

Woodward 46 Specific Plan Project

Draft Environmental Impact Report

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Acronyms

µg/m ³	Micrograms Per Cubic Meter
AB	Assembly Bill
AC	Acre
AD	Anno Domini
ADA	Americans with Disabilities Act
ACC	Advanced Clean Cars
ADT	Average Daily Traffic
AF	Acre Feet
AFY	Acre Feet Per Year
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMI	Area Median Income
AMSL	Above Mean Sea Level
ANFO	Ammonia Nitrate and Fuel Oil
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
AQIA	Air Quality Impact Assessment
AQMD	Air Quality Management District
ASTM	American Society for Testing and Materials
BAU	Business-As-Usual
BCLA	Biological Core and Linkage Area
BMP	Best Management Practices
BP	Before Present
BTA	Bicycle Transportation Account
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAGN	Coastal California Gnatcatcher
CalARP	California Accidental Release Program
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	State of California Occupational Safety and Health Administration
CaRFG	California Reformulated Gasoline
CalRecycle	Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAS	California Approved Samplers
CBB	Crotch's Bumble Bee
CBC	California Building Code
CC&R	Covenants, Conditions, and Restrictions
CCA	Community Choice Aggregation
CCAA	California Clean Air Act
CCR	California Code of Regulations

CCSYA	Critical Coarse Sediment Yield Areas
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLIS	Compensation and Liability Information System
CESA	California Endangered Species Act
CFC	California Fire Code
CFD	Community Facility District
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CFS	Cubic Feet Per Second
CGS	California Geological Survey
CH ₄	Methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Program
CIWBM	California Integrated Waste Management Board
CM	Centimeter
CMP	Congestion Management Plan
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO _{2e}	CO ₂ Equivalent
COPPS	Community Oriented Police and Problem Solving
CORRACTS	Corrective Action Sites
COS	Conservation and Open Space Element
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CRHR	California Register of Historic Resources
CSUSM	California State University San Marcos
CUP	Conditional Use Permit
CWA	Clean Water Act
CWC	California Water Code
CWPP	Community Wildfire Protection Plan
CY	Cubic Yard
dB	Decibel
dBA	A-weighted Decibel
DDE	Dichlorodiphenyldichloroethylene
DEH	Department of Environmental Health
DEIR	Draft Environmental Impact Report
DOF	Department of Finance
DOT	Department of Transportation
DPM	Diesel Particulate Matter
DPR	Department of Parks and Recreation
DTSC	Department of Toxic Substances Control
DU	Dwelling Unit

Du/ac	Dwelling Units per Acre
DWR	Department of Water Resources
E	East
EDCO	EDCO Waste and Recycling
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EJ	Environmental Justice Element
EO	Executive Order
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Endangered Species Act
ESA	Environmental Site Assessment
EV	Electric Vehicle
EWPCF	Encina Water Pollution Control Facilities
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FAR	Floor Area Ratio
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FPA	Focused Planning Area
FRA	Federal Rail Administration
FT	Feet
FTA	Federal Transit Administration
FT/S	Feet per Second
GHG	Greenhouse gas
GO-Biz	Governor's Office of Business and Economic Development
GPA	General Plan Amendment
GPD	Gallons Per Day
GPNE	General Plan Noise Element
GW	Gigawatt
GWP	Global Warming Potential
H ₂ S	Hydrogen Sulfide
HA	Hydrologic Area
HAPs	Hazardous Air Pollutants
HCFC	Hydrochlorofluorocarbons
HCM	Highway Capacity Manual
HFC	Hydrofluorocarbons
HFRA	Health Forests Restoration Act
HMBP	Hazardous Material Business Plan
HMP	Hydromodification Plan
HOA	Home Owner's Association
HOCSP	Heart of the City Specific Plan
HP	Horsepower
HP-h	Horsepower Hour
HRA	Hazards Risk Assessment
HREC	Historical Recognized Environmental Condition
HVAC	Heating, Ventilation, and Air Conditioning

H&SC	Health and Safety Code
IBC	International Building Code
IC/EC	Institutional Controls/ Engineering Controls
IEPR	Integrated Energy Policy Report
IFC	International Fire Code
IIRP	Individual Integrated Resource Plan
IN	Inch
in/sec	inch per second
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
IWMP	Integrated Waste Management Plan
JRMP	Jurisdictional Runoff Management Program
KBtu	One Thousand British Thermal Units
kV	Kilovolt
kWh	Kilowatt-hour
Lbs	Pounds
Lbs/Day	Pounds per Day
LED	Light Emitting Diode
Leq	Equivalent Sound Level
LI	Light Industrial
LID	Low Impact Development
LOS	Level of Service
LTA	Local Transportation Analysis
LTS	Less than Significant
LTSM	Less than Significant with Mitigation
M	Meter
MBTA	Migratory Bird Treaty Act
MEP	Maximum Extent Possible
MFR	Multi-family Residential
MFSD	Multifamily Site Development Permit
MG	Million Gallon
MG/M ³	Milligrams per Cubic Meter
MGD	Million Gallons Per Day
MHCP	Multiple Habitat Conservation Plan
MM	Mitigation Measure
MMT	Million Metric Tons
MPH	Miles Per Hour
MRF	Meadowlark Reclamation Facility
MRZ	Mineral Resource Zone
MS4s	Separate Storm Sewer Systems
MSSC	Minor Street Stop Controlled Intersection
MT	Metric Ton
MU2	Mixed Use 2
MU3	Mixed Use 3
MW	Megawatt
MWD	Metropolitan Water District
N ₂	Nitrogen
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission

NBL	Northbound Lane
NCCP	Natural Community Conservation Planning
NCTD	North County Transit District
NEVs	Neighborhood Electric Vehicles
NFRAP	No Further Remedial Action Planned
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	Nitrogen Dioxide
NOP	Notice of Preparation
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
NSLU	Noise Sensitive Land Use
NTA	Northern Tributary Area
O ₂	Oxygen
O ₃	Ozone
OEHHA	Office of Environmental Health Hazards Assessment
OPR	Office of Planning and Research
Pb	Lead
PDP	Priority Development Project
PFCs	Perfluorocarbons
PFF	Public Facility Fee
PG&E	Pacific Gas & Electric
PM _{2.5}	Fine Particulate Matter
PM ₁₀	Respirable Particulate Matter
POC	Point of Confluence
PPB	Parts Per Billion
PPHM	Parts Per Hundred Million
PPM	Parts Per Million
PPV	Peak Particle Velocity
PRC	Public Resources Code
PV	Photovoltaic
PVC	Polyvinyl Chloride
RAQS	Regional Air Quality Strategies
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
REL	Reference Exposure Levels
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RMP	Risk Management Plan
RMS	Root Mean Square
ROG	Reactive Organic Gas
ROZ	Ridgeline Overlay Zone
RPS	Renewable Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments

SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SDNR	San Diego Northern Railroad
SDP	Site Development Plan
S.F.	Square Feet
SF ₆	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SIP	State Implementation Plans
SLCP	Short-Lived Climate Pollutants
SLF	Sacred Lands File
SMFD	San Marcos Fire Department
SMUSD	San Marcos Unified School District
SO ₂	Sulfur Dioxide
SP	Specific Plan
SPA	Specific Plan Area
SRA	State Responsibility Areas
SR-78	State Route 78
SSC	Species of Special Concern
STP	Shovel Test Pit
SUSMP	Standard Urban Stormwater Mitigation Plan
SWDA	Solid Waste Disposal Act
SWRCB	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
SWQMP	Stormwater Quality Management Plan
TACs	Toxic Air Contaminants
T-BACT	Toxics Best Available Control Technology
TCA	Traditionally and Culturally Affiliated
TCP	Traditional Cultural Properties
TDM	Transportation Demand Management
THPO	Tribal Historic Preservation Officer
TIA	Transportation Impact Analysis
TIAG	Transportation Impact Analysis Guidelines
TK	Transitional Kindergarten
TMDL	Total Maximum Daily Load
TSD	Treatment, Storage and Disposal
TSM	Tentative Subdivision Map
TWSC	Two-way stop controlled intersection
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

UST	Underground Storage Tank
UWMP	Urban Water Management Plan
V/C	Volume-To-Capacity
Vdb	Vibration Velocity
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VWD	Vallecitos Water District
WB	Westbound
WEAP	Worker Environmental Awareness Program
WELO	Water Efficiency Landscape Ordinance
WMA	Watershed Management Area
WoS	Waters of the State
WoUS	Waters of the US
WQIP	Water Quality Improvement Plan
WUI	Wildland Urban Interface
ZEB	Zero Emission Bus
ZEV	Zero Emission Vehicle

1.0 Summary

1.1 Project Summary

The applicant is proposing to develop 46 duplex residential units, associated infrastructure, and common and private open space on an approximately 8.57 gross acre site located on Woodward Road in the City of San Marcos.

The project applicant is requesting the following discretionary approvals from the City to allow for development of the proposed project:

- **Specific Plan Amendment (SP22-0006)** – A Specific Plan Amendment to modify the Heart of the City Specific Plan to remove the current Richmar Sub-Plan designation on the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan..
- **Specific Plan (SP22-0005)** – The Woodward 46 Specific Plan establishes the development rules and regulations of all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the Specific Plan.
- **General Plan Amendment (GPA22-0004)** – A General Plan Amendment to the Land Use Element for the purpose of amending land use maps and text related to changing the sub-plan designation of the subject property from Richmar Specific Plan to Woodward 46 Specific Plan.
- **Multi-Family Site Development Plan (MFSDP22-0005)** - Multi-Family Site Development Plan approval would be required to construct 46 multi-family residential units and address the details of the architectural style, building elevation, fencing, and landscaping, among other criteria, within the development.
- **Tentative Subdivision Map (TSM22-0004)** - Tentative Subdivision Map approval would be required for formation of residential condominium units, private driveways, and open space areas.
- **Conditional Use Permit (CUP22-0005)** - Conditional Use Permit approval would be required for potential use of a temporary rock crusher.

1.2 Summary of Significant Effects/Mitigation

Table 1-1 provides a summary of significant environmental impacts resulting from the project, mitigation measures identified to reduce and/or avoid the environmental effects, and a determination of the level of significance of each impact following implementation of the identified mitigation measures. The analysis shows that, with implementation of mitigation measures, all project impacts will be mitigated to below a level of significance. Detailed analyses of significant environmental effects and mitigation are provided in Chapter 3 of this Environmental Impact Report (EIR).

In addition to mitigation measures, regulatory standards for grading, construction, and environmental protection have been incorporated into the project design to reduce adverse environmental effects. These include, but are not limited to, grading design and earthwork specifications, erosion control measures, Best Management Practices for pollutant control during construction, and biofiltration basins to handle and treat runoff.

The mitigation measures listed in Table 1-1 will reduce impacts related to biological resources, cultural resources, noise, and tribal cultural resources. As shown in Table 1-1, all impacts would be reduced to below a level of significance.

Table 1-1. Summary of Significant Environmental Impacts

Impact	Mitigation Measures	Level of Significance After
<i>Biological Resources</i>		
BIO-1: The proposed project has the potential to result in direct and indirect impacts to coastal California gnatcatcher	Implementation of MM-BIO-1a and MM-BIO1b, refer to Section 3.3.6	Less than significant
BIO-2: Focused surveys found the Diegan Coastal Sage Scrub on site to be occupied by Crotch's bumble bee. Thus, there is potential for "take" of Crotch's bumble bee and adverse impacts may occur through the removal of occupied habitat.	Implementation of MM-BIO-2, refer to Section 3.3.6	Less than significant
BIO-3: The proposed project has the potential to result in direct and indirect impact to special-status wildlife species including Orange-throated whiptail, coastal whiptail, Southern California rufous-crowned sparrow, Cooper's hawk, Crotch's bumble bee, and Bryant's woodrat.	Implementation of MM-BIO-3a through MM-BIO-3d, refer to Section 3.3.6	Less than significant
BIO-4: The proposed project has the potential to impact nesting birds and raptors that are afforded protection under the California Fish and Game Code and the Migratory Bird Treaty Act.	Implementation of MM-BIO-4, refer to Section 3.3.6	Less than significant
BIO-5: The proposed project has the potential to result in indirect impacts to sensitive species due to urban run-off, introduction of meso-predators (e.g., dogs and cats), invasive plant species, and noise and lighting effects.	Implementation of MM-BIO-3a through MM-BIO-3d, refer to Section 3.3.6	Less than significant
BIO-6: The proposed project would impact 5.24 acres of Diegan coastal sage scrub and 0.26 acre of disturbed Diegan coastal sage scrub for a total of 5.50 acres of impact.	Implementation of MM-BIO-6, refer to Section 3.3.6	Less than significant

Impact	Mitigation Measures	Level of Significance After
<i>Cultural Resources</i>		
CR-1: Due to grading and ground disturbing activities, the project has the potential to impact unidentified archeological resources on the project site.	Implementation of MM-CR-1, refer to Section 3.4.6	Less than significant
CR-2: There is a potential for project construction activities to disturb previously unidentified human remains on the project site.	Implementation of MM-CR-2, refer to Section 3.4.6	Less than significant
<i>Noise</i>		
N-1: Potential for noise impacts due to rock drilling and blasting.	Implementation of MM-N-1, refer to Section 3.9.6	Less than significant
N-2: Potential for noise impacts due to rock crushing.	Implementation of MM-N-2, refer to Section 3.9.6	Less than significant
<i>Tribal Cultural Resources</i>		
TCR-1: As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is determined, by the City, based on substantial evidence, to be a tribal cultural resource.	Implementation of MM-TCR-1 through MM-TCR-12, refer to Section 3.12.6	Less than significant

1.3 Areas of Controversy

A Notice of Preparation (NOP) was distributed on August 21, 2023 for a 30-day public review and comment period. Additionally, a public scoping meeting was held on August 30, 2023.

Comments received during the NOP public scoping period were considered part of the preparation of this EIR. The NOP and written comments are included in Appendices B.2 and B.3 to this EIR. Topics raised during the NOP comment period and scoping meeting include:

- Aesthetics: views from adjacent private homes
- Biological Resources: Multiple Habitat Conservation Program plan consistency, sensitive species, sensitive habitat, and biological resources mitigation
- Cultural and Tribal Cultural Resources: compliance with Assembly Bill 52 and Senate Bill 18
- Land Use: provision of low-income or senior housing
- Noise: construction and vehicular noise, vibration from blasting

- Public Services (police): City should consider having their own police department
- Transportation (pedestrian): pedestrian safety
- Transportation (vehicular): congestion
- Utilities and Service Systems: water use

These concerns are addressed in Chapter 3 of the EIR.

1.4 Issues to be Resolved

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

The lead agency must respond to each significant effect identified in the EIR by making “Findings” for each significant effect. The issues to be resolved by the decision makers for the project include whether or how to mitigate the associated significant effects, including whether to implement a project alternative.

Issues to be resolved that are directly related to the proposed project include the choice among the alternatives and whether or how to mitigate the significant effects. In particular, the decision makers must decide if the significant impacts to biological resources, cultural resources, resources, noise, and tribal cultural resources have been mitigated to less than significant. Lastly, the decision makers must determine whether any of the project alternatives would substantially reduce significant effects while still meeting key objectives of the project.

1.5 Project Alternatives

Three alternatives are proposed to provide an understanding of how environmental effects could be reduced by varying the design and scope of the project. **Table 1-2** provides a comparison of the impacts of project alternatives to the impacts of the proposed project.

1.5.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the proposed project would not be implemented, and the project site would remain undeveloped and in its current condition. No grading or construction would occur on the project site under this alternative. The project site is currently undeveloped and supports Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, and urban/developed areas (Rincon 2025).

Since the No Project/No Development Alternative would not develop any residential uses on the project site, overall impacts would be less than those of the proposed project or eliminated entirely. There are some benefits of the project that would not be realized under this alternative, including providing additional housing units in the City which helps the City meet its Regional Housing Need Allocation numbers. Under this alternative there would not be any payment of the City’s Public Facilities Fee (PFF), which goes toward supporting a variety of services and improvements in the City, including but not limited to Circulation Streets, State Route 78 Interchanges, National Pollutant Discharge Elimination System, Tech Improvements, Parks, and Habitat Conservation. Payment of these fees provide improvements that benefit all residents of the city. Similarly, this alternative would not

contribute any school fees. Finally, this alternative would not meet any of the project objectives (Table 1-3).

1.5.2 No Project/Existing Plan Alternative

Typically, under a No Project/Existing Plan Alternative, the project site would be developed consistent with the site's existing land use designation. The project site has a General Plan Designation of SPA (Specific Plan Area) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, including the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan have not been adopted by the City and there is no current City effort to do so. Therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The Richmar Specific Plan identifies commercial, office and multifamily residential as land use options within the Richmar planning area.

Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. City policy requires that a secondary access be provided if more than 50 units are proposed. Given the topographical constraints of the site and the adjacent residential land uses, multifamily residential land use is assumed as the existing land use for this analysis. The project site would not be suitable for commercial or office development given the site topography and adjacent uses. It is also assumed that a maximum of 50 multifamily residential units could be built on the site given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point. Under this scenario the site would have a density of 5.9 du/acre and a Specific Plan would be required.

The overall footprint of development for the 50 units (25 buildings with two units each) is assumed to be the same as the proposed project. The units would still be duplexes; however, the units would be smaller. Building heights could be up to 45 feet. Site access would be similar to the proposed project and would be via a driveway from Woodward Street. Grading, blasting and rock crushing as well as fire fuel modification would be required for this alternative.

The No Project/Existing Plan Alternative would result in a slightly more intensive use on the project site, including an increase in trip generation compared to the proposed project (400 ADT compared to 368 ADT). This results in a corresponding proportional increase in air pollutants and noise from vehicles compared to the proposed project. Construction-related air pollutants are expected to be slightly increased as construction duration would be longer due to additional building construction but a similar amount of grading, blasting, rock crushing and site preparation would be required. Construction-related noise impacts due to rock drilling and rock crushing would be similar to the proposed project. Footprint-specific impacts, such as those related to biological resources, cultural resources, and tribal cultural resources, would be similar to the proposed project, as the same amount of site area would be disturbed. This alternative would slightly increase the number of students generated for San Marcos Unified School District (SMUSD) and would increase demand for parks, libraries, and solid waste facilities compared to the proposed project. This alternative would have a similar water demand and wastewater generation as the proposed project. This alternative could meet the majority of the project objectives, as detailed in Table 1-3.

