/Woodcrest Area Plan (LMWAP) land use designations.

Table 6-1 No Project Alternative

General Plan Land Use Designation	On-Site Acreage	Mid-Point Density (du/ac)	Dwelling Units
RC-VLDR	6.7	0.75	5
RC-LDR	104.9	1.5	157
		Total:	**162**

1. Notes: du/ac = dwelling units per acre; RC-VLDR = Rural Community – Very Low Density Residential; RC-LDR = Rural Community – Low Density Residential.

(Riverside County, 2021a, Appendix E, Table E-1)

6.1.3 Reduced Project Alternative (RPA)

The Reduced Project Alternative (RPA) considers development of the Project site with residential uses similar to the proposed Project, but with minimum one-acre lots sizes and at an overall average density of 0.75 dwelling units per acre (du/ac), consistent with the mid-point density identified by Appendix E to the General Plan for the RC-VLDR land use designation. Accordingly, under the RPA, the Project site would be developed with 83 dwelling units on minimum one-acre lot sizes, along with one park site on approximately 0.9-acre. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would result in developing the Project site with less residential density, which would serve to reduce the total amount of Vehicle Miles Traveled (VMT) generated by the Project site in comparison to the proposed Project.

6.2 Alternatives Considered and Rejected

An EIR An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines § 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines § 15126.6(f)(1) notes:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, and/or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered buy rejected are described below.

6.2.1 Alternative Sites

CEQA does not require that an analysis of alternative sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site then this alternative should be considered and analyzed in the EIR. In making the decision to include or exclude analysis of an alternative site, the *"key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR"* (CEQA Guidelines § 15126.6(f) (2)).

Based on a review of aerial photography, the Riverside County General Plan land use map and a list of approved/pending development proposals within Riverside County and nearby jurisdictions, there are no other available, undeveloped properties of similar size (i.e., approximately 111.6 acres) that are zoned for and adjacent to other properties designated for large-lot residential development and that would reduce or avoid the Project's significant and unavoidable impacts. For example, a different site location would merely shift the Project's unavoidable impacts due to VMTs to a different location. Accordingly, Riverside County finds that evaluation of an alternative site location is not required for the Project because alternative site locations would not reduce or avoid the Project's significant environmental effects.

6.3 Alternative Analysis

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Project, as detailed in EIR Subsection 4.0, *Environmental Analysis*. A conclusion is provided for each impact as to whether the alternative results in one of the following: (1) reduction or elimination of the proposed Project's impact, (2) a greater impact than would occur under the proposed Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the proposed Project's impacts. Table 6-2, *Alternatives to the Proposed Project – Comparison of Environmental Impacts*, located at the end of this Section, compares the environmental hazard and resource impacts of the alternatives with those of the proposed Project and identified the ability of the alternative to meet the basic objectives of the Project. As described in EIR Subsection 3.4, the underlying purpose of the proposed Project is to develop a low-density residential community that provides recreational and open space areas and minimizes impacts to the Victoria Grove community. The following is a list of specific objectives that the proposed Project intends to achieve.

A. To efficiently develop an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages.

B. To develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration.

C. To increase the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities.

D. To assist Riverside County in meeting its Regional Housing Needs Assessment (RHNA) allocation for Above Moderate income units by developing a property with low density residential uses.

E. To provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.

6.3.1 No Development Alternative (NDA)

The No Development Alternative (NDA) considers no development on the Project site beyond that which occurs under existing conditions. As such, the Project site would continue to consist of 111.6 acres of partially-disturbed undeveloped lands that are routinely disced for fire abatement purposes. Under the NDA, no improvements would be made to the Project site and none of the Project's roadway, utility, or other infrastructure improvements would occur. This alternative was selected by the lead agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

A. Aesthetics

The NDA considers no development or disturbance on the Project site beyond that which occurs under existing conditions. As such, the 111.6-acre site would remain undeveloped and would continue to be subject to routine discing for fire abatement purposes. Thus, the Project's less-than-significant impacts to scenic vistas would be avoided under this Alternative. Although the Project is not expected to result in significant impacts due to the degradation of the existing visual character or quality of the site or its surroundings, implementation of the NDA would retain the site's existing visual character and impacts would be reduced in comparison to the Project. The Project site is located outside of areas subject to Ordinance No. 655; thus, no impacts due to a conflict with Ordinance No 655 would occur with implementation of the proposed Project or NDA, and impacts would be similar. The Project site is not prominently visible from any officially-designated or eligible State or County scenic highways; thus, no impacts to scenic highway corridors would occur and impacts would be similar to the proposed Project. Although the Project would result in less-than-significant light and glare impacts, no new lighting sources or sources of potential glare would occur on site under the NDA: thus, impacts associated with light and glare would be reduced in comparison to the proposed Project.

B. Agriculture and Forestry Resources

Under the NDA, no new development would occur on site. Under existing conditions, the 111.6-acre Project site is classified by the entire Project site is classified by the FMMP as containing "Farmland of Local Importance," which is not considered "Farmland" as that term is defined by CEQA, the County, or the CDC. Accordingly, no impacts to Farmland would occur with implementation of the Project or the NDA, and the level of impact would be the same. Neither the Project nor the NDA would conflict with the site's existing agricultural zoning classification of A-1-10 (with approval of the Project's CZ 2400026), and the Project and NDA would not conflict with existing agricultural uses on site. Under existing conditions, the Project stie is not subject to a Williamson Act contract, although the property does comprise a portion of the El Sobrante Agricultural Preserve No. 1. Under the proposed Project, Agricultural Preserve No. 1 would be diminished to

remove the Project site from the boundaries of the agricultural preserve, while under the NDA, there would be no diminishment of Agricultural Preserve No. 1 and the property would remain within Agricultural Preserve No. 1. However, assuming approval of the Project's Agricultural Preserve Diminishment No. 240006 (APD 240006), neither the Project nor the NDA would conflict with lands subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve, although impacts would be slightly reduced under the NDA because the Project site still would remain available for agricultural production. Although the Project would be subject to compliance with Riverside County Ordinance No. 625, because no new development would occur under the NDA, the NDA would avoid the Project's less-than-significant impacts due to a conflict with off-site agricultural zoning on properties located within 300 feet of the Project site. The Project site and surrounding areas are not zoned for forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)). As such, neither the Project nor the NDA would result in impacts to forestry resources, and impacts would be the same.

C. *Air Quality*

Under the NDA, there would be no new construction or development on the Project site. Although both the Project and NDA would be consistent with the SCAQMD AQMP, because no new development would occur on site under the NDA, the NDA would avoid the Project's less-than-significant impacts due to a conflict with the AQMP. In addition, although the Project's construction- and operational-related air quality emissions would be below the applicable SCAQMD regional and localized thresholds, because there would be no development under the NDA there would be no increase in emissions of criteria pollutants. As such, the Project's less-than-significant regional air quality impacts would be completely avoided under the NDA. Additionally, although the proposed Project would result in less-than-significant impacts due to localized air quality emissions, including CO "hot spots," because no new development would occur on site under the NDA, the NDA would result in reduced impacts to sensitive receptors. Implementation of the NDA also would avoid the Project's less-than-significant impacts due to odors.

D. *Biological Resources*

With implementation of the NDA, there would be no new construction or development on the Project site, as such, the NDA would avoid all of the Project's significant but mitigable impacts to biological resources. Specifically, the NDA would avoid the Project's impacts to 2.14 acres of riparian/riverine resources; direct and indirect impacts to the least Bell's vireo; impacts to the burrowing owl; impacts to paniculate tarplant; impacts to special-status bats; impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA); impacts to 1.99 acres of Goodding's willow–red willow riparian woodland; and impacts to 2.14 acres of jurisdictional waters. Neither the Project nor the NDA would result in impacts on local policies or ordinances protecting biological resources, and impacts would be similar.

E. *Cultural Resources*

Under the NDA, there would be no new construction or development on the Project site. The NDA would avoid the Project's less-than-significant impacts (following mitigation) to previously undiscovered surface-level or subsurface historical and pre-historic/archaeological resources that may be encountered during

grading. Additionally, because there would be no new grading on site, the NDA would avoid the Project's less-than-significant impacts (with mitigation) to buried human remains that may be uncovered during site grading activities. Thus, impacts to cultural resources would be reduced under the NDA in comparison to the Project.

F. Energy

Under the NDA, there would be no increase in demand from the Project site for energy resources. As such, the NDA would avoid the Project's less-than-significant impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources. Neither the Project nor the NDA would conflict with a State or local plan for renewable energy or energy efficiency, although impacts would be reduced under the NDA in comparison to the Project because the NDA would not result in an increase in use of energy resources.

G. Geology and Soils

Under the NDA, there would be no new development on the Project site. There are no known faults on or trending towards the Project site; thus, impacts associated with rupture of a known fault would be less than significant under the proposed Project and the NDA and the level of impact would be similar. However, because the Project would involve an increase in the number of residents on site by approximately 688 persons, the Project's less-than-significant impacts (with mitigation) due to strong seismic ground shaking would be avoided under the NDA. Because no new development would occur, the NDA would result in reduced impacts as compared to the Project's less-than-significant impacts (with mitigation) due to liquefaction and dynamic settlement. Additionally, the Project and NDA would both be subject to less-than-significant impacts due to seismic-related ground failure and mudflow hazards. Thus, impacts would be similar. Because there would be no new development on site, the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to cut or fill slopes higher than 10 feet. Neither the Project nor the NDA would result in grading that affects or negates subsurface sewage disposal systems, and neither the Project nor the NDA would require septic tanks or alternative wastewater disposal systems on unsuitable soils; thus, impacts would be less than significant and similar under the NDA and proposed Project. During construction of the proposed Project vegetative cover would be removed, increasing the potential for erosion as compared to the site's existing conditions; thus, the NDA would avoid the Project's less-than-significant erosion impacts during construction. However, for the proposed Project under long-term conditions, the Project site's potential for erosion would be substantially reduced as compared to existing conditions due to the introduction of impervious surfaces and landscaped areas on site; thus, impacts under long-term conditions due to erosion would be increased under the NDA as compared to long-term operations associated with the Project. Lastly, the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to expansive soils.

H. Greenhouse Gas Emissions

Under the NDA, there would be no new construction or development on the Project site. As such, there would be no increase in GHG emissions from the Project site under the NDA. Accordingly, the NDA would completely avoid the Project's less-than-significant impacts (with mitigation) due to GHG emissions. Similarly, the Project's less-than-significant impacts (with mitigation) due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs also would be avoided with implementation of the NDA.

I. Hazards and Hazardous Materials

Under the NDA, there would be no new development on site. The NDA would avoid the Project's less-than-significant impacts due to the creation of a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. There would be no construction activities or changes to operational conditions on site under the NDA; thus, the NDA would result in reduced impacts in comparison to the Project's less-than-significant construction and operational impacts due to hazardous materials. Neither the Project nor the NDA would impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan; thus, impacts under the NDA and proposed Project would be less than significant and the level of impact would be similar. Although neither the Project nor the NDA would emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, because there would be no change in the site's existing conditions impacts to nearby schools would be reduced in comparison to the Project's less-than-significant impacts. The Project site is not identified on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the Project or NDA, and the level of impact would be similar. In addition, the Project site is not located within two miles of a public or private airport and is not located within an airport land use plan; thus, no impacts due to airport-related safety hazards would occur under the NDA or proposed Project, and the level of impact would be similar.

J. Hydrology and Water Quality

Under the NDA, there would be no new development on site. The NDA would result in reduced impacts to water quality as compared to the proposed Project's less-than-significant water quality impacts during construction activities. While the risk of erosion would increase during construction of the proposed Project, under long-term operating conditions the Project would result in the introduction of impervious surfaces and landscaped areas; thus, long-term operational erosion impacts would be increased under the NDA due to the lack of impervious surfaces and vegetative cover on portions of the site. While the Project would result in less-than-significant impacts due to groundwater recharge, impacts to groundwater recharge would be reduced under the NDA because there would be no new impervious surfaces on site. Although the Project would result in less-than-significant impacts to the site's existing drainage pattern, because there would be no changes to the site's drainage patterns under the NDA impacts would be reduced in comparison to the proposed Project. Similarly, although the Project would not exceed the capacity of any existing or planned stormwater drainage systems, because there would be no changes to site drainage under the NDA impacts would be reduced in comparison to the Project. The portions of the Project site proposed for development as part of the Project are not subject to flood hazards; thus, impacts due to flooding would be less than significant and would be similar under the Project and NDA. The Project site is not subject to inundation from flood hazards or tsunamis; thus, impacts would be less than significant and would be similar under the Project and NDA. Although the Project site is not subject to inundation due to seiches, because no new development would occur on site under the NDA, the NDA would avoid the Project's less-than-significant impacts due to inundation from a failure at Dike 1 (Saddle Dam 1) at Lake Mathews.

K. Land Use and Planning

The NDA would be consistent with the existing land use designations applied to the property by the Riverside County General Plan and the LMWAP. Because the proposed Project proposes GPA No. 240072 to reconfigure the land use designations assigned to the site, impacts would be slightly decreased compared to the proposed Project. Neither the Project nor the NDA would conflict with the SCAG 2024-2050 RTP/SCS. Additionally, neither the Project nor the NDA would disrupt or divide the physical arrangement of an established community; thus, impacts would be less than significant, and the level of impact would be similar.

L. Mineral Resources

The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, no impacts to mineral resources would occur under the Project or the NDA, and the level of impact would be similar. Additionally, neither the Project nor the NDA would represent an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and the NDA and Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. No impacts would occur, and the level of impact would be similar.

M. Noise

The Project's proposed residential uses would not be exposed to public and private airport-related noise levels exceeding 60 dBA CNEL; therefore, both the Project and the NDA would result in similar less-than-significant impacts due to airport-related noise. The NDA also would avoid the Project's less-than-significant impacts (following mitigation) due to construction and long-term operational noise levels and would avoid the Project's less-than-significant impacts due to off-site traffic-related noise levels. Additionally, the NDA would avoid the Project's less-than-significant impacts due construction-related vibration, including vibration related to blasting and rock crushing activities.

N. Paleontological Resources

Under the NDA, there would be no new construction or development on site. Therefore, the NDA would avoid the Project's less-than-significant construction-related impacts (after mitigation) to paleontological resources that may be buried beneath the site's surface.

O. Population and Housing

There would be no new development under the NDA. Under existing conditions, there are no existing residential homes or residents on the Project site; thus, neither the Project nor the NDA would displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and the level of impact would be the same. The Project would result in the development of 206 residential homes on site, while no new development would occur under the NDA; thus, no impact due to the creation of a demand for additional housing (including housing affordable to households earning 80% or less of the County's median income) would occur under the Project or the NDA, and the level of impact would be the same. Although the Project would result in less-than-significant impacts due to substantial unplanned

population growth, the NDA would not result in any new development on site; thus, impacts under the NDA would be reduced in comparison to the proposed Project.

P. Public Services

There would be no new development on site under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts to fire protection, police protection, school services, library services, and health services.

Q. Recreation

The NDA would not result in any new development on site and thus would not generate any increase in demand for recreational resources, nor would any recreational resources be constructed on site under the NDA. Although the Project would accommodate sufficient parkland to accommodate future residents of the Project through on-site trails and the one proposed park site, the NDA would avoid the Project's physical impacts due to construction of recreational resources; thus, impacts to recreation would be reduced under the NDA in comparison to the proposed Project. Additionally, the NDA would avoid the Project's less-than-significant impacts due to increased use of existing recreational resources and due to Quimby fees.