1.5.3 Reduced Density Alternative

Under the Reduced Density Alternative, the project site would be developed with single family residential uses at a reduced density of 2 du/acre, resulting in 16 single family homes. Prior to the last comprehensive update of the City's General Plan, the project site was designated for Single-Family Detached under the HOCSP with a density of 2 to 4 du/acre assigned to it. The Reduced Density Alternative assumes the lower end of the density range given the steep slope of the property and the preparation of a Specific Plan would be required. The maximum building height under this alternative would be 35 feet or two stories. Due to the topographical constraints of the site, access would be similar to the proposed project and would be via a driveway on Woodward Street. Grading, blasting and rock crushing as well as fire fuel modification would be required for this alternative.

The Reduced Density Alternative would result in a less intensive use on the project site, including a reduction in trip generation compared to the proposed project (192 ADT compared to 368 ADT). This results in a corresponding proportional decrease in air pollutants and noise from vehicles compared to the proposed project. Grading-related air pollutants are expected to be similar under this alternative since a similar amount of grading, blasting, rock crushing and site preparation would be required. Fewer air pollutants would be generated from building coating and finishes, since seven fewer buildings would be constructed. Construction-related noise impacts due to rock drilling and rock crushing would be similar as the proposed project. Footprint-specific impacts, such as those related to biological resources, cultural resources, and tribal cultural resources, would be similar as the proposed project, as the same amount of site area would be disturbed. This alternative would reduce the number of students generated for SMUSD and would reduce demand for parks, libraries, water, sewer, and solid waste services compared to the proposed project. The Reduced Density alternative could meet the majority of the project objectives, as detailed in Table 1-3, but would not provide multi-family housing in the 4.1-8.0 dwelling unit range.

1.5.4 Environmentally Superior Alternative

Table 1-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As shown in Table 1-2, the No Project/No Development Alternative would eliminate all of the potentially significant impacts identified for the project. However, the No Project/No Development Alternative would not meet any of the project objectives (see Table 1-3). Additionally, there is no certainty that the project site would remain undeveloped in perpetuity. The California Environmental Quality Act Guidelines Section 15126.6(e)(2) states that if the No Project alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives.

Among the other alternatives, not including the proposed project, the No Project/Reduced Density Alternative is the environmentally superior alternative because it would provide a reduced level of impact in some environmental analysis areas including air quality, energy, noise, public services, and utilities/service systems. Mitigation measures would still be required to mitigate impacts to biological resources, cultural resources/tribal cultural resources, and noise. However, the Reduced Density Alternative was not selected as it would result in a significant new and unmitigated impact related to transportation (vehicle miles traveled).

Table 1-2. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Density Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Geology and Soils	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Hydrology and Water Quality	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Land Use and Planning	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Noise	LTSM	No Impact (Reduced)	LTSM (Increased)	LTSM (Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Transportation	LTS	No Impact (Reduced)	LTSM (Increased)	SU (Increased)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)

Notes: Impact Status: LTS = Less than significant impact; LTSM = Less than significant with mitigation; SU = Significant and Unmitigated

Table 1-3. Summary of Alternatives and Project Objectives

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Density Alternative
Provide multi-family housing opportunities close to major transit, educational facilities, shopping opportunities, employment uses, and trails to optimize alternative modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.	Meets objective	Does not meet this objective	Meets objective	Does not meet this objective
To the extent possible given site constraints, maximize the opportunity to provide housing for the City of San Marcos in the 4.1 to 8.0 dwelling unit density range which is comparable to low-density housing developments in the City of San Marcos.	Meets objective	Does not meet this objective	Meets objective	Does not meet this objective
Cluster development to lessen site impacts and minimize landform modification.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Develop high-quality attainable housing which meets the housing needs of the City of San Marcos and the region.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Create a development that promotes a high-quality-of-life by providing each dwelling unit its own private patio/yard space and by providing a common recreational open space gathering area.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complements and enhances the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan Area.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Density Alternative
Finance or contribute a fair share of funding to all community services and infrastructure needed to support Specific Plan development to promote economic stability.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

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2.0 Project Description, Location and Environmental Setting

This Draft Environmental Impact Report (EIR) has been prepared by the City of San Marcos to evaluate the potential effects associated with the construction and implementation of the proposed Woodward 46 Specific Plan Project (proposed project) as described in Section 2.2 of this EIR. The EIR is intended to provide information to the San Marcos City Council, public agencies, stakeholders and organizations, and the general public regarding the potential environmental impacts, mitigation measures, and alternatives to the proposed project

2.1 Project Objectives

The following objectives describe the underlying purpose of the proposed project and provide a basis for identification of a range of reasonable alternatives evaluated in the EIR.

- Provide multi-family housing opportunities close to major transit, educational facilities, shopping opportunities, employment uses, and trails to optimize alternative modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.
- To the extent possible given site constraints, maximize the opportunity to provide housing for the City of San Marcos in the 4.1 to 8.0 dwelling unit density range which is comparable to low-density housing developments in the City of San Marcos.
- Cluster development to lessen site impacts and minimize landform modification.
- Develop high-quality attainable housing which meets the housing needs of the City of San Marcos and the region.
- Create a development that promotes a high-quality-of-life by providing each dwelling unit its own private patio/yard space and by providing a common recreational open space gathering area.
- Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complements and enhances the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan Area.
- Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.
- Finance or contribute a fair share of funding to all community services and infrastructure needed to support Specific Plan development to promote economic stability.

2.2 Project Description

The approximate 8.57-acre project site is located on the east side of Woodward Street, generally between E. Mission Road to the south and Vineyard Road to the north in the Richland neighborhood in City of San Marcos (City) in North County San Diego, California (**Figure 2-1a**). The project site is approximately 0.5 mile north of State Route 78 (SR-78) and 0.1 mile north from the Civic Center SPRINTER rail station (**Figure 2-1b**). The assessor parcel number (APN) is 220-210-49-00.

The project applicant is requesting approval of a Specific Plan Amendment to the Heart of the City Specific Plan (HOCSP) (SP22-0006), adoption of a new Woodward 46 Specific Plan (SP22-0005), General Plan Amendment (GPA22-0004), Multi-Family Site Development Plan (MFSD22-0005), Tentative Subdivision Map (TSM22-0004), and Conditional Use Permit (CUP22-0005). If approved, these entitlements would allow for the development of the proposed 46-unit condominium development on the project site. The conceptual site plan is presented in **Figure 2-2**.

2.2.1 Discretionary Actions

As mentioned above, the requested project entitlements/discretionary actions, and permits by the City include a Specific Plan Amendment, a Specific Plan, General Plan Amendment, Multi-Family Site Development Plan, Tentative Subdivision Map, and a Conditional Use Permit. Each of these actions is described in more detail below. The Specific Plan is included as **Appendix A.1**, the amendment to the HOCSP is included as **Appendix A.2**, and the project plans are included as **Appendix A.3**.

- **Specific Plan Amendment (SP22-0006)** – A Specific Plan Amendment to modify the Heart of the City Specific Plan to remove the current Richmar Sub-Plan designation on the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan.
- **Specific Plan (SP22-0005)** – The Woodward 46 Specific Plan establishes the development rules and regulations of all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the Specific Plan.
- **General Plan Amendment (GPA22-0004)** – A General Plan Amendment to the Land Use Element for the purpose of amending land use maps and text related to changing the sub-plan designation of the subject property from Richmar Specific Plan to Woodward 46 Specific Plan.
- **Multi-Family Site Development Plan (MFSD22-0005)** – A Multi-Family Site Development Plan approval would be required to construct 46 multi-family residential units and address the details of the architectural style, building elevation, fencing, and landscaping, among other criteria, within the development.
- **Tentative Subdivision Map (TSM22-0004)** – Tentative Subdivision Map approval would be required for formation of residential condominium units, private driveways, and open space areas.
- **Conditional Use Permit (CUP22-0005)** – Conditional Use Permit approval would be required for potential use of a temporary rock crusher.

2.2.2 Project Characteristics

This section details the characteristics of the proposed project.

2.2.2.1 Land Use

Residential Land Use

The project proposes 46 duplex residential units in 23 buildings situated on approximately 8.57 gross acres for a project density of 5.37 du/acre. The proposed residential units would all be three bedroom and 3.5 baths and range from 1,585 square feet (s.f.) to 1,900 s.f. The units would be three stories

and approximately 35 feet in height. Each unit would have a two-car garage. The Specific Plan's development standards require a minimum of 0.75 floor area ratio.

Open Space

There are three main categories of open space proposed for the project: private open space, common open space with grades of 10% or greater, and common open space with grades less than 10%. Recreational open space is sub-categorized under the common open space with grades less than 10%.

Private open space is associated with private patio/yard areas for each of the residential units. **Table 2-1** presents the open space summary as detailed in the Specific Plan. **Figure 2-3** presents the open space concept plan as proposed for the project.

Table 2-1. Open Space Summary

Type of Open Space	Total (Acres)
Common Open Space – Grades of 10% and Greater	5.18 acres
Common Open Space – Grades less than 10%	0.86 acres
Private Open Space ⁽¹⁾	38.375 s.f.
Recreation Areas ⁽²⁾	0.2 acres
Common Open Space Total	6.04 acres

Notes: Private open space square footages are not included in the total.

Recreation area calculations included within the Common Open Space with Grades Less than 10%.

Common Open Space

Common Open Space – Grades 10 Percent or Greater

Open space with grades of 10 percent or above typically constitute landscape slope areas that are not usable open space. The project site contains steep slopes on the south, west, and north, however inclusion of strategically placed walls around the site would produce a level area for residential development to occur. Graded areas of development containing slopes over 10 percent shall be landscaped to prevent erosion of slopes. Landscaping and water quality basins may fall into this category of open space supporting the functionality of drainage systems as well as enhancing and beautifying the Specific Plan area. Portions of the common open space area within Lot A may be preserved as biological habitat and subject to an open space easement. The project includes 5.18 acres of common open space – grades 10 percent and greater.

Common Open Space – Grades Less than 10 Percent

This category of open space would be included within the developed footprint of the residential land uses within the Specific Plan. Recreation areas within the Specific Plan shall provide at least three major amenities for each residential planning area. A list of comparable recreation amenities can be found in Section 3.3.3 of the Woodward 46 Specific Plan. Landscaping and water quality basins may fall into this category of open space supporting the functionality of drainage systems as well as enhancing and beautifying the Specific Plan area. The project includes 0.86 acres of common open space – grades less than 10 percent, including the recreation area discussed below. Recreation Areas

2.0 Project Description, Location, and Environmental Setting

The project includes a 7,480 s.f. (0.2 acre) community recreation area which would be located in the southcentral portion of the site. The recreational amenities would include a tot lot with fall-safe surfacing, turf play areas, shaded picnic table, looped trike track, and a sensory play area. The homeowners association would be responsible for the maintenance of the common open space areas, including the recreation area.

Private Open Space

Private open space within the proposed project consists of private patio space and private balcony/deck space. The City requires that each unit with ground floor living must provide 250 s.f. of private open space. Units with living space on the second floor and above must provide 50 s.f. of private open space in the form of decks or balconies. Each dwelling unit included within the Specific Plan area would be provided with private open space. Each unit with ground floor living would include a minimum of 250 square feet of private open space which would be provided as a private rear yard area. For units located on the second story and above a minimum of 50 square feet of private open space would be provided. The project includes a total of 38,375 s.f. (0.88 acres) of private open space.

Landscape Plan

The proposed landscape plan includes a mix of trees, shrubs, and groundcover and the plant selection emphasizes low and moderate water use species and species that are suitable for rocky slope conditions. Proposed tree species include: evergreen elm, Marina strawberry tree, Chitalpa pink dawn, Australian willow, Tuscarora crape myrtle, Chinese pistache, African sumac, eastern redbud, bronze loquat, sweetshade, shrubby yew podocarpus, Torrey pine, coast live oak, southern live oak, Brisbane box, and little gem magnolia. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance (WELo) and Municipal Code, Title 20. The landscape concept plan is included as **Figure 2-4** and the complete landscape plan and planting palette is included in **Appendix A.4**.

2.2.2.2 Architectural Design

The proposed project would be developed with two building types (Elevation A and Elevation B). Each building type would provide a variation of contemporary/modern style architecture. For each elevation type, some of the units have been identified for enhanced elevation treatments. **Figures 2-5a, 2-5b, 2-6a and 2-6b** present conceptual building elevations for each elevation type and **Figure 2-7** presents the rendered building elevations.

The proposed architectural style takes inspiration from contemporary/modern style architecture. Elements and materials traditionally used for this style include angular pitched roofs using concrete roof tiles, simple forms with stucco or stone veneer walls, metal and stucco railings, and awnings. The architecture was chosen to complement existing architecture adjacent to the project site. The architectural style would be complemented with a color scheme which incorporates neutral wall colors to complement the project with nearby development within the area. The Specific Plan identifies design concepts to minimize the bulk and scale of the project. This includes: using building-form elements such as place breaks, roof forms, and changes in materials to define individual units; articulating the front and rear elevations both vertically and horizontally; and avoiding long unbroken surfaces on front and rear elevations by providing a change in plane at least every 25 feet.

2.2.2.3 Walls, Fencing and Lighting

Fencing and Walls

Generally, walls and fences within the proposed development are designed to function in five ways; (1) as aesthetic boundaries for open space, (2) sound attenuation, (3) retaining barriers along roadways or lots, (4) safety fencing around recreational areas, and (5) privacy fencing between private open space for multi-family dwelling units. Fence and wall types allowed within the Specific Plan Area may include geogrid retaining walls, soil nail retaining walls, tan block retaining wall, tubular steel fencing, tubular steel on retaining wall, and vinyl privacy fencing. Wall and fencing materials may be substituted with other wall and fence types and materials upon review and approval by the Development Services Department. Figure 2-8 presents the conceptual fence and wall plan and Figure 2-9 presents examples of the proposed wall and fencing materials.

Lighting

Lighting for the proposed project would be used to accent landscaping and provide safety and accent lighting for duplex buildings. All lighting fixtures for the proposed project would be energy efficient, architecturally appropriate, and designed to minimize glare, conflict, and light pollution, while providing illumination levels that create a safe environment for both vehicles and pedestrians. Street area lights would be full cut-off fixtures and would utilize house-side shields to reduce light trespass and prevent light pollution. Common area lighting would be used to enhance and complement the character of the development. Conceptual lighting fixtures and locations are illustrated on **Figure 2-10**. Lighting would be required to conform with the City's lighting ordinance and standards, (San Marcos Municipal Code Title 20, Section 20.300.080).

2.2.2.4 Access, Circulation and Parking

Project Access

Access to the project site would be via one unsignalized driveway on Woodward Street. The entrance driveway would be ungated and would be 24 feet wide. Internal vehicular movement would be via a 24-foot-wide drive aisle.

Circulation

The project site would have one internal circulation system. The conceptual circulation plan is included as **Figure 2-11**. The driveway in the Specific Plan Area would provide a minimum of 24 feet of paved driving surface measured curb to curb. Where provided, a minimum 4-foot concrete sidewalk would accommodate safe pedestrian travel through each area. Units requiring Americans with Disability Act (ADA) accessibility would be located on the western side of the driveway where a 4.5-foot sidewalk would run the length of the development and connect units to the common recreation area. A concrete sidewalk would be constructed along the west side of the main project driveway to connect the project to Woodward Street. A 6-inch curb and gutter would be constructed to either side of the driveway and each travel lane would be a minimum of 12 feet from center line.

Emergency Access

The Specific Plan Area would accommodate the Pierce Pumper truck, which is the emergency vehicle in operation with the City of San Marcos Fire Department. A 24-foot minimum curb to curb driveway would be constructed to maintain a minimum road width and any portion of the driveway with grades

12% and steeper would require concrete pavement surface with a broom finish suitable for emergency vehicles per City of San Marcos Fire Department requirements. The project design would include a 30-foot-wide emergency vehicle turnaround area at the northeast corner of the proposed development. The cul-de-sac at the southern end of the site would also serve as an emergency vehicle turnaround area. Both turnaround areas would accommodate the Pierce Pumper truck.

Parking

The project proposes a total of 108 on-site parking spaces. This includes two-car garages for each residential unit and 16 open parking spaces. Each garage would be wired to accommodate an electric vehicle charger. The open parking spaces would be located throughout the project area.

2.2.2.5 Grading and Construction Phase

The proposed project is expected to start construction in 2025 and full occupancy is anticipated in 2027.

Grading

Earthwork activities include 41,989 cubic yards (CY) of cut volume. With over-excavation and bulking, the total fill volume would be 50,270 CY, for a difference of 8,281 CY. If suitable, the excess material would be used as wall backfill and the site would balance. If it is not suitable, it would be exported from the site. To be conservative, the environmental analysis assumes the materials would be exported. Assuming 15 cy truck trips, that would equate to 553 trips. These trips would be spread over approximately 23 working days for 24 trips per day associated with export.

The project design incorporates retaining walls to manage the topography of the site and create areas for the access driveway and building pads. The proposed retaining walls include slump block, geogrid, and soil nail styles, depending on the location within the project. The retaining walls would be earth-tone color and textured to blend in with the surrounding terrain.

There is existing netting along the Woodward Street frontage to minimize the potential for rock and debris fall onto the roadway. As noted on the proposed grading plans for the project, a portion of this netting would be removed to accommodate the project grading. The netting would be re-anchored to the new top of slope or as recommended by the soils engineer during project construction.

The import and export of earth material is guided by Section 17.32.080 of the City's Municipal Code and prior to any export of soils, a haul route would be submitted for review and approval by the City Engineer. Additionally, grading and other earth moving activities are restricted to the hours of 7:00 AM and 4:30 PM, Monday through Friday, per Section 17.32.180 of the City's Municipal Code.

The proposed project would comply with San Diego Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control. This rule limits airborne dust beyond the property line and roadway dust associated with construction equipment and trucks.

Blasting and Rock Crushing

Due to bedrock conditions, blasting would be required on the project site. The proposed project would comply with all provisions identified in the City's Municipal Code Section 17.60.06 as it relates to blasting and blasting would only be permitted between the hours of 9:00 AM and 4:00 PM during any weekday. Blasting also requires issuance of a Blasting Permit from the San Marcos Fire Department.

2.0 Project Description, Location, and Environmental Setting

The proposed project's requested approvals include a Conditional Use Permit (CUP22-0005), which would allow for the use of the temporary rock crusher. The rock crusher, a Thunderbird Hazemag impact crusher, would be located in the central portion of the site to provide the most distance from adjacent residential uses. The crusher would be approximately 329 feet from the residential use to the east, 667 feet from the closest residential use to the north and 531 feet from the closest residential use to the south.

2.2.2.6 Public Utilities and Services

Water Facilities

The project site lies within the service area of Vallecitos Water District (VWD) for water service and sewer service. The project would connect to the existing 8-inch water main in Woodward Street at the main entry to the project site. Water connections to the dwelling units would be provided via 4-inch lines. An 8-inch fire main would parallel the potable water line for fire service to the site.

Wastewater Facilities

The project site is also in the VWD service area for sewer service. For sewer service, the proposed project would extend the existing gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. The proposed sewer line extension would be within the existing roadway on Woodward Street. Dwelling units would connect to sewer via an 8-inch sewer main that would run the length of the main driveway.

Site Drainage and Stormwater Management

Storm drain systems and connections would be designed to accommodate the proposed future development. The proposed project would construct two biofiltration basins (BMP-A and BMP-B) for storm water quality and hydromodification, which would be located at the northeast corner and northwest edge of the project site. These features would collect storm water from the buildings and street and direct the storm water through storm water drainage pipes to existing points of confluence (POC). In conformance with the 2023 City of San Marcos BMP Design Manual.

Electricity and Gas

The proposed project would be served by San Diego Gas & Electric (SDG&E) for electricity and gas service. The design for the dry utilities connection are still under preparation, however the proposed project would connect to existing infrastructure within Woodward Street. This work would take place within the existing right-of-way and would not disturb any vegetation.

Solid Waste Disposal

Solid waste collection and recycling services to the proposed project would be provided by EDCO Waste & Recycling. Non-recyclable waste, including general trash and green materials, would be collected and transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials would be transferred to the Escondido Resources Recovery Transfer Station for further processing.

Fire Protection

The San Marcos Fire Department (SMFD) would provide fire protection for urban and wildland fires and emergency services to the project site. SMFD services San Marcos with four stations, the closest

of which is Fire Station No. 1 located at 180 W. Mission Road, approximately 0.25 miles west of the project site. There are two easements on the project site associated with vegetation management for fire fuel reduction. One is located along a portion of the project site's eastern boundary and the other is located along a portion of the project site's southern boundary. These are associated with fire buffer maintenance requirements of adjacent development.

The proposed project would also implement a zoned brush management plan which would provide a minimum of 150 feet of clearance. The brush management plan would follow the California Department of Forestry and Fire Protection's (CAL FIRE) guidance for defensible space (CAL FIRE 2023) which includes three zones of defensible space. The preliminary brush management plan is included as **Figure 2-12**. The brush management plan and implementation would be the responsibility of the Home Owners Association. The brush management zones include:

- **Zone 1 (Structures)** – This zone covers 50 feet around structures and is measured from the structure outward to 50 feet or to the property line. Zone 1 landscaping shall be permanently irrigated and landscaped with fire resistive, low fuel plant material lower than 18 inches high. At maturity, trees shall be located so crowns are a minimum 10 feet from structures at maturity and spaced with a minimum of 10 feet between crowns at maturity. No combustible fencing shall be allowed. No bark mulch shall be allowed within 5 feet of structure walls.
- **Zone 1 (Roadway Adjacent)** – This zone measures 30 feet outwards from the roadway curb to 30 feet each side of the roadway. Landscaping shall be permanently irrigated and landscaped with fire-resistive, low-fuel plant material.
- **Zone 2** – This zone is measured from the outside edge of Zone 1 outward to 100 feet from the structure. This zone has a reduced fuel, non-irrigated area and shall be maintained, thinned, and trimmed. A maximum of 50 percent of native vegetation shall be retained with single specimen shrubs 20 feet off center maximum. Groundcover shall be maintained at 6 inches height. Trees shall be maintained with a minimum 20 feet between canopies.
- **Zone 3** – This zone measures from the outside of edge of Zone 2 outward to 150 feet from the structure. This zone is a reduced fuel, non-irrigated area and shall be maintained, thinned, and trimmed. A maximum of 30 percent of native vegetation shall be retained with single specimen shrubs 20 feet off center maximum. Groundcover shall be maintained at 6 inches height. Trees shall be maintained with a minimum 20 feet between canopies.

2.2.2.7 Vacation of Easement

As part of the project, an existing easement for drainage, slope and public street, and utility is recorded in favor of the City (recoded March 26, 2002, Document No. 2002-0251944). As part of the project all drainage rights will be vacated on the final map and portions of the slope rights will be vacated on the Final Map. The City will reserve the public street and utility rights associated with this existing easement.

2.2.2.8 Offsite Improvements

Wastewater Infrastructure

As discussed in Section 2.2.2.6, prior to project occupancy, the proposed project would implement the following improvement:

Extend the existing 8-inch gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. The proposed sewer line extension would be within the existing roadway on Woodward Street.

Transportation Infrastructure Improvements

The proposed project would construct a minimum 50-foot southbound left-turn pocket on Woodward Street for left-turn access to the project site outside of the southbound through lane.

2.2.2.9 Economic Characteristics

As discussed in Chapter 8 of the Woodward 64 Specific Plan (Appendix A.1), the proposed project would include a Facilities Financing Plan to ensure improvements are implemented in a timely and successful manner. The financing mechanisms for each improvement would be timed with development of the project site, the City's conditions of approval, and site plan/design review approval. Refer to Chapter 8 of Appendix A.1 for additional details regarding the methods of financing of construction and operation of public improvements and services.

2.2.2.10 Project Design Features

The project incorporates the following design features and would adhere to specific regulatory requirements that would minimize potential environmental effects. These are summarized, in **Table 2-2**.

Table 2-2. Project Design Features

Aesthetics <ul style="list-style-type: none">• Implementation of the Landscape Plan to provide a cohesive and visually appealing planting scheme.• Compliance with the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards.
Air Quality <ul style="list-style-type: none">• Compliance with SDACPD Rule 55 – Fugitive Dust.• In accordance with SDAPCD Rule 67.0 (Architectural Coatings), the project would utilize low-volatile organic compound (VOC) paint that does not exceed 100 grams of VOC per liter for interior surfaces and 150 grams of VOC per liter for exterior surfaces.• Heavy diesel construction equipment shall be rated Tier IV.
Energy <ul style="list-style-type: none">• Ensure proper maintenance of all construction equipment per manufacturer recommendations.• Installation of rooftop solar consistent with Title 24.
Greenhouse Gas Emissions <ul style="list-style-type: none">• Installation of rooftop solar consistent with Title 24.• Compliance with the City's Model Water Efficient Landscape Ordinance and Municipal Code, Title 20.• None of the units would have fireplaces.• Planting of shade trees.• Each garage would be wired to accommodate an electric vehicle charger.

Geology and Soils

- Implement all recommendations from the preliminary geotechnical investigation (GeoTek 2019). These recommendations include general provisions related earthwork, and design recommendations related to stormwater infiltration, foundation design, seismic design parameters, corrosion, retaining all design and construction, and post-construction considerations. The detailed recommendations are included in Chapter 5 of the geotechnical report, which is included as Appendix G of this document.
- Removal and replacement of netting along Woodward Street frontage to minimize potential for rock and debris fall on the roadway, as noted on the project grading plans.

Hazards

- Implementation of a zoned brush management plan which would provide a minimum of 150 feet of clearance from structures.
- Future residents shall be notified of potential annoyances commonly associated with proximity to airports (e.g., noise, vibrations, and overflights) through the recording of overflight notification documents as outlined in the McClellan-Palomar Airport Land Use Compatibility Plan and Chapter 20.265 of the City's Municipal Code.

Hydrology and Water Quality

Source control BMPs include, but are not limited to:

- Preventing illicit discharges into the MS4
- Stenciling the future on-site public road storm drain inlets
- Protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal.

Site design BMPs include, but are not limited to:

- Conserving natural drainage pathways and hydrologic features
- Conserving natural areas, soils, and vegetation
- Minimizing impervious areas
- Minimizing soil compaction
- Runoff collection through multiple private inlets
- Landscaping with native or drought tolerant species.

Permanent Structural BMPs, include, but are not limited to:

- Biofiltration basins and hydromodification facility including 100-year post-development detention

Noise/Vibration

- Grading, excavation, and other earth moving activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. No grading, excavation and other earth moving activities would occur on the weekends or holidays in accordance with the City's Municipal Code, Section 17.32.180.
- The project would comply with all provisions identified in the City's Municipal Code Section 17.60.06 as it relates to blasting and blasting shall only be permitted between the hours of 9:00 AM and 4:00 PM during any weekday. Blasting also required issuance of a Blasting Permit from the San Marcos Fire Department.
- All construction equipment would be properly fitted with mufflers and all staging and maintenance would be conducted as far away from the existing residence as possible.
- To ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Public Services – Fire Protection, Police Protection Schools, and Parks

- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic).
- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 98-01 (Police).
- The applicant shall pay the San Marcos Unified School District developer fees that are in effect at the time of building permit issuance. The current residential fee is \$4.79 per square foot.
- Payment of Public Facility Fees, a portion of which go towards park development.

Transportation

- The applicant/developer/property owner shall construct an access point that provides adequate driveway sight distance.
- The applicant/developer/property owner shall construct a southbound left-turn pocket on Woodward Street for left-turn access to the project site outside of the southbound through lane.
- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2011-01 (Congestion Management).
- Payment of Public Facility Fees, a portion of which go towards improvements to circulation streets and State Route 78 interchanges.

Utilities and Service Systems

- The applicant would pay applicable Water and Wastewater Capital Facility Fees to Vallecitos Water District per Ordinances Nos. 175 and 176. Proof of payment would be provided to the City's Planning Manager.
- Extend the existing 8-inch gravity sewer main located north of the project site in Woodward Street for approximately 490 feet.

2.3 Environmental Setting

2.3.1 Existing Land Use and Setting

On-Site

The project site is currently undeveloped, steeply-sloped vacant land. The earliest-available aerial images of the project site, dating to 1928, appear to show two graded areas with a dirt road connecting the two. By 1938, at least one of the dirt roads appears to have been abandoned. Between 1953 and 1964, another episode of disturbance is visible on the aerial imagery, with grading over a portion of the project area and possibly the widening of Woodward Street. By 1980, a four-sided feature is visible in these graded areas. By 1987, this feature is no longer visible. Post-1987, activity in the project site appears to be sporadic and included clearing of some of the previously cut roadways. In the most-recent google earth images dating to 2021, a small approximately 7-x-10-ft feature is visible in the southern portion of the project area. During the cultural resources site survey, it was determined that this feature was an abandoned asphalt-related machine (ASM 2024). There is existing netting along the Woodward Street frontage to minimize the potential for rock and debris fall onto the roadway.

Surroundings

The project site is in a developed portion of the City. The project vicinity includes single-family residential neighborhoods to the north and east, multi-family residential developments to the south, and undeveloped land to the west across Woodward Street. Directly north of the project site is an area designated as Open Space in the City's General Plan. The City of San Marcos Civic Center is located south of the project site across E. Mission Road and contains a mix of institutional, office, and medical office uses as well as adjacent commercial land uses which offer a variety of retail space, restaurants, service uses, and shopping. The Civic Center SPRINTER rail station is located approximately 0.1 miles from the project site at the intersection of E. Mission Road and San Marcos Boulevard.

2.3.2 Existing General Plan and Zoning

Existing General Plan Land Use Designation

The project site has a General Plan Designation of SPA (Specific Plan Area) and is associated with the HOCSP. The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses.

Existing Zoning Designation

The project site is located within the HOCSP Specific Plan Area and zoned SPA. No change in zoning is proposed as part of the project.

2.3.3 Regional Setting

The following provides a general description of various aspects of the proposed project's environmental setting. Additional descriptions of the project's environmental setting as it relates to environmental issue areas can be found in Chapter 3.

2.3.3.1 Climate

The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average summertime high temperature in the region is approximately 74° Fahrenheit (F), with highs approaching 76°F in August on average. The average wintertime low temperature is approximately 49°F. Precipitation in the local area is approximately 10 inches per year, with the bulk of precipitation falling between December and March.

2.3.3.2 Air Basin

The City and project site is within the San Diego Air Basin (SDAB) and is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). The SDAB is one of 15 air basins that geographically divide the State of California. The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and it is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB is currently classified as a federal nonattainment area for ozone (O₃) and a state nonattainment area for particulate matter less than or equal to 10 microns of coarse particulate matter (PM₁₀), particulate matter less than or equal to 2.5 microns (fine particulate matter (PM_{2.5})), and ozone (O₃).

2.3.3.3 Soils

The earth materials present at the project site consist of sporadic undocumented fill materials, colluvium, and Cretaceous age plutonic bedrock (GeoTek 2019). There is existing netting along the Woodward Street frontage to minimize the potential for rock and debris fall onto the roadway. As noted on the proposed grading plans for the project, a portion of this netting would be removed to accommodate the project grading. The netting would be re-anchored to the new top of slope or as recommended by the soils engineer during project construction.

2.3.3.4 Terrain and Topography

The project site is located within the 7.5-minute San Marcos Quadrangle map. The project site is undeveloped and steeply sloped. Elevation ranges from 754 feet above mean sea level (amsl) in the eastern portion of the project site down to 615 feet in the southwestern portion of the project site.

2.3.3.5 Watershed and Hydrology

The project site is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into eleven hydrologic units. The project site is located in the Richland Hydrologic Subarea (904.52) within the San Marcos Hydrologic Area (904.5) of the Carlsbad Watershed Hydrologic Unit (904). The existing drainage conveyance is natural and fronts Woodward Street and E. Mission Road.. The upper east side of the project site drains westerly to the existing 18-inch and 24-inch storm drain pipes, then to POC-1 which is located at the southeast corner of the project site. The lower east side of the project site drains southerly to the existing 18-inch and 24-inch storm drain pipes then to POC-2, which is located at the southeast corner of the project site. At the most northern portion of the project site, surface runoff drains northerly to POC-3, which is located at the northwest edge of the project site.

2.3.3.6 Regional Biology

The City of San Marcos Subarea Habitat Conservation Plan/Natural Community Conservation Plan (NCCP) has not been finalized or implemented, and the City is no longer an active participant in the NCCP program and the subregional Multiple Habitat Conservation Program (MHCP) conservation planning effort. However, it is the City's General Plan policy to comply with the conservation policies identified in the MHCP through use of the Draft San Marcos Subarea Plan as an implementation tool. The project site is not located within a Focused Planning Area (FPA) in the City's Draft Subarea Plan. Directly north of the project site is an area designated as Open Space in the City's General Plan.

Based upon the biological resources study prepared for the project (Rincon 2025), the project site supports Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, and urban/developed areas. No drainages or wetlands occur on the project site. Focused surveys for costal California gnatcatcher (CAGN) were conducted in 2023 and no CAGN were observed on the project site. Rare plant surveys were conducted in June and September 2023 and no rare plants were observed on the project site. (Rincon 2024).

2.3.3.7 Public Services

Police Protection

Police protection for the proposed project would be provided by the County of San Diego Sheriff's Department. The County Sheriff provides contract law enforcement services to the City of San Marcos through the station located at 182 Santar Place, approximately 0.75 miles east of the project site.

Schools

The project site is within the San Marcos Unified School District (SMUSD) boundary. SMUSD is 49 square miles in size and encompasses most of the City of San Marcos and portions of the Cities of Vista, Escondido, and Carlsbad, as well as unincorporated areas of the County of San Diego between these cities. Students generated by the project would attend Richland Elementary School, Woodland Park Middle School, and Mission Hills High School.

Parks

There are 24 community parks, 13 neighborhood parks and three recreation centers in the City. The parks closest to the project site are Richmar Park and Hollandia Park. Richmar Park is located 0.25 mile west of the project site at 110 Richmar Avenue. Richmar Park is developed with adapted play

equipment, a performance plaza, permanent restrooms, a picnic shelter, picnic tables, play equipment and turf play areas. Hollandia Park is located 0.8 miles east of the project site at 12 Mission Hills Court. Hollandia Park is developed with an amphitheater, lighted ballfield, barbeque area, dog park, horseshoe court, lighted multi-purpose fields, park space, permanent restrooms, a picnic shelter, play equipment, skate plaza and turf play areas.

Libraries

The City is served by the San Diego County Library. The San Marcos Branch is located at 2 Civic Center Drive, approximately 1.75 miles southeast of the project site.

2.4 Intended Uses of EIR

The EIR was prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.), CEQA Guidelines (14 CCR 15000 et seq.).

The EIR is an informational document that provides the City's decision makers, public agencies, responsible and trustee agencies, and members of the public with information about (1) the potential for significant adverse environmental impacts that would result from the development of the proposed project, (2) possible ways to minimize any significant environmental impacts, and (3) feasible alternatives to the proposed project that would reduce or avoid significant impacts associated with the proposed project (California Public Resources Code, Section 21002.1[a]; 14 CCR 15121[a]). Responsible and trustee agencies may use the EIR to fulfill their legal authority to issue permits for the proposed project. The analysis and findings in the EIR reflect the independent judgment of the City.

Lead Agency

As defined by CEQA Guidelines Section 15367, a "Lead Agency" means the public agency which has the principal responsibility for carrying out or approving a project. The City is the lead agency for the proposed project because it would perform the entitlement processing of the proposed project. As the designated lead agency, the City has assumed responsibility for preparing the EIR, and the analysis and findings in the EIR reflect the City's independent judgment. When deciding whether to approve the proposed project, the City will use the information in the EIR to consider potential impacts to the physical environment associated with the proposed project.

Responsible Agencies

As defined by CEQA Guidelines Section 15381, a "Responsible Agency" includes all public agencies other than the lead agency which have discretionary approval power over the project. Subsequent to certification of the Final EIR, agencies with permitting authority over all or portions of the proposed project would use the Final EIR as the basis for their evaluation of environmental effects related to the proposed project that would culminate with the approval or denial of applicable permits.

Trustee Agencies

As defined by CEQA Guidelines Section 15381, a "Trustee Agency" means 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 California Department of Fish and Wildlife (CDFW) is a Trustee Agency with regard to the fish and wildlife of the state, to designate rare and endangered native plants, and

to game refuges, ecological reserves, and other areas administered by the department. CDFW is a Trustee Agency for the project.

2.4.1 Scope of the EIR

For the proposed project, the City determined that a Project EIR, as defined by CEQA Guidelines, Section 15161, was required. The City made this determination based on the scope and the location of the proposed project, as well as preparation of an Initial Study in accordance with CEQA Guidelines, Section 15063 (included as Appendix B.1 to the EIR).