R. Transportation

Under the NDA, there would be no new development on site and thus there would be no increase in traffic generated by the site. As such, the NDA would avoid the Project's significant and unavoidable impacts due to VMT. Additionally, due to the lack of improvements, the NDA would avoid the Project's less-than-significant impacts due to increased hazards due to a geometric design feature or incompatible uses. The NDA also would avoid the Project's less-than-significant impacts due to the need for new or altered maintenance of roads. The NDA would not involve a construction phase, and thus would avoid the Project's less-than-significant impacts to circulation during construction activities on site and during improvement plans affecting public roadways. The NDA would not result in any impacts due to emergency access or access to nearby uses; thus, the NDA would avoid the Project's less-than-significant impacts to emergency access during construction activities. No new bike lanes or trails would be constructed under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts due to trail construction.

S. Tribal Cultural Resources

Under the NDA, there would be no new construction or development on the Project site. The NDA would avoid the Project's less-than-significant impacts (following mitigation) to previously undiscovered surface-level or subsurface tribal cultural resources that may be encountered during grading.

T. Utilities and Service Systems

Under the NDA, there would be no increased demand for water, wastewater treatment, or stormwater drainage; thus, the NDA would avoid the Project's less-than-significant impacts due to the construction of such facilities and due to the provision of water or wastewater treatment services. There would be no increase in demand for

water resources under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts to water supply. Additionally, the NDA would avoid the Project's less-than-significant impacts due to the construction of wastewater conveyance facilities on and off site, and would avoid the Project's less-than-significant impacts to wastewater treatment capacity. There would be no increase in solid waste generated on site; thus, the NDA would avoid the Project's less-than-significant impacts due to solid waste. There are no components of the NDA or the proposed Project that would conflict with federal, State, and local management and reduction statutes and regulations related to solid wastes, including the County Integrated Waste Management Plan (CIWMP); thus, impacts would be less than significant and the level of impact would be similar. The NDA also would avoid the Project's less-than-significant impacts due to the construction of facilities for electricity, natural gas, communication systems, and street lighting, or due to increased roadway maintenance.

U. Wildfire

Under the NDA, there would be no new development on site. Although impacts due to wildfire would be less than significant under the proposed Project with implementation of Fuel Management Zones (FMZs) and radiant walls, the NDA would result in reduced impacts due to wildfires because the NDA would not involve the construction of any new structures on site. However, under the NDA the Project site would remain in its existing undeveloped condition, and the natural vegetation that occurs on site under existing conditions could serve as potential fuel for future wildfires in the local area; thus, long-term impacts due to wildland fire hazards associated with existing vegetation at the site would be increased under the NDA as compared to the proposed Project.

V. Conclusion

Implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Almost all effects of the proposed Project would be avoided or lessened by the selection of the NDA, although a few new impacts, such as erosion and fire hazards, would be increased under this alternative. Because this alternative would avoid most of the Project's impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the Reduced Project Alternative (RPA), as discussed in subsection 6.3.3, is identified as the environmentally superior alternative.

The NDA would fail to meet all of the Project's objectives. Specifically, the NDA would not efficiently develop an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages. The NDA would fail to develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration. The NDA also would not increase the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities. Additionally, the NDA would not assist Riverside County in meeting its Regional Housing Needs Assessment (RHNA)

allocation for Above Moderate income units by developing a property with low density residential uses. Furthermore, the NDA would not provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.

6.3.2 No Project Alternative (NPA)

The No Project Alternative (NPA) assumes development of the Project site in accordance with the site's existing General Plan and land uses, and based on the mid-point densities of the site's existing land use designations as specified by Appendix E to the Riverside County General Plan. Thus, the NPA would not result in the reconfiguration of the Project site's existing RC-VLDR and RC-LDR land use designations. As previously summarized in Table 6-1, based on the site's existing General Plan land use designations and the mid-point densities specified in Table E-1 of Appendix E to the General Plan, the NPA would allow for development of the 111.6-acre property with up to 162 dwelling units. In addition, it is assumed that a 1.6-acre park would be constructed on site to meet the recreational needs of future residents under the NPA. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would allow for buildout of the Project site in accordance with the site's existing General Plan and LMWAP land use designations.

A. Aesthetics

The Project site is not located within the viewshed of any officially-designated or eligible State or County scenic highways. Thus, no impacts to scenic corridors would occur under the Project or NPA, and the level of impact would be similar. As with the proposed Project, the NPA would not substantially damage scenic resources; obstruct any prominent scenic vista or view open to the public; or conflict with applicable zoning and other regulations governing scenic quality, and the level of impact would be similar. Although the Project would not result in the creation of an aesthetically offensive site open to public view, because the NPA would result in less development on site the NPA would result in reduced impacts to aesthetics as compared to the proposed Project. Both the Project and NPA would be subject to compliance with Riverside County Ordinance Nos. 348 and 915, as well as the development standards and design guidelines proposed or approved, which would ensure that light and glare impacts would be less than significant under both the Project and the NPA, and the level of impact would be similar.

B. Agriculture and Forestry Resources

Under existing conditions, the entire 111.6-acre Project site is classified by the FMMP as containing "Farmland of Local Importance," which is not considered "Farmland" as that term is defined by CEQA, the County, or the CDC. Accordingly, neither the Project nor the NPA would convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance to non-agricultural use; therefore, no impact to Farmland would occur under either the Project and NPA, and the level of impact would be the same. Both the Project and the NPA would require approval of a change of zone in order to ensure there would be no conflict with existing agricultural zoning; thus, with approval of a change of zone, impacts due to a conflict with agricultural zoning would be less than significant under both the Project and NPA, and the level of impact would be the same. No agricultural uses occur on site under existing conditions; thus, neither the Project nor the NPA would conflict with existing agricultural uses, and the level of impact would be the same. Although the Project site is not

subject to any Williamson Act contracts and impacts due to a conflict with a Williamson Act contract would not occur under either the Project or the NPA, both the Project and the NPA would require approval of an Agricultural Preserve Diminishment to remove the Project site from the El Sobrante Agricultural Preserve No. 1; thus, with approval of an Agricultural Preserve Diminishment, impacts due to a conflict with an Agricultural Preserve would be less than significant under the Project and NPA, and the level of impact would be the same. Both the Project and the NPA would be subject to compliance with Riverside County Ordinance No. 625; therefore, both the Project and the NPA would result in less-than-significant impacts due to a conflict with off-site agricultural zoning on properties located within 300 feet of the site, and impacts would be similar. The Project site and surrounding areas are not zoned for forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)). As such, neither the Project nor the NPA would result in impacts to forestry resources, and impacts would be the same.

C. *Air Quality*

Although the Project would require approval of General Plan Amendment No 240072 (GPA 240072) to reconfigure the site's existing RC-VLDR and RC-LDR General Plan land use designations, the total acreage of the RC-VLDR and RC-LDR land use designations on site would remain unchanged at 6.7 acres and 104.9 acres, respectively. Thus, neither the Project nor the NPA would exceed the growth assumptions of the SCAQMD AQMP. The number of single-family dwelling units on-site would decrease from 206 under the proposed Project to 162 under the NPA. Because the land use intensity would be decreased, the NPA would result in reduced air quality emissions as compared to the proposed Project, although air quality impacts would be less than significant under both the Project and NPA. Additionally, the NPA would result in reduced impacts due to a cumulatively considerable net increase of criteria pollutants. Neither the Project nor the NPA would result in the exposure of sensitive receptors within one mile of the Project site to substantial pollutant concentrations; thus, no impact would occur and the level of impact would be similar. Furthermore, neither the Project nor the NPA would result in other emissions, such as those leading to odors, affecting sensitive receptors, and the level of impact would be similar.

D. *Biological Resources*

Under the NPA, the overall intensity of development on site would be similar to the proposed Project, except that under the NPA a portion of the areas designated for RC-LDR land uses occur within the existing drainage in the eastern portion of the property. Thus, it is anticipated that buildout of the NPA would result in an increase in impacts to riparian/riverine resources in comparison to the proposed Project, including an increase in impacts to areas containing Goodding's willow–red willow riparian woodland. All other impacts to biological resources would be similar to the Project. Specifically, both the Project and the NPA would result in significant but mitigable direct and indirect impacts to the least Bell's vireo; impacts to the burrowing owl; impacts to paniculate tarplant; impacts to special-status bats; and impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA). Thus, with exception of impacts to jurisdictional resources and riparian/riverine resources, which would increase under the NPA, all other impacts to biological resources would be similar to the proposed Project.