The EIR evaluates all subject areas listed in Appendix G to the CEQA Guidelines, with the exception of those subject areas determined not to have a potentially significant impact on the environment, as determined during preparation of the Initial Study (refer to Chapter 5 of the EIR). Chapter 3 of the EIR evaluates in detail, the following subject areas: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, hydrology and water quality, land use and planning, noise, public services, transportation, tribal cultural resources, utilities and service systems, and cumulative impacts. growth-inducing impacts are analyzed in Chapter 6.

As a “Project EIR,” the EIR is “focused primarily on the changes in the environment that would result from the development project” (CEQA Guidelines Section 15161). In addition, as a Project EIR, the EIR examines all phases of the proposed project including planning, construction, and operation (CEQA Guidelines Section 15161). Where environmental impacts have been determined to be significant, the EIR recommends mitigation measures directed at reducing or avoiding those significant environmental impacts.

2.4.2 Notice of Preparation and Scoping

CEQA establishes mechanisms to inform the public and decision makers about the nature of the proposed project and the extent and types of impacts that the proposed project and alternatives to the proposed project would have on the environment should the proposed project or alternatives be implemented. Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) dated August 21, 2023, to interested agencies, organizations, and parties. The NOP was also posted to the State Clearinghouse CEQANet portal. State Clearinghouse assigned a state identification number (SCH No 2023080449) to the EIR.

The NOP is intended to encourage interagency and public communication regarding the proposed action so that agencies, organizations, and individuals are afforded an opportunity to respond with specific comments and/or questions regarding the scope and content of the EIR.

A public scoping meeting was held on August 30, 2023 in the Valley of Discovery Room at San Marcos City Hall and two community members attended. The 30-day public scoping period ended on September 20, 2023. A total of five NOP comment letters were received.

Comments received during the NOP public scoping period were considered part of the preparation of the EIR. The NOP and written comments are included in **Appendices B.2 and B.3** to the EIR. Environmental-related topics raised during the NOP comment period and scoping meeting include:

- Aesthetics: views from adjacent private homes;
- Biological Resources: MHCP, sensitive species, sensitive habitat, and biological resources mitigation

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- Cultural and Tribal Cultural Resources: compliance with Assembly Bill 52 and Senate Bill 18;
- Land Use: provision of low-income or senior housing
- Noise: construction and vehicular noise, vibration from blasting
- Public Services (police): City should consider having their own police department
- Transportation (pedestrian): pedestrian safety
- Transportation (vehicular): congestion
- Utilities and Service Systems: water use

Public scoping comments regarding the proposed project's potential impact on the environment have been incorporated in the analysis in the EIR in Sections 3.1 (Aesthetics), 3.3 (Biological Resources), 3.4 (Cultural Resources), 3.8 (Land Use – level of service analysis for traffic), 3.9 (Noise), 3.10 (Public Services), 3.11 (Transportation), 3.12 (Tribal Cultural Resources), and 4.0 (Alternatives).

2.4.3 Draft EIR and Public Review

This Draft EIR was prepared under the direction and supervision of the City. The Draft EIR will be made available to members of the public, responsible agencies, and interested parties for a 45-day public review period in accordance with CEQA Guidelines, Section 15105.

Public review of the Draft EIR is intended to focus “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” (14 CCR 15204). The Notice of Completion of the Draft EIR will be filed with the State Clearinghouse as required by CEQA Guidelines, Section 15085. In addition, the Notice of Availability of the Draft EIR will be distributed pursuant to CEQA Guidelines, Section 15087.

Interested parties may provide comments on the Draft EIR in written form. The EIR and related technical appendices are available for review during the 45-day public review period at: City of San Marcos.

Development Services Department Counter
1 Civic Center Drive
San Marcos, CA 92069

The document is also available online at: <https://www.san-marcos.net/departments/development-services/planning/environmental-review-sustainability/environmental-documents>.

Interested agencies and members of the public may submit written comments on the adequacy of the Draft EIR to the City's Development Services Department at the address above, addressed to Scott Nightingale, Principal Planner or emailed at: snightingale@san-marcos.net

Comments on the Draft EIR must be received by the close of business on the last day of the 45- day review period.

2.4.4 Final EIR Publication and Certification

Once the 45-day public review period has concluded, the City will review all public comments on the Draft EIR and provide a written response to all written comments pertaining to environmental issues

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as part of the Final EIR. The Final EIR will include all written comments received during the public review period; responses to comments; and, if applicable, edits and errata made to the Draft EIR. The City will then consider certification of the Final EIR (14 CCR 15090). If the EIR is certified, the City may consider project approval (14 CCR 15092).

When deciding whether to approve the proposed project, the City will use the information provided in the Final EIR to consider potential impacts to the physical environment. The City will also consider all written comments received on the Draft EIR during the 45-day public review period in making its decision to certify the Final EIR as complete and compliant with CEQA and in making its determination whether to approve or deny the proposed project. Environmental considerations, as well as economic and social factors, will be weighed by the City to determine the most appropriate course of action.

If the proposed project is approved, the City will file a Notice of Determination with the State Clearinghouse and San Diego County Clerk within five working days after project approval (14 CCR 15094.)

Subsequent to certification of the Final EIR, agencies with permitting authority over all or portions of the proposed project will use the Final EIR's evaluation of the proposed project's environmental effects in considering whether to approve or deny applicable permits.

2.5 Matrix of Project Approvals

Consistent with the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20, the proposed project requires certain entitlements be submitted, reviewed, and approved by the City. The requested entitlements include a Specific Plan Amendment, Specific Plan, General Plan Amendment, Multi-Family Site Development Plan, Tentative Subdivision Map, Conditional Use Permit, among others listed and described in **Table 2-3**. These entitlements would govern the development of the project site.

The City will use the EIR and associated documentation in its decision to approve or deny the required discretionary permits. Other responsible and/or trustee agencies can use the EIR and supporting documentation in their decision-making process to issue additional approvals.

Table 2-3. Required Actions and Approvals

Agency	Required Action/Approval
City of San Marcos – Lead Agency	<ul style="list-style-type: none">• Specific Plan Amendment• Specific Plan• General Plan Amendment• Multi-Family Site Development Plan• Tentative Subdivision Map• Conditional Use Permit• Grading Plan/Permit• Public Improvement Plan/Permit• Landscape Plan/Permit• Building Permits• Blasting Permit

Agency	Required Action/Approval
San Diego Regional Water Quality Control Board	National Pollutant Discharge Elimination System Construction General Permit (State Water Resources Control Board Order 2009-09-DWQ)
Vallecitos Water District	Approval for water and sewer service

2.6 Project Inconsistencies with Applicable Regional and General Plans

Throughout Chapter 3 of this EIR, the proposed project has been evaluated in relation to the applicable goals, policies, and objectives of: the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20 (Section 3.8, Land Use); Regional Air Quality Strategy (Section 3.2, Air Quality); San Diego Air Pollution Control District policies (Section 3.2, Air Quality); Regional Water Quality Control Board permits (Section 3.7, Hydrology and Water Quality); the Multiple Habitat Conservation Program (Section 3.3, Biological Resources); Airport Land Use Compatibility Plans (3.8, Land Use, 3.9, Noise, and 5.7, Hazards and Hazardous Material); the City's Climate Action Plan (Section 5.6, Greenhouse Gas Emissions) and various other applicable regional and local plans and policies.

2.7 List of Past, Present and Reasonably Anticipated Future Projects in the Project Area

CEQA requires an EIR to analyze cumulative impacts. Section 15355 of CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15130 of the CEQA Guidelines provides guidance for analyzing significant cumulative impacts in an EIR. The discussion of cumulative impacts "need not provide as great detail as is provided for the effects attributable to the project alone," but instead is to be "be guided by standards of practicality and reasonableness" (CEQA Guidelines §15130(b)). The discussion should also focus only on significant effects resulting from the project's incremental effects and the effects of other projects. According to Section 15130(a)(1), "an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR."

Cumulative impacts can result from the combined effect of past, present, and future projects located in proximity to the project under review. Therefore, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future developments whose impacts might compound or interrelate with those of the project under review.

According to Section 15130(b)(1) of the CEQA Guidelines, a cumulative impact analysis may be conducted and presented by either of two methods:

- A list of past, present, and probable activities producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

With the exception of the impact analyses of air quality, the cumulative list approach has been used in this cumulative analysis, as discussed below. The cumulative impacts of air quality has been

2.0 Project Description, Location, and Environmental Setting

evaluated using the summary of projections method because the geographic scope of such impacts tends to be broad and area wide.

An inventory of past, present, and reasonably foreseeable future projects within the vicinity of the project site is presented in **Table 2-4**.

Table 2-4. Cumulative Projects

No.	Project	Location	Description ⁽¹⁾
1	Armorlite Lofts	225 N. Las Posas Road	119 apartments and 5,600 s.f. of commercial
2	Breakers Real Estate	Southeast corner of Twin Oaks Valley Road and Richmar Avenue	174 bed assisted living facility
3	CRP III Mission, LLC	528 W. Mission Road	Redevelop existing 10.83 acre industrial park with 3 new industrial buildings.
4	Hollandia Dairy CUP	620 E. Mission Road	CUP to demolish and reconstruct a 100,000 s.f. portion of an existing dairy.
5	Hollandia Farms SDP	641 E. Mission Road	Develop and establish a screened outdoor construction contractor yard on 12.45 acres. storage
6	Karl Strauss Brewery & Tasting Room	Northeast corner of Las Posas Road and Vallecitos Road	10,528 s.f. of commercial
7	Lanikai Senior Residential	Northwest corner of E. Mission Road and Woodward Street	115 multi-family residential (MFR) units (age-restricted for 55+)
8	Lonnie Tabbaa	Southwest corner of W. Mission Road and N. Las Posas Road	Gas station, car wash, commercial drive thru and convenience store
9	Mariposa II/Phase 1	Richmar Avenue and Los Olivos Drive	100 MFR affordable units to replace 40 existing MFR units (net increase of 60 units)
10	Mariposa II/Phase 2	Richmar Avenue and Los Olivos Drive	96 MFR affordable units to replace 30 existing MFR units (net increase of 66 units)
11	Meritage Homes (Grand Vista Multi-Family)	West of Las Posas Road and Palm Road intersection	120 MFR units

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No.	Project	Location	Description ⁽¹⁾
12	Pico Investments	236 Pico Avenue	16 MFR units
13	Twin Oaks Fuel	Twin Oaks Valley Road and Borden Road	Fuel station, 4,083 s.f. convenience store, and car wash.
14	University District Specific Plan and Discovery Villages	Twin Oaks Valley Road, south of SR-78, Discovery, and Barham Street areas	<p>Various projects within the University District Specific Plan (North City) and adjacent area:</p> <ul style="list-style-type: none"> • Block 3 student housing • Discovery Village North - Office/Commercial/Residential • Discovery Village South - Single-Family Residential • SH North City, LLC - Condo Units, Master Association Community Rec Center, Public And Private Trail Systems • Univ District SPA – North City Phase A&B - Mixed-Use Development comprised of 20,000 s.f. retail, 100,00 s.f. office, and 537 multi-family units
15	Villa Serena	Northwest corner of Richmar Avenue and Marcos Street	Demolish 136 MFR units and construct 148 MFR units (net increase of 12 units)
16	Woodmont Land Company	Northeast corner of Twin Oaks Valley Road and Windy Way	11,430 s.f. preschool