E. Cultural Resources

Although no significant historical or archaeological resources are known to be present on the Project site, both the Project and the NPA would have the potential to result in impacts to previously-undiscovered historic or archaeological resources that may be buried beneath the Project site's surface. Likewise, both the Project and the NPA have the potential to result in impacts to previously-undiscovered human remains that may be buried beneath the site's surface. Although both the Project and NPA would be subject to mitigation to reduce impacts to subsurface historical and archaeological resources and to address the potential for discovery of human remains, and although impacts would be less than significant following mitigation under both the Project and NPA, because the NPA would require less grading than the proposed Project, potential impacts to subsurface historical resources, archaeological resources, and human remains would be slightly decreased under the NPA in comparison to the Project.

F. Energy

Neither the Project nor the NPA would result in the wasteful, inefficient, or unnecessary consumption of energy resources during construction activities. Accordingly, construction-related impacts due to energy consumption would be less than significant under the Project and NPA, although the level of impact would be slightly reduced under the NPA due to the construction of fewer dwelling units. Due to the decrease in single-family residential units, the NPA would generate a demand for electricity that is approximately 21.4% less than the proposed Project's electricity demand, and also would generate approximately 21.4% less demand for natural gas than the proposed Project. Therefore, the NPA would result in reduced impacts in comparison to the proposed Project. The Project and the NPA would not conflict with any applicable State or local plans, resulting in similar less-than-significant impacts.

G. Geology and Soils

Both the Project and NPA would be required to comply with the site-specific recommendations of a geotechnical study to address potential geologic hazards, which would reduce potential impacts due to geology and soils to less-than-significant levels. There are no known faults on or trending towards the site; thus, impacts associated with rupture of a known fault would be less than significant and similar under the proposed Project and the NPA. However, because the Project would involve a higher number of residents on site compared to the NPA, the Project's less-than-significant impacts (with mitigation) due to strong seismic ground shaking liquefaction, and dynamic settlement would be reduced under the NPA. Because development would occur over approximately the same area under the NPA and proposed Project, impacts due to unstable geologic units or soils that are unstable and that potentially could result in on- or off-site landslide, lateral spreading, or rockfall hazard would be similar and would be less than significant. Impacts associated with ground subsidence also would not occur under the NPA or proposed Project and the level of impact would be the same. Both the NPA and the proposed Project would have less-than-significant impacts (with mitigation) due to cut or fill slopes higher than 10 feet. Neither the Project nor the NPA would result in grading that affects or negates subsurface sewage disposal systems, and neither the Project nor the NPA would require septic tanks or alternative wastewater disposal systems on unsuitable soils; thus, impacts would be less than significant and similar under the NPA and proposed Project. Similarly, impacts due to erosion hazards during construction

and long-term operation would be similar under the NPA and proposed Project and impacts would be less than significant.

H. Greenhouse Gas Emissions

As previously noted, the NPA would generate a demand for approximately 21.4% less than the proposed Project's electricity demand, and also would generate approximately 21.4% less demand for natural gas than the proposed Project. In addition, the 162 dwelling units proposed under the NPA would generate approximately 1,528 Average Daily Trips (ADT) for traffic, which is approximately 21.4% less than the Project's anticipated 1,944 ADT. As such, it can be concluded that total GHG emissions and associated impacts under the NPA would be decreased as compared to the proposed Project. As with the Project, the NPA would be required to demonstrate consistency with the County's Climate Action Plan (CAP) Update, which would reduce GHG impacts to less-than-significant levels. Neither the Project nor the NPA would conflict with applicable plans, policies, or regulations related to GHGs; thus, impacts would be less than significant and the level of impact would be similar.

I. Hazards and Hazardous Materials

Land uses under the NPA would be similar to the proposed Project, with a decrease in the number of single-family residential units. Neither the Project nor the NPA would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; thus, impacts would be less than significant, and the level of impact would be similar. Additionally, neither the NPA nor the Project would 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, and the level of impact would be similar. Neither the Project nor the NPA would impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan; thus, impacts under the NPA and proposed Project would be less than significant and the level of impact would be similar. Neither the Project nor the NPA would emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; thus, impacts would be less than significant, and the level of impact would be similar. The Project site is not identified on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the Project or NPA, and the level of impact would be the same.

J. Hydrology and Water Quality

Both the Project and the NPA would be subject to compliance with the Santa Ana Region Basin Plan, and would be required to comply with the requirements of the Santa Ana Regional Water Quality Control Board (RWQCB) and the County of Riverside. This includes the requirement to obtain a NPDES Municipal Stormwater Permit for construction activities, which requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that would include measures to address water pollution, including sedimentation. Additionally, both the Project and NPA would be subject to NPDES requirements for long-term operations, which would reduce potential water quality impacts (including sediments) from construction to less-than-significant levels. It is not expected that the Project or NPA would result in substantial changes to the existing drainage system of the Project site and area, thus, impacts would be less than significant

and the level of impact would be similar. Both the Project and the NPA would be required to incorporate drainage features (such as extended detention basins) to ensure that runoff is treated for water quality and is detained prior to discharge such that the rate of runoff from the Project site is reduced in comparison to the rates that occur under existing conditions. Thus, impacts related to exceeding the capacity of existing or planned stormwater drainage facilities and downstream erosion hazards would be less than significant and the level of impact would be similar. The Project site is not subject to flood hazards or tsunamis, and would have no impact on existing flood plains; thus, impacts due to pollution from inundation from flooding and tsunamis would be less than significant, and the level of impact would be similar. Although the Project site is not subject to inundation due to seiches, the Project site is within the inundation zone in the event of a failure of Dike 1 (Saddle Dam 1) at Lake Mathews. However, future residential uses on site are unlikely to be inundated in the event of such a failure for the reasons discussed under the analysis of Threshold h. in EIR Subsection 4.10, and furthermore any such inundation also would be routed to the extended detention basins that would be constructed under both the Project and NPA prior to ultimate discharge from the property. Thus, neither the Project nor the NPA would result in impacts due to the release of pollutants due to Project inundation, although impacts would be slightly reduced under the NPA in comparison to the Project due to the reduction in the number of residential dwelling units proposed on site.

K. Land Use and Planning

Assuming approval of the Project's proposed GPA No. 240072, both the Project and the NPA would be fully consistent with the Riverside County General Plan and LMWAP. Thus, impacts due to a conflict with the General Plan would be less than significant under both the Project and the NPA, although the level of impact would be reduced under the NPA since no General Plan Amendment would be required. Both the Project and NPA also would be consistent with SCAG's 2024-2050 RTP/SCS, and as such impacts due to a conflict would be similar and less than significant. Additionally, neither the Project nor the NPA would disrupt or divide the physical arrangement of an established community; thus, impacts would be less than significant and the level of impact would be similar.

L. Mineral Resources

The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, no impacts to mineral resources would occur under the Project or the NPA, and the level of impact would be similar. Additionally, neither the Project nor the NPA would represent an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and the NPA and Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. No impacts would occur, and the level of impact would be similar.

M. Noise

The Project's proposed residential uses would not be exposed to public or private airport-related noise levels exceeding 60 dBA CNEL; therefore, the NPA would result in similar less-than-significant impacts as compared to the proposed Project. Because the NPA would result in less construction and fewer residents, noise impacts associated with construction and long-term operations, including impacts related to traffic-related noise, would decrease as compared to the proposed Project, although impacts are anticipated to be less than significant under

both the Project and the NPA. Both the NPA and the Project would result in less-than-significant noise and vibration impacts due to blasting rock crushing activities following the implementation of mitigation measures, and the level of impact would be the same.

N. Paleontological Resources

The Project site was determined to have a "Low Potential (L)" for containing paleontological resources. However, there is a remote potential that fossils may be discovered during grading and earthmoving activities, which is evaluated as a potentially significant impact of the proposed Project and the NPA. Because areas of physical impact would be slightly reduced under the NPA in comparison to the Project, the NPA would result reduced impacts to subsurface paleontological resources in comparison to the Project. However, both the Project and NPA would result in significant but mitigatable impacts to paleontological resources that may be buried beneath the site's surface.

O. Population and Housing

Neither the Project nor the NPA would result in the displacement of substantial numbers of existing people or housing, necessitating the construction of housing elsewhere; thus, no impact would occur under either the Project or the NPA. Although the number of single-family residences on site would vary between the Project and the NPA, neither the NPA nor the Project would represent substantial unplanned population growth as the Project site is currently planned for residential land uses by the County's General Plan, although impacts would be reduced under the NPA due to the reduction in the number of dwelling units. Additionally, neither the Project nor the NPA would indirectly induce growth, as infrastructure improvements would be sized to accommodate only future development on site, and the level of impact would be the same.

P. Public Services

The NPA would result in a decrease in the number of single-family homes on-site compared to the proposed Project by approximately 44 dwelling units. As such, impacts to fire services, sheriff services, school services, library facilities, and health services would be decreased under the NPA as compared to the Project. Impacts under both the Project and the NPA would be less than significant with payment of mandatory Development Impact Fees (DIF) in accordance with Riverside County Ordinance No. 659 and mandatory payment of school impact fees pursuant to Senate Bill 50 (SB 50).

Q. Recreation

Both the Project and NPA would be required to accommodate a 10-foot-wide community trail through the property. In addition, the NPA would accommodate approximately 1.6 acres of parkland, while the Project would accommodate approximately 1.9 acres of parkland. Although there are no components of the recreational facilities under the NPA and proposed Project that would result in physical environmental impacts that have not already been addressed and accounted for throughout this EIR, impacts to the environment would be slightly reduced under the NPA because only 1.6 acres of parkland would be required to be developed on site to meet the Ordinance No. 460 requirement to accommodate a minimum of 3.0 acres per 1,000 population, as compared to the Project's proposed 1.9 acres of parkland. Both the Project and NPA would accommodate

sufficient parkland on site to meet the demands of future residents; thus, neither the Project nor the NPA would include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. In addition, because adequate parkland would be accommodated on site, neither the Project nor the NPA would subject to payment of in-lieu park fees (Quimby fees); thus, impacts would be less than significant under both the Project and NPA, and the level of impact would be similar.

R. Transportation

Both the Project and the NPA would be required to comply with all applicable provisions of the County's General Plan, LMWAP, and Riverside County ordinances. As such, neither the Project nor NPA would conflict with a program, plan, ordinance, or policy addressing the circulation system; thus, impacts would be less than significant, and the level of impact would be similar. Both the Project and NPA would result in significant and unavoidable impacts due to VMT, although impacts would be reduced under the NPA because the NPA would result in a decrease in the total amount of VMT generated by the Project site. Impacts due to hazardous geometric design features and incompatible uses would be less than significant under both the Project and the NPA, and the level of impact would be similar. Both the Project and the NPA would result in less-than-significant impacts due to the need for new or altered maintenance of roads, and the level of impact would be similar. Neither the Project nor the NPA would have the potential to result in impacts to circulation during construction, including emergency access routes, resulting in similar and less-than-significant impacts. Both the Project and NPA would be required to accommodate facilities for bicycles, although impacts associated with the construction of such trails have been evaluated throughout this EIR, and both the Project and NPA would result in similar less-than-significant impacts due to bicycle facilities.

S. Tribal Cultural Resources

Although no significant tribal cultural resources are known to be present on the Project site, both the Project and the NPA would have the potential to result in impacts to previously-undiscovered tribal cultural resources that may be buried beneath the Project site's surface. Although both the Project and NPA would be subject to mitigation to reduce impacts to subsurface tribal cultural resources and to address the potential for discovery of human remains, and although impacts would be less than significant following mitigation under both the Project and NPA, because the NPA would require less grading than the proposed Project, potential impacts to subsurface tribal cultural resources would be slightly decreased under the NPA in comparison to the Project.

T. Utilities and Service Systems

The level of development intensity on-site would be decreased under the NPA as compared to the proposed Project. Both the Project and NPA would require the construction of water, wastewater, stormwater drainage, electric power, natural gas, and telecommunication facilities. Impacts associated with the provision of such facilities would be similar and would be mitigated to less-than-significant levels with implementation of the mitigation measures identified throughout this EIR. Due to the reduction in the number of dwelling units on site, the NPA would result in a substantial reduction in demands for water resources and sewer treatment

capacity, although impacts due to water supply and sewer treatment capacity would be less than significant under both the Project and NPA.

U. Wildfire

Development under the NPA would be similar to the proposed Project, and likely would entail the development of buildings in similar proximity to off-site areas that are subject to wildland fire hazards. As such, impacts associated with wildfire would be similar under the NPA as compared to the Project, although neither the Project nor the NPA would result in significant impacts due to wildfire-related hazards with implementation of the Project's proposed fuel modification zones (FMZs), alternative FMZs, and radiant walls (as required by EIR Mitigation Measures MM 4.21-1 and MM 4.21-2).

V. Conclusion

As compared to the proposed Project, the NPA would have decreased impacts under the issue areas of aesthetics, air quality, cultural resources, energy, geology/soils, greenhouse gas emissions, hydrology/water quality, land use/planning, noise, paleontological resources, population/housing, public services, recreation, transportation, tribal cultural resources, and utilities/service systems. The NPA would result in the same or similar impacts under the issues of agriculture/forestry resources, hazards/hazardous materials, mineral resources, and wildfire. The NPA would result in an increase in impacts to biological resources (i.e., impacts to jurisdictional waters/wetlands and riparian/riverine habitat).

The NPA would generally meet the Project's objectives, although generally to a lesser extent. Specifically, the NPA would be less effective than the proposed Project in efficiently developing an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages, because the NPA would result in a reduction in the number of dwelling units on site by 44 units. The NPA would meet the Project's objective to develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration. Due to the reduction in the number of dwelling units by 44 units, the NPA would be less effective than the proposed Project in increasing the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities. Similarly, the NPA would be less effective than the proposed Project in assisting Riverside County in meeting its Regional Housing Needs Assessment (RHNA) allocation for Above Moderate income units by developing a property with low density residential uses. The NPA would meet the Project's objective to provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.

6.3.3 Reduced Project Alternative (RPA)

The Reduced Project Alternative (RPA) considers development of the Project site with residential uses similar to the proposed Project, but with minimum one-acre lots sizes and at an overall average density of 0.75 dwelling units per acre (du/ac), consistent with the mid-point density identified by Appendix E to the General Plan for the RC-VLDR land use designation. Accordingly, under the RPA, the Project site would be developed

with 83 dwelling units on minimum one-acre lot sizes, along with one park site on approximately 0.9-acre. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would result in developing the Project site with less residential density, which would serve to reduce the total amount of Vehicle Miles Traveled (VMT) generated by the Project site in comparison to the proposed Project.

A. Aesthetics

The Project site is not located within the viewshed of any officially-designated or eligible State or County scenic highways. Thus, no impacts to scenic corridors would occur under the Project or RPA, and the level of impact would be similar. As with the proposed Project, the RPA would not substantially damage scenic resources; obstruct any prominent scenic vista or view open to the public; or conflict with applicable zoning and other regulations governing scenic quality, and the level of impact would be similar. Although the Project would not result in the creation of an aesthetically offensive site open to public view, because the RPA would result in less development on site the RPA would result in reduced impacts to aesthetics as compared to the proposed Project. Both the Project and RPA would be subject to compliance with Riverside County Ordinance Nos. 348 and 915, as well as the development standards and design guidelines proposed or approved, which would ensure that light and glare impacts would be less than significant under both the Project and the RPA, and the level of impact would be similar.