Notes: (1) SFR = Single-Family Residential, MFR= Multi-Family Residential

2.0 Project Description, Location, and Environmental Setting

Figure 2-1a. Regional Location

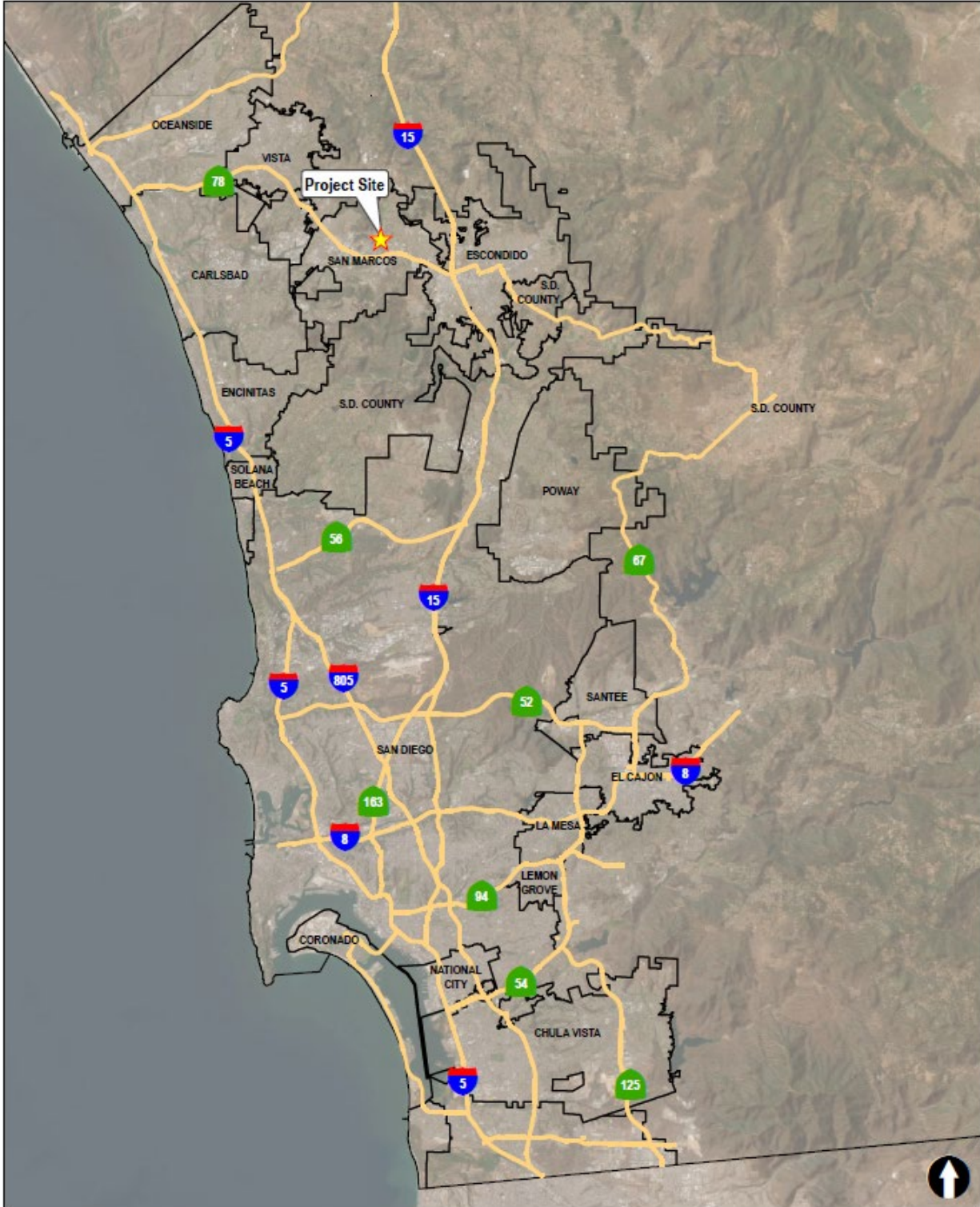


Figure 2-1b. Vicinity Map

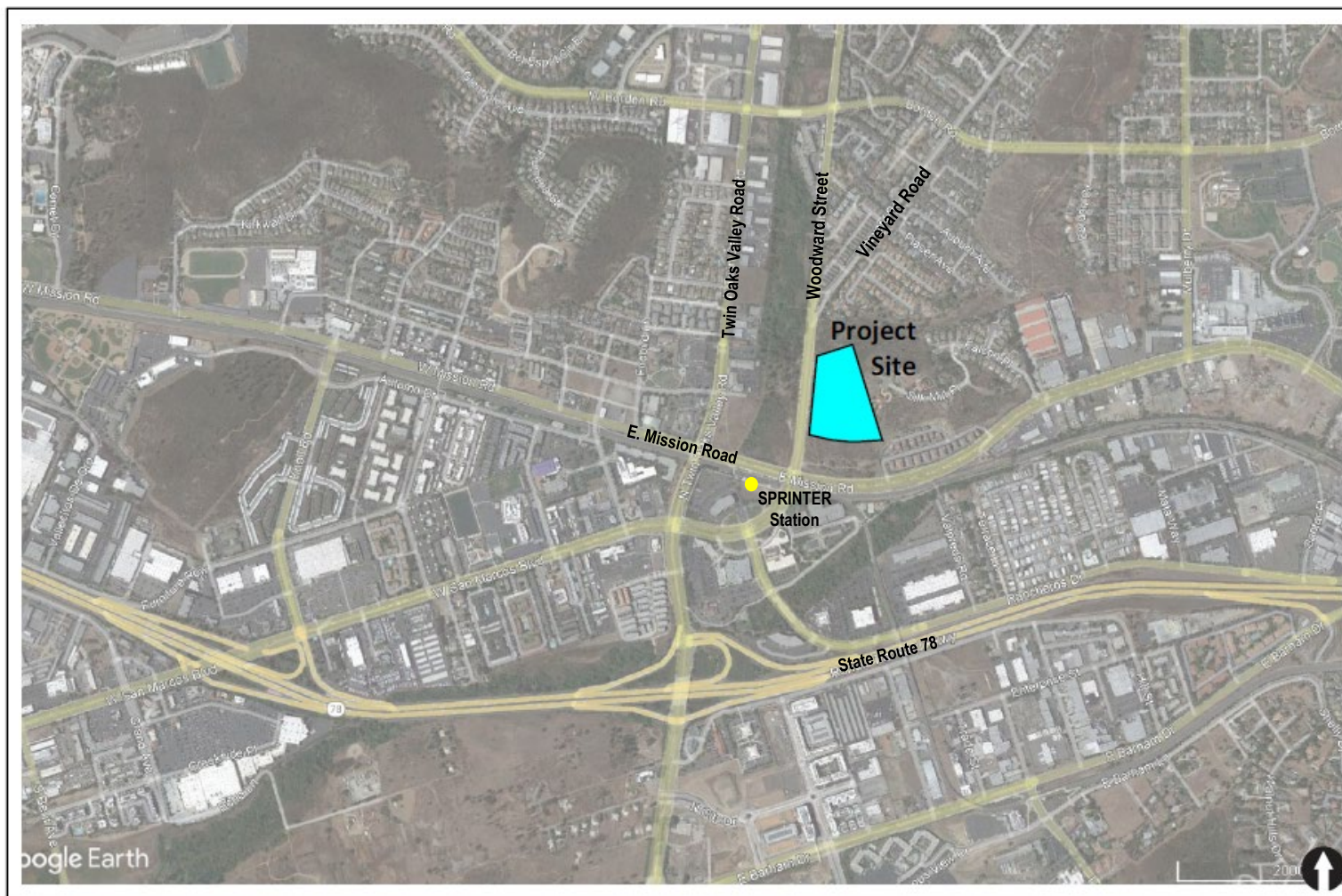


Figure 2-2-Conceptual Site Plan



Figure 2-3. Conceptual Open Space Plan

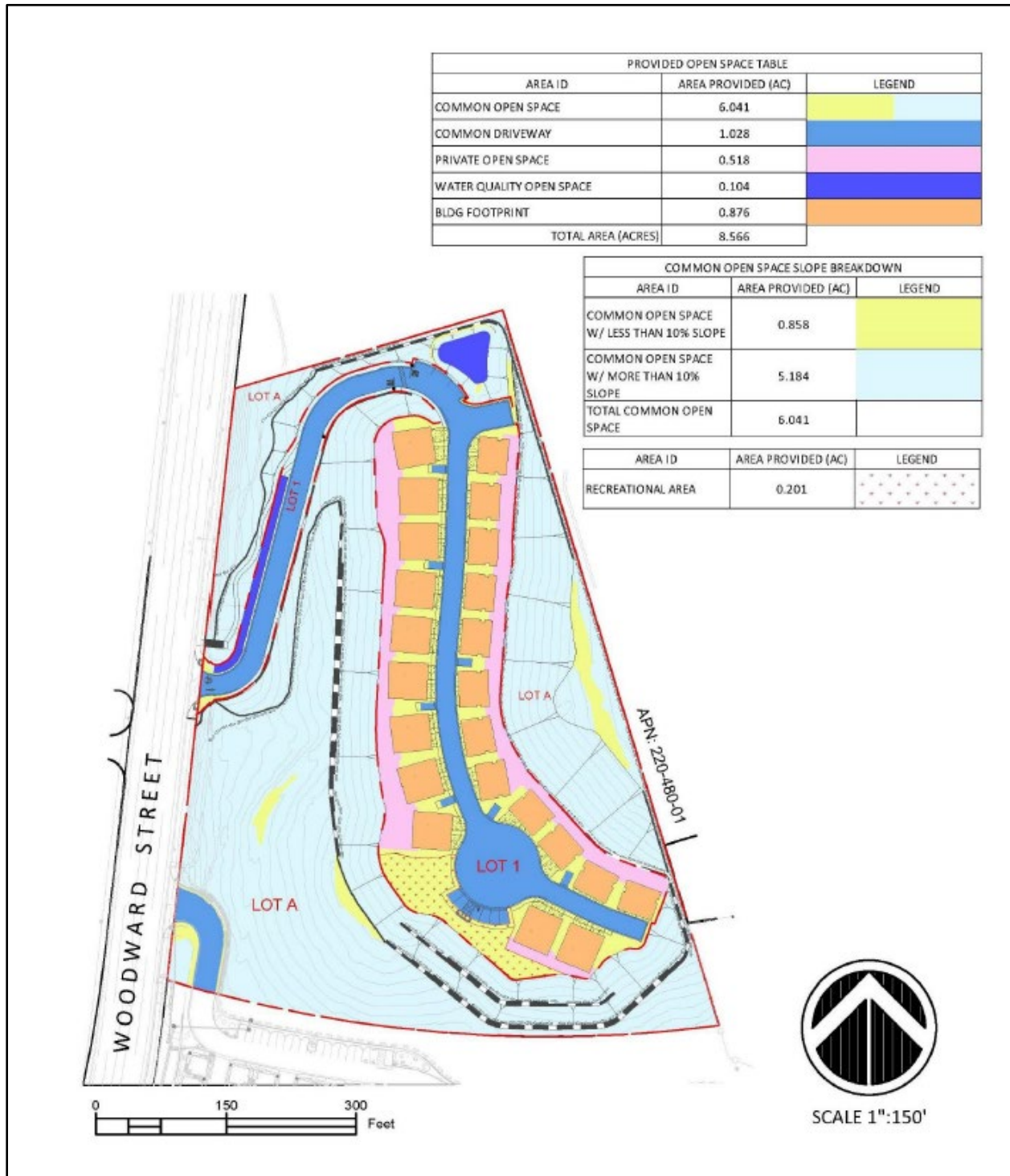


Figure 2-4. Conceptual Landscape Plan



Figure 2-5a. Building A Elevations



Figure 2-5b. Building A Enhanced Elevations



Figure 2-6a. Building B Elevations



Figure 2-6b. Building B Enhanced Elevations



Figure 2-7. Conceptual Building Renderings



Figure 2-8. Conceptual Wall and Fencing Plan

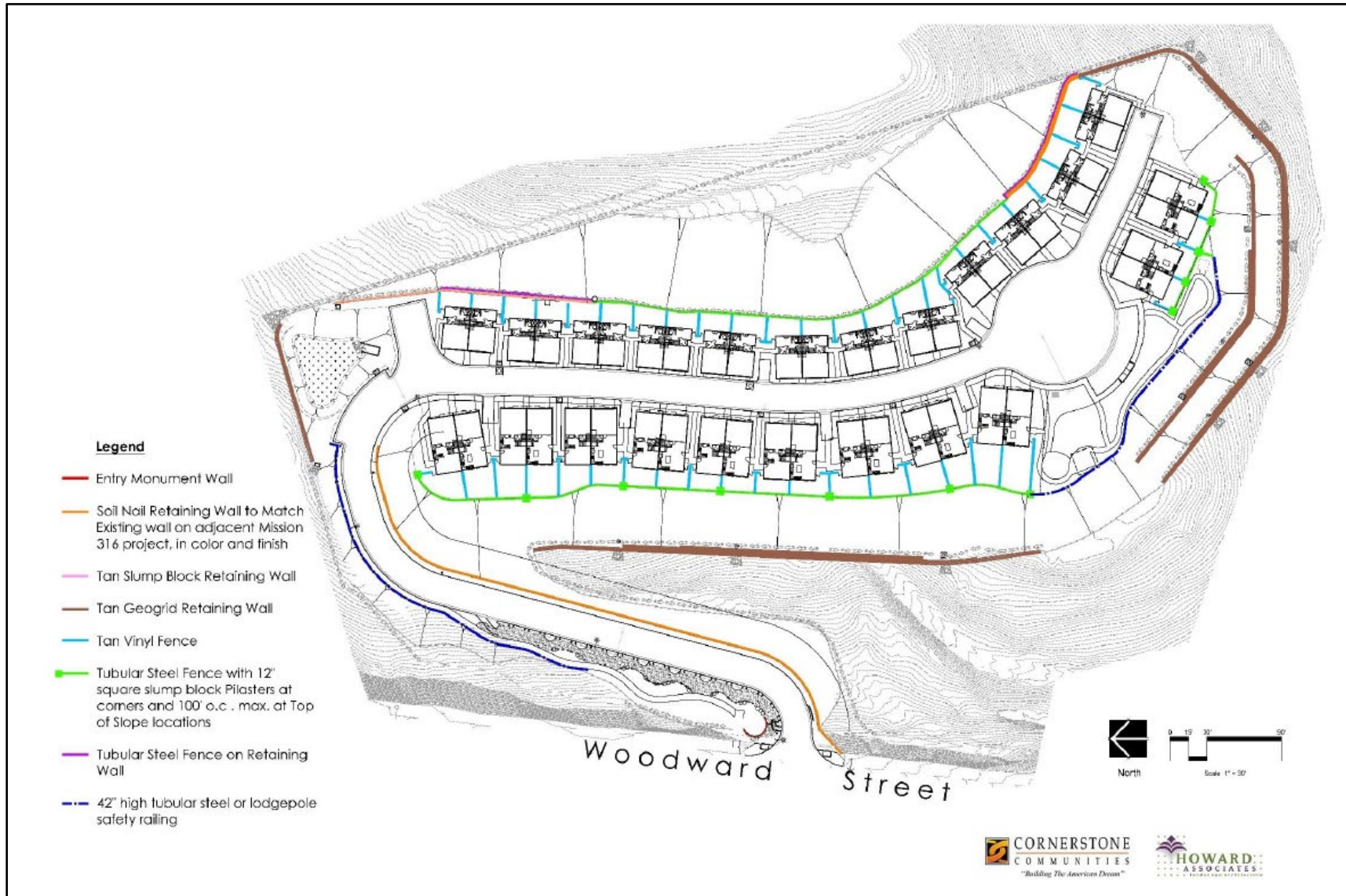


Figure 2-9. Wall and Fencing Materials Examples

Woodward 46

Cornerstone Communities



— Entry Monument Wall



— Tan Vinyl Fence



— Tubular Steel Fence with Slump
block pilasters per plan



— Tan Slump Block Retaining Wall



— Soil Nail Retaining Wall to match
wall on adjacent Mission 316 project,
in color and finish



— Tan Geogrid Retaining Wall



— 42" Ht. Lodge Pole Safety Railing

Figure 2-10. Conceptual Lighting Plan



Figure 2-11. Conceptual Circulation Plan

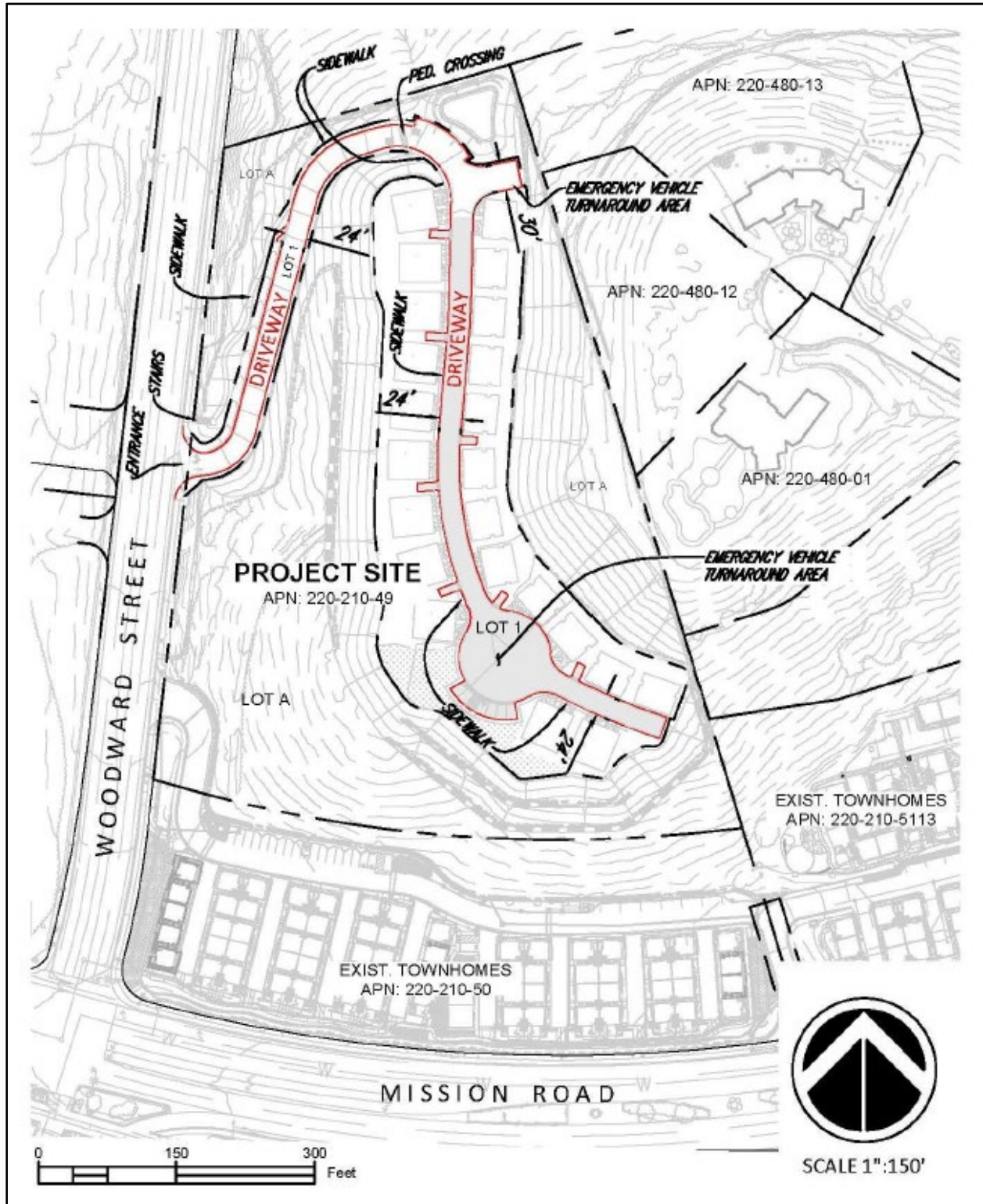
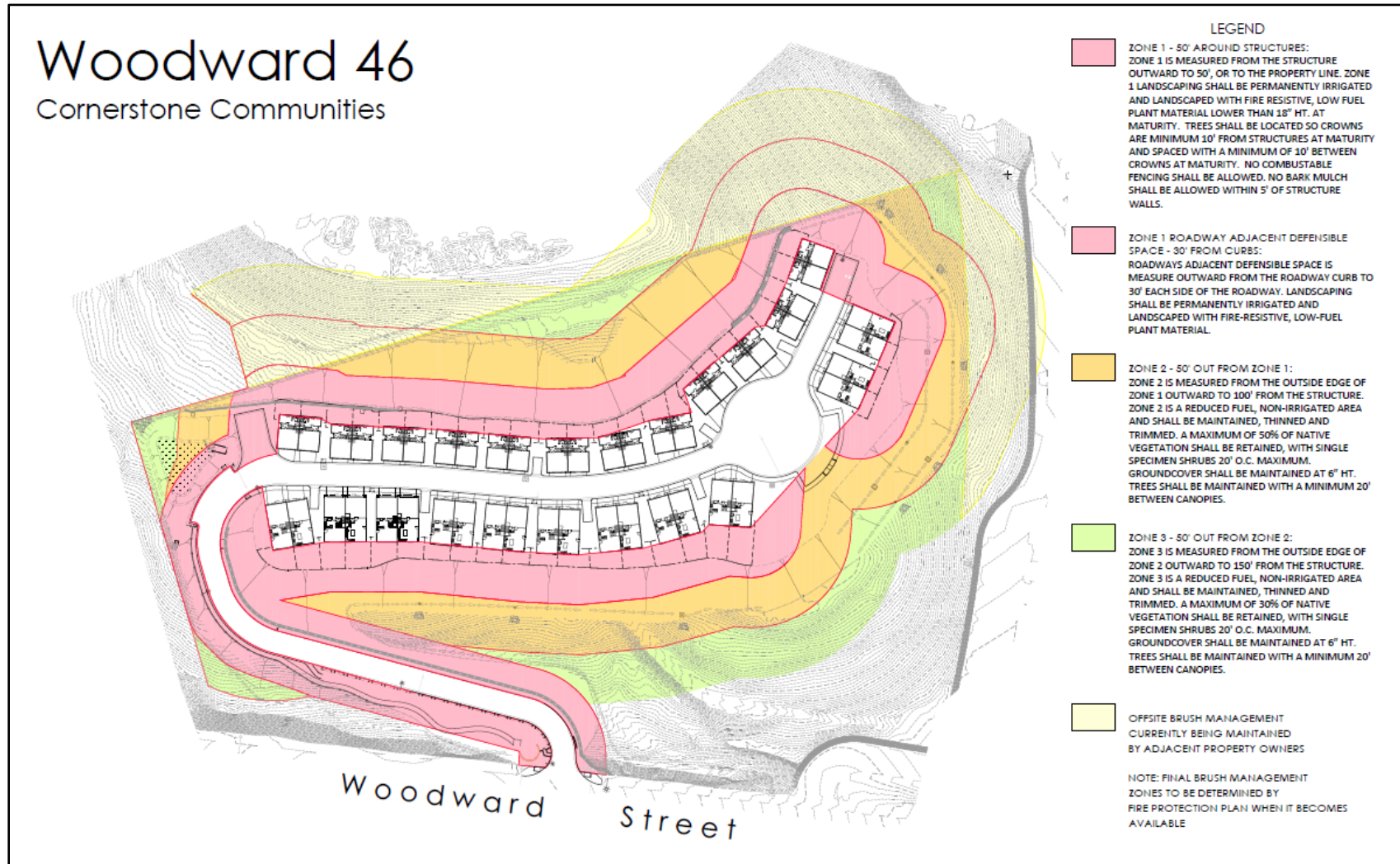


Figure 2-12. Preliminary Brush Management Plan



3.0 Environmental Impact Analysis

Sections 3.1 through 3.13 provide the project- and cumulative-level environmental impact analysis for the proposed project.

After preparation of the Initial Study for the proposed project (Appendix B.1), it was concluded that impacts to agriculture/forestry resources, greenhouse gas emissions, hazards/hazardous materials, mineral resources, population and housing, recreation, and wildfire would be less than significant. However, it was also concluded that the following issue areas could possibly result in significant impacts: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, hydrology and water quality, land use and planning, noise, public services, transportation, tribal cultural resources, and utilities and services systems. Therefore, this Environmental Impact Report (EIR) evaluates the potential for impacts related to these issue areas

The 13 environmental topics analyzed in Sections 3.1 through 3.13 are organized as follows:

- **Introduction** – provides a brief overview to each section.
- **Existing Conditions** – describes the existing environmental conditions on the project site as it relates to the specific environmental topic being addressed in the subchapter.
- **Regulatory Setting** – describes the federal, state, regional, and local regulatory requirements applicable to the proposed project.
- **Thresholds of Significance** – describes the thresholds by which the significance of project impacts are determined. A “no impact” conclusion means the project will not have any impacts for a given threshold. A “less than significant impact” conclusion means the project may have an impact; however, the impact is not to a level that would be deemed significant per the given threshold. A “significant impact” means the project has an impact that meets or exceeds a threshold and mitigation is required to reduce the impact.
- **Project Impact Analysis** – analyzes the project-level impacts, by threshold.
- **Cumulative Impact Analysis** – analyzes the cumulative-level impacts of the project. Cumulative projects considered in this analysis are listed in Table 2-4 in Chapter 2.0, Project Description.
- **Mitigation Measures** – identifies the mitigation measures to reduce project- and/or cumulative-level impacts to below a level of significance.
- **Conclusion** – briefly summarizes the analysis of each section.