B. Agriculture and Forestry Resources

Under existing conditions, the entire 111.6-acre Project site is classified by the FMMP as containing "Farmland of Local Importance," which is not considered "Farmland" as that term is defined by CEQA, the County, or the CDC. Accordingly, neither the Project nor the RPA would convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance to non-agricultural use; therefore, no impact to Farmland would occur under either the Project and RPA, and the level of impact would be the same. The site's existing A-1-10 zoning classification would accommodate the minimum one-acre lot sizes anticipated under the RPA, while the Project would require approval of a change of zone in order to ensure there would be no conflict with existing agricultural zoning; thus, impacts due to a conflict with existing agricultural zoning would be less than significant under both the Project and RPA, although impacts would be slightly reduced under the RPA because no change of zone would be required. No agricultural uses occur on site under existing conditions; thus, neither the Project nor the RPA would conflict with existing agricultural uses, and the level of impact would be the same. Although the Project site is not subject to any Williamson Act contracts and impacts due to a conflict with a Williamson Act contract would not occur under either the Project or the RPA, both the Project and the RPA would require approval of an Agricultural Preserve Diminishment to remove the Project site from the El Sobrante Agricultural Preserve No. 1; thus, with approval of an Agricultural Preserve Diminishment, impacts due to a conflict with an Agricultural Preserve would be less than significant under the Project and RPA, and the level of impact would be the same. Both the Project and the RPA would be subject to compliance with Riverside County Ordinance No. 625; therefore, both the Project and the RPA would result in less-than-significant impacts due to a conflict with off-site agricultural zoning on properties located within 300 feet of the site, and impacts would be similar. The Project site and surrounding areas are not zoned for forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section

4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)). As such, neither the Project nor the RPA would result in impacts to forestry resources, and impacts would be the same.

C. *Air Quality*

Neither the Project nor the RPA would exceed the growth assumptions of the SCAQMD AQMP; however, because the RPA would include 123 fewer residential dwelling units, the RPA would result in reduced impacts in comparison to the Project due to a conflict with the SCAQMD AQMP growth assumptions. Additionally, due to the reduction in the number of dwelling units, the RPA would result in reduced air quality emissions as compared to the proposed Project, although air quality impacts would be less than significant under both the Project and RPA. Additionally, the RPA would result in reduced impacts due to a cumulatively considerable net increase of criteria pollutants. Neither the Project nor the RPA would result in the exposure of sensitive receptors within one mile of the Project site to substantial pollutant concentrations; thus, no impact would occur and the level of impact would be similar. Furthermore, neither the Project nor the RPA would result in other emissions, such as those leading to odors, affecting sensitive receptors, and the level of impact would be similar.

D. *Biological Resources*

Implementation of the RPA would entail development with larger residential lots, which would result in less overall grading on the Project site and generally would result in reduced impacts to biological resources as compared to the proposed Project. Although impacts would be reduced, it still is anticipated that implementation of the RPA would result in significant but mitigable impacts to riparian/riverine resources, the least Bell's vireo, the burrowing owl, paniculate tarplant, special-status bats, nesting birds protected by the MBTA, Goodding's willow–red willow riparian woodland, and jurisdictional waters/wetlands, although overall the RPAs impacts to these resources would be reduced due to the reduction in proposed development intensity on site.

E. *Cultural Resources*

Although no significant historical or archaeological resources are known to be present on the Project site, both the Project and the RPA would have the potential to result in impacts to previously-undiscovered historic or archaeological resources that may be buried beneath the Project site's surface. Likewise, both the Project and the RPA have the potential to result in impacts to previously-undiscovered human remains that may be buried beneath the site's surface. Although both the Project and RPA would be subject to mitigation to reduce impacts to subsurface historical and archaeological resources and to address the potential for discovery of human remains, and although impacts would be less than significant following mitigation under both the Project and RPA, because the RPA would require less grading than the proposed Project, potential impacts to subsurface historical resources, archaeological resources, and human remains would be slightly decreased under the RPA in comparison to the Project.

F. Energy

Neither the Project nor the RPA would result in the wasteful, inefficient, or unnecessary consumption of energy resources during construction activities. Accordingly, construction-related impacts due to energy consumption would be less than significant under the Project and RPA, although the level of impact would be slightly reduced under the RPA due to the construction of fewer dwelling units. Due to the decrease in single-family residential units, the RPA would generate a demand for electricity that is approximately 59.7% less than the proposed Project's electricity demand, and also would generate approximately 59.7% less demand for natural gas than the proposed Project. Therefore, the RPA would result in reduced impacts in comparison to the proposed Project's less-than-significant impacts. The Project and the RPA would not conflict with any applicable State or local plans, resulting in similar less-than-significant impacts.

G. Geology and Soils

Both the Project and RPA would be required to comply with the site-specific recommendations of a geotechnical study to address potential geologic hazards, which would reduce potential impacts due to geology and soils to less-than-significant levels. There are no known faults on or trending towards the site; thus, impacts associated with rupture of a known fault would be less than significant and similar under the proposed Project and the RPA. However, because the Project would involve a higher number of residents on site compared to the RPA, the Project's less-than-significant impacts (with mitigation) due to strong seismic ground shaking liquefaction, and dynamic settlement would be reduced under the RPA. Because development would occur over approximately the same area under the RPA and proposed Project, impacts due to unstable geologic units or soils that are unstable and that potentially could result in on- or off-site landslide, lateral spreading, or rockfall hazard would be similar and would be less than significant. Impacts associated with ground subsidence also would not occur under the RPA or proposed Project and the level of impact would be the same. Both the RPA and the proposed Project would have less-than-significant impacts (with mitigation) due to cut or fill slopes higher than 10 feet. Neither the Project nor the RPA would result in grading that affects or negates subsurface sewage disposal systems, and neither the Project nor the RPA would require septic tanks or alternative wastewater disposal systems on unsuitable soils; thus, impacts would be less than significant and similar under the RPA and proposed Project. Similarly, impacts due to erosion hazards during construction and long-term operation would be similar under the RPA and proposed Project and impacts would be less than significant.

H. Greenhouse Gas Emissions

As previously noted, the RPA would generate a demand for approximately 59.7% less than the proposed Project's electricity demand, and also would generate approximately 59.7% less demand for natural gas than the proposed Project. In addition, the 83 dwelling units proposed under the RPA would generate approximately 783 ADT, which is approximately 59.7% less than the Project's anticipated 1,944 ADT. As such, it can be concluded that total GHG emissions and associated impacts under the RPA would be decreased as compared to the proposed Project. As with the Project, the RPA would be required to demonstrate consistency with the County's CAP Update, which would reduce GHG impacts to less-than-significant levels. Neither the Project nor the RPA would conflict with applicable plans, policies, or regulations related to GHGs; thus, impacts would be less than significant and the level of impact would be similar.

I. Hazards and Hazardous Materials

Land uses under the RPA would be similar to the proposed Project, with a decrease in the number of single-family residential units. Neither the Project nor the RPA would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; thus, impacts would be less than significant, and the level of impact would be similar. Additionally, neither the RPA nor the Project would 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, and the level of impact would be similar. Neither the Project nor the RPA would impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan; thus, impacts under the RPA and proposed Project would be less than significant and the level of impact would be similar. Neither the Project nor the RPA would emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; thus, impacts would be less than significant, and the level of impact would be similar. The Project site is not identified on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5; thus, no impact would occur under the Project or RPA, and the level of impact would be the same.

J. Hydrology and Water Quality

Both the Project and the RPA would be subject to compliance with the Santa Ana Region Basin Plan, and would be required to comply with the requirements of the RWQCB and the County of Riverside. This includes the requirement to obtain a NPDES Municipal Stormwater Permit for construction activities, which requires the preparation and implementation of a SWPPP that would include measures to address water pollution, including sedimentation. Additionally, both the Project and RPA would be subject to NPDES requirements for long-term operations, which would reduce potential water quality impacts (including sediments) from construction to less-than-significant levels. It is not expected that the Project or RPA would result in substantial changes to the existing drainage system of the Project site and area, thus, impacts would be less than significant and the level of impact would be similar. Both the Project and the RPA would be required to incorporate drainage features (such as extended detention basins) to ensure that runoff is treated for water quality and is detained prior to discharge such that the rate of runoff from the Project site is reduced in comparison to the rates that occur under existing conditions. Thus, impacts related to exceeding the capacity of existing or planned stormwater drainage facilities and downstream erosion hazards would be less than significant and the level of impact would be similar. The Project site is not subject to flood hazards or tsunamis, and would have no impact on existing flood plains; thus, impacts due to pollution from inundation from flooding and tsunamis would be less than significant, and the level of impact would be similar. Although the Project site is not subject to inundation due to seiches, the Project site is within the inundation zone in the event of a failure of Dike 1 (Saddle Dam 1) at Lake Mathews. However, future residential uses on site are unlikely to be inundated in the event of such a failure for the reasons discussed under the analysis of Threshold h. in EIR Subsection 4.10, and furthermore any such inundation also would be routed to the extended detention basins that would be constructed under both the Project and RPA prior to ultimate discharge from the property. Thus, neither the Project nor the RPA would result in impacts due to the release of pollutants due to Project inundation, although

impacts would be slightly reduced under the RPA in comparison to the Project due to the reduction in the number of residential dwelling units proposed on site.