The focus of the environmental analysis in each of the following sections 3.1 through 3.13 is the suite of proposed actions as described in Chapter 2.0, Project Description.

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3.1 Aesthetics

Introduction

This section addresses the aesthetic resources of the proposed project area and the potential effects that implementation of the proposed project may have related to aesthetics, including impacts to degradation of visual character and lighting/glare. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G, and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's website.¹

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact on a scenic vista, nor would the project damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. Therefore, these issues will not be discussed further in the Environmental Impact Report (EIR). Section 5.1, Environmental Effects Found Not to be Significant – Aesthetics, of the EIR provides additional information on this topic.

Table 3.1-1 summarizes the project- and cumulative-level impact analysis for each threshold of significance.

Table 3.1-1. Aesthetics Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 - 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 point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant	Less Than Significant	Less Than Significant Without Mitigation
#2 - Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant	Less Than Significant	Less Than Significant Without Mitigation

3.1.1 Existing Conditions

Visual Character

The following is a description of the existing visual characteristics and visual quality of the project site and surrounding area.

The City of San Marcos (City) is in the northern portion of San Diego County. The majority of the City is located on the valley floor, with State Route 78 (SR-78) running through the center of the City.

¹ <http://www.san-marcos.net/work/economic-development/general-plan>

Landforms such as the mountain ranges to the north and south of San Marcos contribute to its scenic corridors.

The project site is located on the east side of Woodward Street, generally between E. Mission Road to the south and Vineyard Road to the north in the Richland neighborhood in the City. The project site is undeveloped and steeply slopped. Elevation ranges from 754 feet above mean sea level (amsl) in the eastern portion of the project site down to 615 feet in the southwestern portion of the project site. The project site supports Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, and urban/developed areas (Rincon 2025). No drainages or wetlands occur on the project site. The project vicinity includes single-family residential neighborhoods to the north and east, multi-family residential development to the south, and undeveloped land to the west across Woodward Street. Directly north of the project site is an area designated as Open Space in the City's General Plan. The City of San Marcos Civic Center is located south of the project site and contains a mix of institutional, office, and medical office uses as well as adjacent commercial land uses which offer a variety of retail space, restaurants, service uses, and shopping. The Civic Center SPRINTER rail station is located approximately 0.1-mile from the project site at the intersection of E. Mission Road and San Marcos Boulevard.

Figure 3.1-1 provides an overview of the locations for photos simulations prepared for the project. **Figures 3.1-2 through 3.1-5** provide current and future views of the project site from area roadways.

Existing Light and Glare Conditions

The project site is currently undeveloped and thus does not contain any existing sources of light or glare. Additionally, the project site does not contain any reflective surfaces that would function as sources for glare. The project vicinity contains sources of nighttime lighting typical of residential uses. The project site is adjacent to developed areas and typical lighting sources in the project vicinity would include outdoor lighting fixtures on structures, in parking areas, and street lights on poles. Additionally, the project site is adjacent to Woodward Street and near E. Mission Road and vehicular headlights are visible at night. There are no sources of substantial glare present in this area.

3.1.2 Regulatory Setting

This section describes the local regulations related to aesthetics that are applicable to the proposed project.

Local

San Marcos General Plan – Conservation and Open Space Element

The following goal and policies from the City of San Marcos General Plan, Conservation and Open Space Element pertain to aesthetics and visual quality:

- Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.
 - Policy COS-3.1: Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.

- Policy COS-3.2: Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.
- Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.
- Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12 in Section 3.8, the project is consistent with all the applicable goals and policies.

San Marcos Municipal Code and Zoning Ordinance. Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The San Marcos Municipal Code Zoning Ordinance Title 20 is the primary implementation tool for the policies of the General Plan. The Zoning Ordinance provides more detailed direction related to design and development standards; permitted, conditionally permitted, and prohibited uses; and other regulations such as lighting and sign regulations. The land uses specified in the Zoning Ordinance are based upon and consistent with the land use policies set forth in the General Plan. Specifically, building design, setbacks, lighting, and signage standards as well as open space requirements for development to protect open space and ambient light levels in the city. The lighting standards of the Ordinance require energy-efficient lighting that limits light and glare for private projects, with exceptions for specialized streetscape lighting. Private developments are required to submit lighting plans to ensure consistency with dark sky needs of the region (City of San Marcos 2023a).

Title 20, Section 20.300.080, Site Planning and General Development Standards

The City of San Marcos Street Lighting Standards and Specifications describes the lighting and glare standards for the city. These standards require lighting to be directed downward and limit the type and spacing of lighting to maintain reasonable lighting levels that do not contribute to light pollution. The City uses International Dark Sky Association thresholds to inform its own testing, leading to a policy that allows for the use of energy-efficient lighting sources that include, but are not limited to, light-emitting diode (LED) and induction lighting technologies (City of San Marcos 2023b).

Title 20, Chapter 20.260, Ridgeline Protection and Management Overlay Zone

The City of San Marcos adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The Ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, and Ridgeline Overlay Zones (ROZ), surrounding these ridgelines (City of San Marcos 2023b). No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.25 miles northwest of the project site.

3.1.3 Thresholds of Significance

According to Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, visual quality and aesthetics impacts are considered potentially significant if the project would:

- **Threshold #1:** 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 point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.
- **Threshold #2:** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4 Project Impact Analysis

Construction

Project construction involves grading and site preparation activities to prepare the site for future buildings and infrastructure improvements. The project design incorporates retaining walls to manage the topography of the site and create areas for the access driveway and building pads. The proposed retaining walls include slump block, geogrid, and soil nail styles, depending on the location within the project. The retaining wall would be earth-tone color and textured to blend in with the surrounding terrain. Construction would require staging areas with construction equipment and supplies, and portable trailers to serve as temporary office space or storage. Grading on the site would change or alter the existing topography on the project site to prepare the site for development. The project plans are included in Appendix A.3.

Operations

The project proposes 46 duplex residential units on 8.57 gross acres. The conceptual site plan is included as Figure 2-2 in Chapter 2. The proposed project would be developed with two building types (Elevation A and Elevation B). Each building type would provide a variation of contemporary/modern style architecture. Figure 2-5 and Figure 2-6 present conceptual building elevations for each elevation type and Figure 2-7 presents the rendered building elevations. The proposed residential units would all be three bedroom and 3.5 baths and range from 1,585 square feet (s.f.) to 1,900 s.f. The units would be three stories and approximately 35 feet in height. Each unit would have a two-car garage. Figures 3.1-2 through 3.1-7 provide visual simulations of the proposed development from offsite locations, including Woodward Street, Mission Road, and the bridge on Twin Oaks Valley Road.

The proposed landscape plan includes a mix of trees, shrubs, and groundcover and the plant selection emphasizes low and moderate water use species and would be suitable for rocky slope conditions. Proposed tree species include: evergreen elm, Marina strawberry tree, Chitalpa pink dawn, Australian willow, Tuscarora crape myrtle, Chinese pistache, African suman, eastern redbud, bronze loquat, sweetshade, shrubby yew podocarpus, Torrey pine, coast live oak, southern live oak, Brisbane box, and little gem magnolia. The plant palette for the manufactured slopes would blend in with the surrounding native vegetation. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance (WELo) and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-4 and the complete landscape plan and planting palette is included in Appendix A.4.

Threshold #1: 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 point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The City of San Marcos (which includes the project site) is considered an urbanized area per the Public Resources Code (PRC). Per PRC Section 21071, an “urbanized area” is defined as “(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.” As of July 1, 2022, the US Census Bureau (USCB) estimated the population of San Marcos to be 94,854 persons (USCB 2023). While this is less than 100,000 persons, the City of San Marcos is contiguous with the City of Escondido, which has an estimated population of 151,074 persons as of July 1, 2022 (USCB 2023). The combined estimated population of these two contiguous cities is 245,928 persons, which is well over the 100,000 persons threshold. Thus, the City would be considered an urbanized area per CEQA. Therefore, the first question of this aesthetics threshold does not apply to the proposed project, as it is directed at non-urbanized areas.

The second part of this threshold is for projects in urbanized areas, which applies to the project. A significant impact would occur if the project conflicts with the applicable zoning and other regulations that govern scenic quality. Scenic quality is a measure of the visual appeal of the landscape, which is subjective and varies.

The project site has a General Plan and zoning designation of SPA (Specific Plan Area) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site’s inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses.

The City of San Marcos adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The Ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, or ROZ surrounding these ridgelines (City of San Marcos 2023b).

No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and “P” Mountain.

This primary ridgeline is located approximately 1.25 miles northwest of the project site. The project would not result in any visual impact to primary and secondary ridgelines. Therefore, the project would not conflict with the ordinance.

Figures 3.1-2 through 3.1-5 provide a comparison of the existing view and a visual simulation of the future view with implementation of the project from offsite locations, including Woodward Street, E. Mission Road, and the bridge on Twin Oaks Valley Road. The greatest level of visual change would be from the Twin Oaks Valley Road bridge, as shown in Figure 3.1-4. In the current view, the project area is undeveloped and covered in vegetation. The existing trees and homes on Silk Mill Place, which sit at a higher elevation than the project site, are visible. With construction of the proposed project, the project site would change to a graded site with retaining walls and residential development. The future development would sit, visually, below the existing homes on Silk Mill place. The use neutral colors on the retaining walls and the future homes, as well as the implementation of the landscape plan and plant palette for the manufactured slopes that would blend in with the surrounding native vegetation would soften the look of the development from offsite views.

The project's consistency with the General Plan goals and policies related to scenic views and aesthetics is presented in Table 3.8-12 in Section 3.8, Land Use and Planning. No conflicts were identified.

The proposed architectural style takes inspiration from contemporary/modern style architecture. Elements and materials traditionally used for this style include angular pitched roofs using concrete roof tiles, simple forms with stucco or stone veneer walls, metal and stucco railings, and awnings. The architecture was chosen to complement existing architecture adjacent to the project site. The architectural style would be complemented with a color scheme that incorporates neutral wall colors to complement the project with nearby development within the area and minimize the potential for visual impacts due to the highly visible nature of the project site. The project would also use low-reflective window glass. The Specific Plan identifies design concepts to minimize the bulk and scale of the project including using building-form elements such as place breaks, roof forms, and changes in materials to define individual units; articulating the front and rear elevations both vertically and horizontally; and avoiding long unbroken surfaces on front and rear elevations by providing a change in plane at least every 25 feet. Figures 3.1-2 through 3.1-7 show renderings of the proposed development from offsite locations.

The proposed landscape plan would further enhance the project site through implementation of a comprehensive and aesthetically pleasing landscape design, which would be maintained by the Homeowners Association. The landscape plan is included as Appendix A.4 of the EIR. The project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be **less than significant**.

Threshold #2: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Excessive, poorly designed, or unshielded lighting can be detrimental to astronomical observations. Two observatories are located in San Diego County: Palomar Observatory, located over 20 miles northeast of the proposed project site, and Mount Laguna Observatory - located approximately 50 miles southeast of the proposed project site.

Lighting in the project vicinity is associated with roadway lighting along E. Mission Road and lighting associated with existing residential uses in the area and immediately adjacent to the project site.

Development of the proposed project would introduce permanent lighting to a site that is currently undeveloped and does not have lighting.

Exterior lighting for the proposed project would be used to accent landscaping and provide safety and accent lighting for duplex buildings. The project's lighting plan is included in Figure 2-10 in Chapter 2. As proposed, the project's exterior lighting would include street and parking area lighting on poles, building lighting, monument and tree accent lighting and a backlit fire directory. All lighting fixtures for the proposed project would be energy efficient, architecturally appropriate, and designed to minimize glare, conflict, and light pollution, while providing illumination levels that create a safe environment for both vehicles and pedestrians. Street area lights would be full cut-off fixtures and would utilize house-side shields to reduce light trespass and prevent light pollution. Common area lighting would be used to enhance and complement the character of the development. Section 4.2.6 of the Specific Plan (Appendix A.1 of the EIR) details the guidelines related to proposed lighting. Lighting would be required to conform with the City's lighting ordinance and standards, (San Marcos Municipal Code Title 20, Section 20.300.080).

The project does not propose features that would be characterized as creating a new source of glare that would adversely affect daytime or nighttime views in the area. The proposed materials include concrete roof tiles, simple forms with stucco or stone veneer walls, metal and stucco railings, and awnings. The roof and wall colors and materials are not reflective and would not create significant sources of glare.

Since the project would be required to comply with the lighting standards set forth by the City, all lighting would be shielded to minimize light scatter and maintain dark sky conditions, and the proposed materials to be used in the homes are not glare-inducing, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Impacts would be **less than significant**.

3.1.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projects contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect.

Projects contributing to a cumulative aesthetic impact include those within the project viewshed. The viewshed encompasses the geographic area within which the viewer is most likely to observe the proposed project and surrounding uses. Typically, this is delineated based on topography, as elevated vantage points, such as scenic vistas, offer unobstructed views of expansive visible landscapes.

From Owen's Peak and "P" Mountain, the closest primary ridgelines to the project site, viewers may be able to see cumulative projects in the same viewshed, and portions of the project site. The proposed buildings would be a maximum of 35 feet in height. There is existing development in the project vicinity including single family residences on the hill side and knoll above the project site and three-story condominiums to the south. The project would not substantially contrast with the visual patterns of the area. The project would appear as an extension of the already urbanized landscape. When the proposed project is considered with other cumulative projects in the same viewshed, cumulatively, the

increase in development would blend in with the existing urban landscape and would not result in a significant visual impact. Therefore, the proposed project would not substantially contribute to a cumulative change in the visual character of the surrounding area.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Currently, the project site does not have night lighting since it is undeveloped. Lighting in the project vicinity is associated with roadway lighting along Woodward Street and lighting associated with existing residential uses in the area and immediately adjacent to the project site. As described in Section 3.1.4, the project would introduce new lighting sources at the project site; however, these fixtures would be shielded to minimize light scatter and maintain dark sky conditions and would be required to comply with the lighting standards set forth by the City. Cumulative projects would also be required to adhere to the lighting standards of the jurisdictions in which they are located. When the proposed project is considered with other cumulative project adding night lighting, the impact would be less than significant due to the compliance with lighting standards set forth in the City that minimize light scatter and maintain dark sky conditions. Therefore, the project would not have a considerable contribution to sky glow such that a new significant cumulative sky glow impact would occur. Cumulative impacts would be **less than significant**.

3.1.6 Mitigation Measures

Based upon the analysis in Sections 3.1.4 and 3.1.5, aesthetics impacts would be less than significant and no mitigation measures are required.

3.1.7 Conclusion

The project site is in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality, including the scenic resource protection policies in the Conservation and Open Space Element of the City's General Plan (refer to Section 3.8, Land Use and Planning). Implementation of the proposed project would not result in any conflicts with existing zoning policies that address visual quality and scenic resources. Landscaping associated with the project would also soften views of the project site from adjacent uses.

Lighting and glare impacts were also determined to be less than significant, as the future multi-family buildings would not include highly reflective finishes or excessive lighting. Further, exterior lighting proposed for the project would comply with the City of San Marcos Street Lighting Standards and Specifications and the San Marcos Municipal Code. Cumulative impacts were determined to be less than significant. Therefore, aesthetic impacts are concluded to be **less than significant**.

Figure 3.1-1 Photo Simulation Overview



Figure 3.1-2 Photo Simulation 1 (Southbound Woodward Street at Vineyard Road)



Current View



Project Simulation View

Figure 3.1-3 Photo Simulation 2 (Southbound Woodward Street)

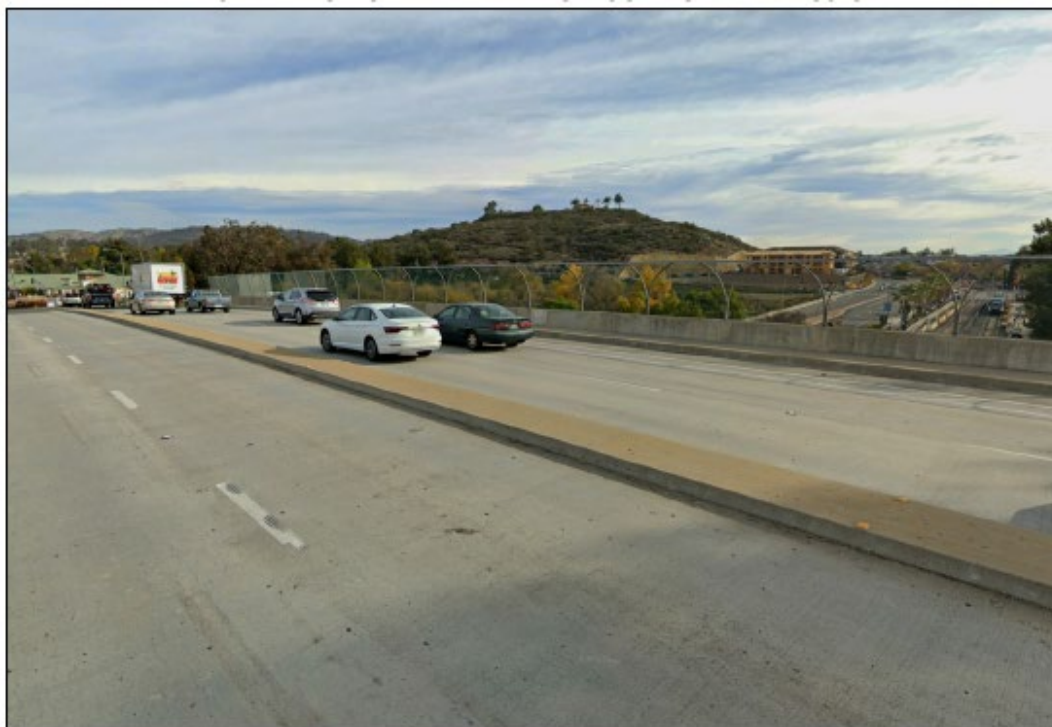


Current View



Project Simulation View

Figure 3.1-4 Photo Simulation 3 (From Twin Oaks Valley Road Bridge Looking at Project Site)



Current View



Project Simulation View

Figure 3.1-5 Photo Simulation 4 (Northbound Woodward Street at Mission Road)



Current View



Project Simulation View

Figure 3.1-6 Photo Simulation 5 (Rendering of Project Entrance at Woodward Street)



Figure 3.1-7 Photo Simulation 6 (Rendering of Project from the Entrance to Mission 316 West)



3.2 Air Quality

Introduction

This section identifies, describes, and evaluates air quality issues associated with the proposed project. An analysis of the proposed project's consistency with the City's Climate Action Plan is included in Section 5.6 (Environmental Effects Found Not to be Significant – Greenhouse Gas).

This section analyzes short-term construction impacts and long-term operational impacts to air quality and determines whether the project would result in a significant air quality impact. This section is based upon the following report, which is included as **Appendix C** of the Environmental Impact Report²:

- Air Quality Assessment, Woodward 46 Specific Plan (SP22-0005, SP22-0006, GPA22-0004, MFSD22-0005, TSM22-0004, prepared by LDN Consulting, January 7, 2025 (LDN 2025).

Table 3.2-1 summarizes the project- and cumulative-level air quality impacts, by threshold.

Table 3.2-1. Air Quality Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 - Conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4 - Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.2.1 Existing Conditions

This section introduces the meteorologic/climate conditions for the project area and presents the current physical setting and pollutant levels in the proximity of the proposed project.

² Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Meteorology/Climate

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heats up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure systems drop to the south and bring cooler, moister weather from the north.

Meteorological trends within the City of San Marcos (City) produce daytime highs typically ranging between 64°F in the winter to approximately 88°F in the summer with August usually being the hottest month. Daytime low temperatures range from approximately 37°F in the winter to approximately 59°F in the summer. Precipitation is generally about 16.2 inches per year. Prevailing wind patterns for the area vary during any given month during the year and vary depending on the time of day or night. The predominant pattern throughout the year is usually from the west or westerly (LDN 2025).

Baseline Air Quality

Regional

The project site is located in the land use jurisdictions of the City within the County of San Diego, within the northwestern coastal portion of the SDAB under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). The SDAB is one of 15 air basins that geographically divide the State of California.

Project area air quality can best be characterized by using ambient measurements made by the SDAPCD. SDAPCD operates a network of ambient air monitoring stations throughout San Diego County, which measure ambient concentrations of pollutants and determine whether the ambient air quality meets national and state air quality standards. Pursuant to the 1990 Clean Air Act amendments, U.S. Environmental Protection Agency (USEPA) classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “nonattainment” for that pollutant. As explained further below, these standards are set by USEPA or the California Air Resources Board (CARB) for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as “unclassified” or “unclassifiable.” The designation of “unclassifiable/attainment” means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, calls for the designation of areas as “attainment” or “nonattainment,” but based on the California Ambient Air Quality Standards (CAAQS) rather than the NAAQS.

Current attainment designations for the SDAB are presented in **Table 3.2-2**. As shown, the SDAB currently exhibits a non-attainment status for the federal 8-hour standard for ozone (O₃). Additionally, the SDAB is either in attainment or unclassified for federal standards of 1-hour O₃, carbon monoxide (CO), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). The SDAB is also in attainment of state air quality standards for all pollutants except for O₃, PM₁₀, and PM_{2.5}. An attainment plan is available for O₃.

Table 3.2-2. San Diego County Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone (O ₃) – 8-hour	Nonattainment	Nonattainment
Ozone (O ₃) – 1-hour	Attainment ⁽¹⁾	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
Respirable Particulate Matter (PM ₁₀)	Unclassifiable ⁽²⁾	Nonattainment
Fine Particulate Matter (PM _{2.5})	Attainment	Nonattainment ⁽³⁾
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified

Source: SDAPCD 2023.

Notes: (1) The federal 1-hour standard of 12 parts per hundred million (PPHM) was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

(2) At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

(3) The California Air Resources Board (CARB) has not reclassified the region to attainment yet due to (1) incomplete data, and (2) the use of non-California Approved Samplers (CAS). While data collected does meet the requirements for designation of attainment with federal PM_{2.5} standards, the data completeness requirements for state PM_{2.5} standards substantially exceed federal requirements and mandates and have historically not been feasible for most air districts to adhere to given local resources. SDAPCD has begun replacing most regional filter-based PM_{2.5} monitors as they reach the end of their useful life with continuous PM_{2.5} air monitors to ensure collected data meets stringent completeness requirements in the future. SDAPCD anticipates these new monitors will be approved as "CAS" monitors once CARB reviews the list of approved monitors, which has not been updated since 2013.

Local

The SDAPCD air quality monitoring stations located in Carmel Mountain Ranch and Camp Pendleton are the closest stations to the project area. **Table 3.2-3** summarizes the two most recent years of monitoring data from the Carmel Mountain Ranch and Camp Pendleton monitoring stations.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes.

The immediate project vicinity includes single-family residential neighborhoods to the north and east, multi-family residential developments to the south, and undeveloped land to the west across Woodward Street. Directly north of the project site is an area designated as Open Space in the City's General Plan. The City of San Marcos Civic Center is located south of the project site and contains a mix of institutional, office, and medical office uses as well as adjacent commercial land uses which

offer a variety of retail space, restaurants, service uses, and shopping. The Civic Center SPRINTER rail station is located approximately 0.1-mile from the project site at the intersection of E. Mission Road and San Marcos Boulevard.

Table 3.2-3. Two Year Ambient Air Quality Summary Near the Project Site (Camp Pendleton or Carmel Mountain Ranch Stations)

Pollutant ⁽¹⁾	Averaging Time	CAAQS	NAAQS	2021	2022	Days Exceeded Over 2 Years
O ₃ (ppm)	1 hour	0.09 ppm	No Standard	0.07	0.08	0
	8 hour	0.070 ppm	0.070 ppm	0.06	0.07	0
PM ₁₀ ⁽³⁾ (µg/m ³)	24 hour	50 µg/m ³	150 µg/m ³	PM ₁₀ Data Not Available for Monitoring Sites near Project Site.		
	Annual ⁽²⁾	20 µg/m ³	No Standard			
PM _{2.5} ⁽³⁾ (µg/m ³)	24 hour	No Standard	35 µg/m ³	23.5	14.9	N/A
	Annual ⁽²⁾	12 µg/m ³	15 µg/m ³	8.5	7.6	N/A
NO ₂ (ppm)	Annual ⁽²⁾	0.030 ppm	0.053 ppm	0.013	0.013	N/A
	1 hour	0.18 ppm	0.100 ppm	0.059	0.059	N/A
CO ⁽²⁾ (ppm)	1 hour	20 ppm	35 ppm	3.0	2.2	N/A
	8 hour	9 ppm	9 ppm	1.8	1.2	N/A

Source: LDN 2025.

Notes: (1) SO₂ is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO₂ emissions within the County are essentially Zero for all metrics including the Average, Maximum 24 hour and 1- hour standards. The Highest 1-hr measurement identified is 0.004 ppm and the most restrictive standard (CAAQS for SO₂) is 0.25 ppm.

(2) Annual arithmetic mean

(3) Data was collected from Carmel Mountain Ranch station which began in 2019. All other data presented was collected at the Camp Pendleton Monitoring Station

ppm = parts per million

µg/m³ = micrograms per cubic meter

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. The criteria air pollutants that are monitored by the USEPA are ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), particulate matter less than or equal to 10 microns or 2.5 microns in diameter (PM₁₀, and PM_{2.5}) sulfur dioxide (SO₂), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed in the following text. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. Examples of sources and effects of these pollutants are identified below:

Ozone (O₃) A strong smelling, pale blue reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy. O₃ exists in the upper

atmosphere O₃ layer, as well as at the earth's surface. O₃ at the earth's surface causes numerous adverse health effects, including lung inflammation, tissue damage, and impaired lung functioning. It is a major component of smog, and can damage materials such as rubber, fabrics, and plastics.

It should be noted that Oxides of Nitrogen (NO_x) is a family of poisonous, highly reactive gases. These gases form when fuel is burned at high temperatures. NO_x pollution is emitted by automobiles, trucks, and various non-road vehicles (e.g., construction equipment, boats, etc.) as well as industrial sources such as power plants, industrial boilers, cement kilns, and turbines. NO_x often appears as a browning gas. It is a strong oxidizing agent and plays a major role in the atmospheric reactions with Volatile Organic Compounds (VOCs) which produce ozone on hot summer days (LDN 2025).

Carbon Monoxide (CO): Carbon monoxide is a colorless, odorless, tasteless, and toxic gas resulting from the incomplete combustion of fossil fuels. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects including fatigue, headaches, confusion, and dizziness.

Nitrogen Dioxide (NO₂): NO₂ is formed when nitrogen (N₂) combines with oxygen (O₂). Its life span in the atmosphere ranges from one to seven days. NO₂ is typically created during combustion processes and is a major contributor to smog formation and acid deposition. NO₂ may result in numerous adverse health effects, including respiratory damage. It absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility.

Particulate Matter Less Than or Equal to 10 Microns in Diameter (PM₁₀): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (equal to 10 microns or smaller, about 0.0004 inch or less in diameter) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects, including allergies, asthma, and respiratory illness. PM₁₀ also causes visibility reduction.

Particulate Matter Less Than or Equal to 2.5 Microns in Diameter (PM_{2.5}): A similar air pollutant to PM₁₀ consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which are often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO₂ released from power plants and industrial facilities and nitrates that are formed from NO_x released from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles depends mostly on location of the emissions, time of year, and weather conditions. Adverse health effects of PM_{2.5} are similar to those of PM₁₀.

Sulfur Dioxide (SO₂): Typically strong smelling, colorless gas that is formed by the combustion of fossil fuels. SO₂ and other sulfur oxides contribute to the problem of acid deposition as well as adverse health effects including respiratory constriction and, with continued exposure, increased incidents of pulmonary symptoms.

Lead (Pb): Lead in the atmosphere occurs as particulate matter. Lead has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the greatest amount of lead emissions. Lead has the potential to accumulate over time and cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

Visibility Reducing Particles: These are particles in the air that obstruct visibility.

Sulfates: Sulfates are salts of Sulfuric Acid and occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.

Hydrogen Sulfide (H₂S): A colorless, toxic, and flammable gas with a recognizable smell of rotten eggs or flatulence, H₂S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of H₂S (greater than 500 parts per million) can cause a loss of consciousness and possibly death.

Vinyl Chloride: Also known as chloroethene, vinyl chloride is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by several sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

CARB classified “particulate emissions from diesel -fueled engines” (i.e., diesel particulate matter [DPM]) as a TAC in August 1998. DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM. To reduce the cancer risk associated with diesel particulate matter, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000).

3.2.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to air quality, including federal, state, and local guidelines.

Federal

Federal Clean Air Act

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency is responsible for implementing most aspects of the Clean Air Act, including setting National ambient air quality standards (NAAQS) for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures, stratospheric O₃ protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the criteria pollutants O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead and shown in **Table 3.2-4**.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS for CO, Lead and those based on annual averages or arithmetic mean are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the USEPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames. These plans must include pollution control means that demonstrate how the standards will be met as expeditiously as possible. The NAAQS were amended in July 1997 to include an additional standard for O₃, and to adopt a standard for fine particulates (PM_{2.5}). In June 2002, a stringent statewide PM_{2.5} standard was adopted. In 2012, the PM_{2.5} standard was lowered further based on air quality monitoring data.

Table 3.2-4. Ambient Air Quality Standards

Pollutant	Average Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Measurement Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry		Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³				
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)		Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)				

Pollutant	Average Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Measurement Method ⁷
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³) ⁸	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m ³)		0.100 ppm ⁸ (188/ µg/m ³)	-	
Sulfur Dioxide (SO ₂) ¹¹	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm ¹⁰ (for Certain Areas)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararoosaniline Method) ⁹
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm ¹⁰ (for Certain Areas) (See Footnote 9)	-	
	3 Hour			-	0.5 ppm (1300 µg/m ³)	
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³)		
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	-		
	Calendar Quarter	-		1.5 µg/m ³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average			0.15 µg/m ³		
Visibility Reducing Particles	8 Hour	See footnote 13		No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			
<div>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.</div> <div>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 µg/m³ 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.</div> <div>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.</div> <div>4. Any equivalent procedure 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.</div> <div>5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.</div> <div>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.</div>						

Pollutant	Average Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Measurement Method ⁷
7. Reference method as described by the 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 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 December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15 µg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 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 SO2 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 SO2 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.						
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 µg/m3 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.						
Source: CARB 2016, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf						
Notes: ppm = parts per million						
µg/m ³ = micrograms per cubic meter						
mg/m ³ = milligrams per cubic meter						

National Ambient Air Quality Standards (NAAQS)

To gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. Primary standards set limits for the protection of public health, including those people most susceptible to further respiratory distress such as asthmatics, children, and the elderly, or sensitive receptors. Secondary standards set limits to protect public welfare and include protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Research has shown that chronic exposure to O₃ at levels that just marginally meet clean air standards may nevertheless have adverse health effects. State and federal agencies, therefore, have promulgated a more stringent 8-hour O₃ standard that better reflects human health response to more chronic exposure, shown in Table 3.2-4. U.S. EPA set the 2008 ozone standard to 75 parts per billion (ppb) and required all areas of the country to meet this monitored concentration by July 20, 2018. The areas that were not able to demonstrate compliance with this standard have now been classified as an ozone nonattainment area. U.S. EPA revised the standard to 70 ppb in 2015.

but some areas, including San Diego County, have still not met the 2008 standard and their attainment status changed in level of severity.

State

California Ambient Air Quality Standards (CAAQS)

In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

The CARB has established California ambient air quality standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. Additionally, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants in California. The CAAQS currently in effect in California are also shown in Table 3.2-4 and include the most recently adopted federal standards for chronic (8-hour) O₃ exposure and for ultra-small diameter particulate matter of 2.5 microns or less in diameter (PM_{2.5}). CAAQS restrict four additional contaminants: visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Current attainment designations for the SDAPCD are presented in Table 3.2-2.

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. Air pollution from commercial and industrial facilities is regulated by local air quality management districts, whereas mobile sources of air pollution are regulated by the California Air Resources Board (CARB) and the USEPA. All air pollution control districts have been formally designated as “attainment” or “nonattainment” for each state air quality standard, as shown in Table 3.2-2. Areas in California where ambient air concentrations of pollutants are higher than the state standard are considered to be in “non-attainment” status for that pollutant. If there are inadequate or inconclusive data to make a definitive attainment designation, districts are considered “unclassified.”

California Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause injury or damage to business or property. This section also applies to sources of objectionable odor.

Local

San Diego Air Pollution Control District

Although CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In San Diego County, O₃ and particulate matter are the pollutants of main concern, because exceedances of the CAAQS for those pollutants are experienced here in most years. In January 2021, SDAPCD sent a request to EPA to reclassify San Diego County from Serious Nonattainment to Severe Nonattainment for the 2008 ozone NAAQS and from Moderate to Severe Nonattainment for the 2015 ozone NAAQS. EPA granted this request in April 2021. SDAPCD prepared and submitted to the USEPA, via CARB, ozone attainment plans identifying control measures and associated emissions reductions necessary to demonstrate attainment of the 75-ppb 2008 standard by July 20, 2027 and attainment of the 70-ppb 2015 standard by August 3, 2033. Reclassification imposes additional requirements under the CAA (for example, transportation control strategies and measures to offset emissions increases from vehicle miles traveled) that will help ensure the area has the tools needed to attain the standard. The 2020 Plan for Attaining the National Ozone Standards (SDAPCD 2020) addresses all requirements for both ozone standards.

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The Regional Air Quality Strategy (RAQS) for the SDAB was initially adopted in 1991 and most recently updated in 2022. The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O₃. The RAQS details how the region will manage and reduce O₃ precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and USEPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans. Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS.

City of San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan identifies one goal and several policies regarding air quality. Those policies that are applicable to the project are listed below:

- Goal COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.
 - Policy COS-4.1: Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.
 - Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.

- Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.
- Policy COS-4.8: Encourage and support the generation, transmission, and use of renewable energy.

The Environmental Justice Element of the City's General Plan identifies one goal and a policy regarding air quality, listed below:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
 - Policy EJ-1.9: Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12, the project is consistent with the applicable General Plan goals and policies pertaining to air quality.

3.2.3 Thresholds of Significance

The State of California has developed guidelines to address the significance of air quality impacts based on *Appendix G of the California Environmental Quality Act (CEQA) Guidelines* which provides guidance that a project would have a significant environmental impact if it would:

- Threshold #1: Conflict with or obstruct implementation of the applicable air quality plan;
- Threshold #2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Threshold #3: Expose sensitive receptors to substantial pollutant concentrations;
- Threshold #4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

To determine whether a project would: (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM₁₀ or PM_{2.5} or exceed quantitative thresholds for O₃ precursors, nitrogen oxides (NO_x) and volatile organic compounds (VOCs), project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD, the agency responsible for air quality planning, monitoring, and enforcement within this basin. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIAs) (SDAPCD 2019).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Since SDAPCD does not have AQIA thresholds for emissions of VOCs, the use of the Coachella Valley VOC threshold from the South Coast Air Quality Management District is acceptable.

The thresholds listed in **Table 3.2-5** represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality for both construction

and operation. Emissions below the screening-level thresholds would not cause a significant impact. If emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the State and Federal AAQS, including appropriate background levels. For nonattainment pollutants (PM₁₀ and PM_{2.5} plus O₃, with O₃ precursors NO_x and VOCs), if emissions exceed the thresholds shown in Table 3.2-5, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

Table 3.2-5. Screening-Level Criteria for Air Quality Impacts

Pollutant	Total Emissions (Pounds/Day)
Construction Emissions	
Respirable Particulate Matter (PM ₁₀)	100
Particulate Matter (PM _{2.5})	55
Nitrogen Oxide (NO _x)	250
Sulfur Oxide (SO _x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) (SCAQMD)	75
Operational Emissions	
Respirable Particulate Matter (PM ₁₀)	100
Particulate Matter (PM _{2.5})	55
Nitrogen Oxide (NO _x)	250
Sulfur Oxide (SO _x)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs) ⁽¹⁾	75
Reactive Organic Gases (ROG) SCAQMD ⁽¹⁾	75

Source: LDN 2025.

Notes: (1) The USEPA uses the term Volatile Organic Compound (VOC) and CARB's Emission Inventory Branch uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term; however, for purposes of the air quality study, they are assumed to be essentially the same due to the fact that SCAQMD interchanges these terms and because CalEEMod directly calculates ROG in place of VOC.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). SDAPCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210 (adopted in 1996 and revised several times, most recently 2021), emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the

public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP that results in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact and would be required to implement toxics best available control technology (T-BACT) (SDAPCD 2021).

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person (SDAPCD 1976). A project that proposes a use which would produce objectionable odors, such as agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (CARB 2005) would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors. The impacts associated with construction and operation of the project were evaluated for significance based on the aforementioned significance criteria.