K. Land Use and Planning

Assuming approval of the Project's proposed GPA No. 240072, both the Project and the RPA would be fully consistent with the Riverside County General Plan and LMWAP. Thus, impacts due to a conflict with the General Plan would be less than significant under both the Project and the RPA, although the level of impact would be reduced under the RPA since no General Plan Amendment would be required. Both the Project and RPA also would be consistent with SCAG's 2024-2050 RTP/SCS, and as such impacts due to a conflict would be similar and less than significant. Additionally, neither the Project nor the RPA would disrupt or divide the physical arrangement of an established community; thus, impacts would be less than significant and the level of impact would be similar.

L. Mineral Resources

The Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Accordingly, no impacts to mineral resources would occur under the Project or the RPA, and the level of impact would be similar. Additionally, neither the Project nor the RPA would represent an incompatible land use located adjacent to a State classified or designated area or existing surface mine, and the RPA and Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. No impacts would occur, and the level of impact would be similar.

M. Noise

The Project's proposed residential uses would not be exposed to public or private airport-related noise levels exceeding 60 dBA CNEL; therefore, the RPA would result in similar less-than-significant impacts as compared to the proposed Project. Because the RPA would result in less construction and fewer residents, noise impacts associated with construction and long-term operations, including impacts related to traffic-related noise, would decrease as compared to the proposed Project, although impacts are anticipated to be less than significant under both the Project and the RPA. Both the RPA and the Project would result in less-than-significant noise and vibration impacts due to blasting rock crushing activities following the implementation of mitigation measures, and the level of impact would be the same.

N. Paleontological Resources

The Project site was determined to have a "Low Potential (L)" for containing paleontological resources. However, there is a remote potential that fossils may be discovered during grading and earthmoving activities, which is evaluated as a potentially significant impact of the proposed Project and the RPA. Because areas of physical impact would be slightly reduced under the RPA in comparison to the Project, the RPA would result reduced impacts to subsurface paleontological resources in comparison to the Project. However, both the Project and RPA would result in significant but mitigatable impacts to paleontological resources that may be buried beneath the site's surface.

O. Population and Housing

Neither the Project nor the RPA would result in the displacement of substantial numbers of existing people or housing, necessitating the construction of housing elsewhere; thus, no impact would occur under either the Project or the RPA. Although the number of single-family residences on site would vary between the Project and the RPA, neither the RPA nor the Project would represent substantial unplanned population growth as the Project site is currently planned for residential land uses by the County's General Plan, although impacts would be reduced under the RPA due to the reduction in the number of dwelling units. Additionally, neither the Project nor the RPA would indirectly induce growth, as infrastructure improvements would be sized to accommodate only future development on site, and the level of impact would be the same.

P. Public Services

The RPA would result in a decrease in the number of single-family homes on-site compared to the proposed Project by approximately 123 dwelling units. As such, impacts to fire services, sheriff services, school services, library facilities, and health services would be decreased under the RPA as compared to the Project. Impacts under both the Project and the RPA would be less than significant with payment of mandatory Development Impact Fees (DIF) in accordance with Riverside County Ordinance No. 659 and mandatory payment of school impact fees pursuant to Senate Bill 50 (SB 50).

Q. Recreation

Both the Project and RPA would be required to accommodate a 10-foot-wide community trail through the property. In addition, the RPA would accommodate approximately 0.9-acre of parkland, while the Project would accommodate approximately 1.9 acres of parkland. Although there are no components of the recreational facilities under the RPA and proposed Project that would result in physical environmental impacts that have not already been addressed and accounted for throughout this EIR, impacts to the environment would be slightly reduced under the RPA because only 0.9-acre of parkland would be required to be developed on site to meet the Ordinance No. 460 requirement to accommodate a minimum of 3.0 acres per 1,000 population, as compared to the Project's proposed 1.9 acres of parkland. Both the Project and RPA would accommodate sufficient parkland on site to meet the demands of future residents; thus, neither the Project nor the RPA would include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. In addition, because adequate parkland would be accommodated on site, neither the Project nor the RPA would subject to payment of in-lieu park fees (Quimby fees); thus, impacts would be less than significant under both the Project and RPA, and the level of impact would be similar.

R. Transportation

Both the Project and the RPA would be required to comply with all applicable provisions of the County's General Plan, LMWAP, and Riverside County ordinances. As such, neither the Project nor RPA would conflict with a program, plan, ordinance, or policy addressing the circulation system; thus, impacts would be less than significant, and the level of impact would be similar. Both the Project and RPA would result in significant and unavoidable impacts due to VMT, although impacts would be reduced under the RPA because the RPA would

result in a decrease in the total amount of VMT generated by the Project site. Impacts due to hazardous geometric design features and incompatible uses would be less than significant under both the Project and the RPA, and the level of impact would be similar. Both the Project and the RPA would result in less-than-significant impacts due to the need for new or altered maintenance of roads, and the level of impact would be similar. Neither the Project nor the RPA would have the potential to result in impacts to circulation during construction, including emergency access routes, resulting in similar and less-than-significant impacts. Both the Project and RPA would be required to accommodate facilities for bicycles, although impacts associated with the construction of such trails have been evaluated throughout this EIR, and both the Project and RPA would result in similar less-than-significant impacts due to bicycle facilities.

S. Tribal Cultural Resources

Although no significant tribal cultural resources are known to be present on the Project site, both the Project and the RPA would have the potential to result in impacts to previously-undiscovered tribal cultural resources that may be buried beneath the Project site's surface. Although both the Project and RPA would be subject to mitigation to reduce impacts to subsurface tribal cultural resources, and although impacts would be less than significant following mitigation under both the Project and RPA, because the RPA would require less grading than the proposed Project, potential impacts to subsurface tribal cultural resources would be slightly decreased under the RPA in comparison to the Project.

T. Utilities and Service Systems

The level of development intensity on-site would be decreased under the RPA as compared to the proposed Project. Both the Project and RPA would require the construction of water, wastewater, stormwater drainage, electric power, natural gas, and telecommunication facilities. Impacts associated with the provision of such facilities would be similar and would be mitigated to less-than-significant levels with implementation of the mitigation measures identified throughout this EIR. Due to the reduction in the number of dwelling units on site, the RPA would result in a substantial reduction in demands for water resources and sewer treatment capacity, although impacts due to water supply and sewer treatment capacity would be less than significant under both the Project and RPA.

U. Wildfire

Development under the RPA would be similar to the proposed Project, and likely would entail the development of buildings in similar proximity to off-site areas that are subject to wildland fire hazards. As such, impacts associated with wildfire would be similar under the RPA as compared to the Project, although neither the Project nor the RPA would result in significant impacts due to wildfire-related hazards with implementation of the Project's proposed fuel modification zones (as required by EIR Mitigation Measures MM 4.21-1 and MM 4.21-2).

V. Conclusion

As compared to the proposed Project, the RPA would have decreased impacts under the issue areas of aesthetics, air quality, biological resources, cultural resources, energy, geology/soils, greenhouse gas emissions, hydrology/water quality, land use/planning, noise, paleontological resources, population/housing, public services, recreation, transportation, tribal cultural resources, and utilities/service systems. In particular, VMT impacts under the RPA would be reduced in comparison to the Project due to the reduction in overall dwelling units and attendant reduction in total VMT; however, impacts to VMT likely still would remain significant and unavoidable since the ratio between total VMT and the future service population under the RPA likely would be similar to the proposed Project. The RPA would result in the same or similar impacts under the issues of agriculture/forestry resources, hazards/hazardous materials, mineral resources, and wildfire.

The RPA would generally meet the Project's objectives, although generally to a lesser extent. Specifically, the RPA would be less effective than the proposed Project in efficiently developing an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages, because the RPA would result in a reduction in the number of dwelling units on site by 123 units. The RPA would meet the Project's objective to develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration. Due to the reduction in the number of dwelling units by 123 units, the RPA would be less effective than the proposed Project in increasing the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities. Similarly, the RPA would be less effective than the proposed Project in assisting Riverside County in meeting its Regional Housing Needs Assessment (RHNA) allocation for Above Moderate income units by developing a property with low density residential uses. The RPA would meet the Project's objective to provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.

6.3.4 Environmentally Superior Alternative

State CEQA Guidelines § 15126.6 requires the identification of the environmentally superior alternative. As discussed herein, implementation of the NDA would result in no physical environmental impacts beyond those that have already occurred on the property. Because the NDA would avoid all of the Project's impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to State CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the RPA, as discussed above in subsection 6.3.3, is identified as the Environmentally Superior Alternative pursuant to State CEQA Guidelines § 15126.6, as the RPA would result in the largest reduction in Project impacts, and would reduce the Project's significant and unavoidable impact due VMT.

Table 6-2 Alternatives to the Proposed Project – Comparison of Environmental Impacts

Environmental Topic/ Project Objective	Proposed Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project/Compliance with Project Objectives		
		No Development Alternative (NDA)	No Project Alternative (NPA)	Reduced Project Alternative (RPA)
Aesthetics	Less than Significant	Reduced	Reduced	Reduced
Agriculture and Forestry Resources	Less than Significant	Reduced	Similar	Similar
Air Quality	Less than Significant	Reduced	Reduced	Reduced
Biological Resources	Less than Significant	Reduced	Increased	Reduced
Cultural Resources	Less than Significant	Reduced	Reduced	Reduced
Energy	Less than Significant	Reduced	Reduced	Reduced
Geology and Soils	Less than Significant	Reduced	Reduced	Reduced
Greenhouse Gas Emissions	Less than Significant	Reduced	Reduced	Reduced
Hazards and Hazardous Materials	Less than Significant	Reduced	Similar	Similar
Hydrology and Water Quality	Less than Significant	Reduced	Reduced	Reduced
Land Use and Planning	Less than Significant	Reduced	Reduced	Reduced
Mineral Resources	No Impact	Similar	Similar	Similar
Noise	Less than Significant	Reduced	Reduced	Reduced
Paleontological Resources	Less than Significant	Reduced	Reduced	Reduced
Population and Housing	Less than Significant	Reduced	Reduced	Reduced
Public Services	Less than Significant	Reduced	Reduced	Reduced
Recreation	Less than Significant	Reduced	Reduced	Reduced
Transportation	Significant and Unavoidable Direct and Cumulatively-Considerable Impacts	Reduced to Less-than-Significant Levels	Reduced	Reduced
Tribal Cultural Resources	Less than Significant	Reduced	Reduced	Reduced
Utilities and Service Systems	Less than Significant	Reduced	Reduced	Reduced
Wildfire	Less-than-Significant	Mixed: Reduced wildfire impacts to structures; increased site wildfire potential	Similar	Similar
Objective A: To efficiently develop an underutilized property with low-density residential uses while preserving, to the maximum extent feasible, areas on site that contain sensitive environmental resources, including major site drainages		No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective B: To develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration.		No	Yes	Yes
Objective C: To increase the available housing supply within the region by providing detached single-family homes that will be marketable within the evolving economic profile of Riverside County and surrounding communities.		No	Yes, but to a lesser extent	Yes, but to a lesser extent

Environmental Topic/ Project Objective	Proposed Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project/Compliance with Project Objectives		
		No Development Alternative (NDA)	No Project Alternative (NPA)	Reduced Project Alternative (RPA)
Objective D: To assist Riverside County in meeting its Regional Housing Needs Assessment (RHNA) allocation for Above Moderate income units by developing a property with low density residential uses.		No	Yes, but to a lesser extent	Yes, but to a lesser extent
Objective E: To provide a system of public and community facilities, including recreational facilities, in an efficient and timely manner in order to meet the needs of Project residents.		No	Yes	Yes

7.0 REFERENCES

7.1 PERSONS CONTRIBUTING TO EIR PREPARATION

7.1.1 COUNTY OF RIVERSIDE PLANNING DIVISION

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B.A History

7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Highland Grove EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the County of Riverside Planning Department, 4080 Lemon Street, 12th Floor, Riverside, CA 92502.

Appendix A: Notice of Preparation (NOP), and Written Comments on the NOP.

Appendix B: Urban Crossroads, 2025a. *Highland Grove Vistas 4 TTM NO. 38927 Air Quality Impact Analysis*. December 11, 2025.

Appendix C1: First Carbon Solutions (FCS), 2025a. *Biological Resources Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Highland Grove IV Development Project, Unincorporated Riverside County, California*.April 16, 2025.

Appendix C2: First Carbon Solutions, 2026. *Determination of Biologically Equivalent or Superior Preservation, Highland Grove IV Project, Riverside County, California*. February 4, 2026.

Appendix C3: First Carbon Solutions, 2025b. *Aquatic Resources Delineation Report, Highland Grove IV Development Project, Unincorporated Riverside County, California*. April 16, 2025.

Appendix D: BFSA Environmental Services, a Perennial Company, 2024a. *A Cultural Resources Assessment Update for the Willow Creek Project*. April 29, 2024.

Appendix E: Urban Crossroads, 2025b. *Highland Grove Vistas 4 TTM NO. 38927 Energy Analysis*. December 11, 2025.

Appendix F: Leighton and Associates, Inc., 2024. *Geotechnical Investigation Report Proposed Highland Grove IV, Lake Matthews Area, Riverside County, California*. August 8, 2024.

Appendix G: Urban Crossroads, 2025c. *Highland Grove Vistas 4 TTM NO. 38927 Greenhouse Gas Analysis*. December 11, 2025.

Appendix H: McAlister GeoScience, 2024. *Phase I Environmental Site Assessment Update Report*. March 29, 2024.

Appendix I1: Adkan Engineers, 2025a. *Preliminary Hydrology Study, Tentative Tract Map No. 38927*. December 10, 2025.

Appendix I2: Adkan Engineers, 2025b. *Project Specific Water Quality Management Plan, Highland Grove IV Tract 38927*. September 10, 2025.

Appendix I3: Adkan Engineers, 2025c. *Preliminary HEC-RAS Analysis, Tentative Tract Map No. 38927*. September 16, 2025.

Appendix J: T&B Planning, Inc., 2025. *General Plan Consistency Analysis for the Highland Grove Environmental Impact Report SCH No. 2024050835*. October 2, 2025.

Appendix K: Urban Crossroads, 2025d. *Highland Grove Vistas 4 TTM No. 38927 Noise Impact Analysis.* June 5, 2025.

Appendix L: BFSA Environmental Services, a Perennial Company, 2024b. *Paleontological Assessment for the Willow Creek Project*. April 30, 2024.

Appendix M1: Urban Crossroads, 2025e. *Highland Grove Vistas 4 TTM No. 38927 Vehicle Miles Traveled (VMT) Assessment*. June 30, 2025.

Appendix M2: Urban Crossroads, 2024. *Highland Grove Vistas 4 TTM No. 38927 Traffic Analysis*. August 15, 2024.

Appendix N: Fire Safe Planning Solutions, 2025. Fire Behavior Report, Willow Creek, Tentative Tract 38927. September 19, 2025.

7.3 DOCUMENTS INCORPORATED BY REFERENCE

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

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