3.2.4 Project Impact Analysis

Threshold #1: Conflict with or obstruct implementation of the applicable air quality plan

As part of the RAQS and SIP planning process, the SDAPCD develops an emission inventory, based on growth projections from SANDAG and existing emissions figures within the SDAB. The SDAPCD then uses the emission inventory to conduct modeling to demonstrate that the SDAB will attain and maintain the state and federal O₃ standards. This inventory could be thought of as an “emissions budget” for the SDAB, accounting for current emissions as well as previously approved projects consistent with current General Plan policies.

Projects that are consistent with the currently adopted General Plan are determined to be consistent with SDAB’s air quality plans, including the RAQS and the SIP. If a project proposes development that is consistent with or less than estimates provided in the General Plan, the project would not conflict with or obstruct implementation of the RAQS or SIP.

The project site has a General Plan Designation of SPA (Specific Plan Area) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, including the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site’s inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. City policy requires that a secondary access be provided if more than 50 units are proposed. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses. The proposed project has a proposed density of 5.7 du/acre. Therefore, the project’s development intensity and density would be slightly less than what is identified in the current General Plan.

In addition, the project conforms to all local air district significance thresholds. As discussed below in Threshold #2 and shown in **Tables 3.2-6** and **3.2-7**, air quality emissions generated by the project would be much lower (at least five times lower) than the SDAPCD screening thresholds. Since the project would not generate significant direct or cumulative construction or operational impacts, the project would therefore be considered consistent with the County's RAQS and would comply with the state's SIP. Impacts would be **less than significant**.

Threshold #2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard

Air quality impacts associated with the proposed project would likely come from two potential sources. The first is related to project construction, such as impacts related to construction equipment emissions, haul trucks for soils export, grading, and blasting/rock crushing activities. The second is operational from mobile source emissions from vehicles traveling to and from the proposed project as well as natural gas emission sources and area sources. Presented below are the analyses and findings for these two sources.

Construction Emissions Analysis

Construction activities are a source of fugitive dust emissions that may have a temporary, but substantial, impact on local air quality. These emissions are generally associated with grading, heavy equipment usage, blasting and rock crushing, and from construction worker commutes. Dust emissions and impacts vary with the level of activity, specific operations conducted, and prevailing winds. For the proposed project, rough grading activities assume site preparation, grading, building construction, paving, and architectural coating.

Construction grading operations for the project are anticipated to include 41,989 cubic yards (cy) of cut material. With over-excavation and bulking, the total fill volume would be 50,270 cy, for a difference of 8,281 cy. If suitable, the excess material would be used as wall backfill and the site would balance. If it is not suitable, the 8,281 cy would be exported from the site. For purposes of the air quality analysis, to be conservative, it was assumed that as much as 10,000 cy of export would be required. The project would start grading sometime in 2025 with residential construction to start shortly thereafter.

The California Emissions Estimator Model (CalEEMod) 2022.1 was used to calculate the emissions associated with the construction of the project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. Earthwork associated with grading within CalEEMod uses a "Grading Equipment Passes" methodology which has been approved by SCAQMD in consultation with building estimator references and is used as the basis of emission generation. The AERSCREEN dispersion model was used to determine the concentration for air pollutants at any location near the pollutant generator as well as to predict the maximum exposure distance and concentrations. The following design features were assumed within the CalEEMod analysis:

- All heavy diesel construction equipment would be classified as Tier IV
- In accordance with Rule 67 of the California Air Resource Board, only Low VOC paints shall be utilized onsite.
- Compliance with SDAPCD Rule 55 (Fugitive Dust) and fugitive dust control measures, which would be provided by the City of San Marcos.

In addition, due to bedrock conditions, the project also may require some blasting-related activities. During blasting operations, grading operations would temporarily stop and resume once blasting is completed. It is expected that each blast operation would require between 10,000 - 12,000 pounds (lbs) (5-6 tons) of ammonium nitrate. Blasting operations usually require a chemical material that is capable of extremely rapid combustion resulting in an explosion or detonation. These materials are usually mixtures of several ingredients but are often oxygen deficient as combustion reactions take place which causes a formation of carbon monoxide and to a lesser extent, nitrogen oxides. For ammonium nitrate and fuel oil (ANFO) mixtures, it is expected that carbon monoxide would be generated in quantities of 67 pounds per every ton of explosives and nitrogen oxides would be generated at 17 pounds per the same quantity. Particulate matter will also be generated from blasting and was estimated using US EPA AP-42 (Compilation of Air Emissions Factors from Stationary Sources) methodology (Table 11.9-1)³ (LDN 2025).

The proposed project would utilize approximately 6 tons of ammonium nitrate per blast which would generate up to 402 lbs (67 lbs/ton * 6 tons) of carbon monoxide and up to 102 lbs (17 lbs/ton * 6 tons) of nitrogen oxides during a blast. These quantities would be additive to the mass grading operations for the entire project site and were added to the worst-case mass grading daily CO and NO_x output. Additional particulates derived from each blast is estimated to be over a 20,000 s.f. area (roughly 100-foot by 200-foot in dimension). Given this, it is estimated that each blast would generate 20.59 lbs/blast. A blasting permit would be required from the San Marcos Fire Department which would include required terms and would limit the blasting material to 6 tons per day as this was indicated as the expected blast charge.

The project's requested approvals include a Conditional Use Permit (CUP 22-0005), which would allow for the use of a temporary rock crusher. The rock crusher, a Thunderbird Hazemag impact crusher, would be located in the central portion of the site to provide the most distance from adjacent residential uses. The crusher would be approximately 329 feet from the residential use to the east, 667 feet from the closest residential use to the north and 531 feet from the closest residential use to the south.

Table 3.2-6 presents estimated construction-related emissions for the proposed project. As shown in Table 3.2-6, construction emissions for all criteria pollutants would be below the screening level thresholds. Therefore, construction-related air emissions would not violate any air quality standards and impacts are **less than significant**.

Operational Emissions Analysis

Daily project operations would generate emissions from sources such as area, energy, mobile, waste and water use. Area Sources include consumer products, landscaping, and architectural coatings as part of regular maintenance. Operational emissions were calculated using the CalEEMod 2022.1 model for both summer and winter scenarios and assumed average winter and summer temperatures. The traffic inputs for CalEEMod were adjusted to be consistent with the proposed project traffic study. Based on that study, the proposed project would generate 368 net average daily trips (LLG 2023).

³ Table 11.9-1 is Emissions Factor Equations for Uncontrolled Open Dust Surfaces at Western Surface Coal Mines <https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf>

Table 3.2-6. Construction Emissions (pounds/day)

Year	ROG	NO _x	CO	SO ₂	PM ₁₀ Dust	PM ₁₀ Exhaust	PM ₁₀ (Total)	PM _{2.5} Dust	PM _{2.5} Exhaust	PM _{2.5} (Total)
2025	7.17	6.57	33.2	0.07	0.15	20.9	21	0.15	10.4	10.5
2026	0.37	2.31	15.7	0.02	0.04	0.31	0.36	0.04	0.07	0.12
Blasting Emissions ⁽¹⁾		102	402		20.59		20.59			
Total Construction with Blasting Emissions (Maximum)	7.17	108.57	435.2	0.07	20.74	20.9	41.59	0.15	10.4	10.5
Screening Level Threshold	75	250	550	250	-	-	100	-	-	55
Exceed Threshold?	No	No	No	No	-	-	No	-	-	No

Source: LDN 2025.

Notes: (1) The project would utilize approximately 6 tons of ammonium nitrate per blast which would generate up to 402 lbs (67 lbs/ton * 6 tons) of carbon monoxide and up to 102 lbs (17 lbs/ton * 6 tons) of nitrogen oxides during a blast. Particulate matter derived from each blast is estimated to be over a 20,000 s.f. area (roughly 100-foot by 200-foot in dimension) resulting in 20.59 lb of PM₁₀ per blast.

Table 3.2-7 summarizes project-related operational emissions, including vehicular and fixed-source emissions. As shown, total operational emissions of the project would be below the SDAPCD screening thresholds for all criteria pollutants in both summer and winter. Therefore, operation-related impacts would not violate any air quality standard and would be **less than significant**.

Table 3.2-7. Operational Emissions (pounds/day)

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer Scenario						
Mobile Source	1.35	0.8	8.37	0.02	1.73	0.45
Area Source	1.25	0.02	2.61	< 0.005	< 0.005	< 0.005
Energy Use	< 0.005	0.08	0.03	< 0.005	0.01	0.01
Total	2.61	0.9	11	0.02	1.74	0.46
Screening Level Threshold	75	250	550	250	100	55
Exceed Threshold?	No	No	No	No	No	No
Winter Scenario						
Mobile Source	1.31	0.86	8	0.02	1.72	0.45
Area Source	1.13	0.01	1.29	< 0.005	< 0.005	11.9

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Energy Use	< 0.005	0.08	0.03	< 0.005	0.01	0.01
Total	2.45	0.96	9.32	0.02	1.73	0.45
<i>Screening Level Threshold</i>	75	250	550	250	100	55
Exceed Threshold?	No	No	No	No	No	No

Source: LDN 2025.

Notes: Daily pollutant generation assumes trip distances within CalEEMod.

Threshold #3: Expose sensitive receptors to substantial pollutant concentrations

Sensitive receptors are defined as schools, hospitals, resident care facilities, or day-care centers, as well as residential receptors in the project vicinity. The project vicinity includes single-family residential neighborhoods to the north and east and multi-family residential developments to the south. The threshold related to sensitive receptors addresses whether the project could expose sensitive receptors to substantial pollutant concentrations of criteria pollutants or TACs. The closest sensitive receptors include residential uses to the east and south. In the greater project vicinity there is a preschool located at 403 N. Twin Oaks Valley Road, a retirement home at 650 Woodward Street and the Senior Center at 111 Richmar Avenue.

As identified above, if a project has the potential to result in emissions of any TAC that results in a cancer risk of greater than 10 in 1 million or substantial non-cancer risk, the project would be deemed to have a potentially significant impact.

To address the potential for emissions of construction-related TAC emissions to result in exposure of sensitive receptors to substantial pollutant concentrations, a screening health risk assessment was conducted for construction emissions. The risk-driving toxic air contaminant that would be emitted during construction would be diesel particulate matter.

Risks were calculated based on the Office of Environmental Health Hazards Assessment update guidance. Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home, and the exposure duration divided by averaging time, to yield the excess cancer risk. Based upon the air quality modeling, worst-case onsite PM₁₀ from onsite construction exhaust would cumulatively produce 0.0074 tons over the construction duration (432 calendar days) or an average of 1.80×10^{-4} grams/second (LDN 2025).

Utilizing these figures and based on the AERSCREEN dispersion model, the maximum 1-hr concentration is $0.197 \mu\text{g}/\text{m}^3$ during the worst-case construction period. The annual concentration is $0.016 \mu\text{g}/\text{m}^3$. Therefore, the inhalation cancer risk is 2.8 per million over the construction duration. This risk would be expressed at the point of maximum exposure 125 meters (410 feet) away. As a condition of project approval, the project would be required to utilize Tier 4 diesel equipment. Since the threshold is 10 per million exposed with T-BACT installed, the project would have a less than significant impact and would be in compliance with the City's thresholds. It should be noted that sensitive residential receptors are adjacent to the project site, and are located approximately 100 feet to the south and east. Single family residences are located approximately 200 feet to the north. The preschool, retirement home and senior center are located at a greater distance. Since the maximum risk is 2.8 per million exposed (and the threshold is 10 per million), all sensitive receptors would have cancer risks at or less than 6 per million exposed which would also represent a less than significant impact (LDN 2025).

There are known chronic health risks associated with diesel exhaust which are considered non-cancer risks. Non-Cancer risks or risks defined as chronic or acute are also known with respect to diesel particulate matter and are determined by the hazard index. To calculate hazard index, diesel particulate matter concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment. Diesel Exhaust has a REL of 5 µg/m³ and targets the respiratory system (LDN 2025). The hourly concentration of 0.197 µg/m³ divided by the REL of 5 µg/m³ yields a Health Hazard Index of 0.4, which is less than one. Therefore, based on thresholds for non-cancer risks, non-cancer health risks are also considered less than significant.

Therefore, toxic air contaminant impacts associated with the project would be **less than significant**.

Threshold #4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Construction activities associated with development of the project site could generate trace amounts of substances such as ammonia, carbon dioxide, hydrogen sulfide, methane, dust, organic dust, and endotoxins. Any generation of odors related to these substances would occur intermittently during construction. Construction activities may also generate odors associated with diesel equipment at various locations. Odors would be strongest at the source and would quickly dissipate.

Operation

Future development on the project site includes multi-family residences. This type of use is not typically characterized as one that would generate odors, compared to uses such as industrial and manufacturing. Moreover, typical odors generated from operation of the proposed project residential land uses would primarily include vehicle exhaust generated by residents and through the periodic use of landscaping and maintenance equipment. Therefore, odor-related impacts from future uses on the project site would be less than significant.

3.2.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to air quality, the cumulative analysis is based upon a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document air quality.

As part of the RAQS and SIP planning process, the SDAPCD develops an emission inventory, based on growth projections from SANDAG (which are based on land use designations) and existing emissions figures within the SDAB. The SDAPCD then uses the emission inventory to conduct modeling to demonstrate that the SDAB will attain and maintain the state and federal O₃ standards. This inventory could be thought of as an “emissions budget” for the SDAB, accounting for current emissions as well as previously approved projects consistent with current General Plan policies.

Projects that are consistent with the currently adopted General Plan are determined to be consistent with SDAB's air quality plans, including the RAQS and the SIP. If a project proposes development that is consistent with or less than estimates provided in the General Plan, the project would not conflict with or obstruct implementation of the RAQS or SIP. Provided a project's emissions are consistent with the projections within the RAQS and SIP, the project would not result in a cumulatively considerable impact on O₃ within the SDAB. As discussed in Section 3.2.4, the project would be developed at a density slightly less than was identified in the applicable planning documents for the project site.

The proposed project is, therefore, consistent with the General Plan and would not result in a cumulatively considerable impact. In addition, the project conforms to all local air district significance thresholds. As shown in Tables 3.2-6 and 3.2-7, air quality emissions generated by the project would be much lower (at least five times lower) than the SDAPCD screening thresholds. Also, since the project would not generate significant direct or cumulative construction or operational impacts, the project would be consistent with the County's RAQS and would comply with the state's SIP.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. There are no other cumulative projects in proximity to the proposed project. Further, it is unknown whether the cumulative projects under review will be approved or not, and, if approved, when actual construction would begin, it would be speculative to estimate any potential overlap of the proposed project. However, future projects would be subject to CEQA and would require an air quality analysis and, where necessary, mitigation if the project would exceed the SDAPCD significance thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by SDAPCD. Cumulative PM₁₀ and PM_{2.5} emissions would be reduced because all future projects would be subject to SDAPCD Rule 55, Fugitive Dust, which sets forth general and specific requirements for all construction sites in the SDAPCD.

As construction and operation of the project would be typical of residential development uses, implementation of the project is not expected to contribute to any cumulative health risks. Cumulative impacts would be **less than significant**.

3.2.6 Mitigation Measures

Based upon the analysis presented in Sections 3.2.4 and 3.2.5, project and cumulative air quality impacts would be less than significant. Therefore, no mitigation measures are necessary.

3.2.7 Conclusion

Implementation of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction or operation, nor would the project conflict with or obstruct implementation of the RAQS or SIP. Additionally, due to the nature of the project, sensitive receptors would not be exposed to substantial pollutant concentrations, nor would a substantial number of people be exposed to objectionable odors.

3.3 Biological Resources

Introduction

This section provides a biological resources impact analysis for the proposed project. The analysis in this section is based upon the following reports prepared by Rincon Consultants (Rincon) and Alden Environmental:

- *Woodward Specific Plan Full Biological Resources Report*. Prepared by Rincon, March 2025 (Rincon 2025)
- *Focused Rare Plant Survey Report for Woodward Specific Plan Development Project*, October 4, 2023 (Rincon 2024)
- *Coastal California Gnatcatcher Protocol Survey Report Woodward Specific Plan Development Project*, June 18, 2023 (Rincon 2023)
- *2024 Survey Report for Foraging Crotch's Bumble Bee (*Bombus crotchii*) on the Woodward Specific Plan Development Project*, August 15, 2024 (Alden Environmental 2024)

These reports are included as **Appendices D.1, D.2,D.3 and D.4** of this Environmental Impact Report (EIR).

During the Initial Study checklist prepared for the proposed project, it was determined that there would be no impact to state or federally protected wetlands, and no impact to wildlife corridors and nursery sites. Section 5.2, Environmental Effects Found Not to be Significant – Biological Resources, of this EIR provides additional information on these topics. The Initial Study is included as Appendix B.1 of this document.

Table 3.3-1 summarizes the project- and cumulative-level impact analysis by threshold for the proposed project.

Table 3.3-1. Biological Resources Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1: 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. Fish and Wildlife Service.	Significant Impact	Less than Significant	Mitigated to Less Than Significant
#2: 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	Significant Impact	Less than Significant	Mitigated to Less Than Significant

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
Wildlife or U.S. Fish and Wildlife Service?			
#3: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	Less than Significant	Less than Significant	Mitigated to Less Than Significant
#4: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Less than Significant	Less than Significant	Mitigated to Less Than Significant

3.3.1 Existing Conditions

The 8.27-acre project site is currently undeveloped, vacant land located east of Woodward Road and north of E. Mission Road. The project is in a developed portion of the City with residential uses to the north, east and south. Elevation ranges from 754 feet above mean sea level (amsl) from the east, 700 feet from the northern boundary of the project, sloping down to 615 feet in the southwestern portion.

Vegetation Mapping and Biological Surveys

To locate and characterize natural vegetation communities, including habitats for special-status species, within the project site, Rincon conducted a biological field survey on December 29, 2022, including a biological reconnaissance survey, vegetation mapping, and general habitat assessment. Additionally, focused rare plant surveys were conducted in June and September 2023 and focused coastal California gnatcatcher protocol surveys were conducted in May and June 2023.

Literature and Database Review

Prior to the field survey, Rincon conducted background research to preliminarily characterize the nature and extent of biological resources on and adjacent to the project site. Rincon reviewed project site aerial photographs and previous historical land use of the project site. Queries of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants were conducted to obtain comprehensive information regarding state and federally listed species as well as other special-status species considered to have potential to occur within a 5-mile radius of the project site. For CNPS query purposes, a nine-quadrangle search area centered on the project site was used; species with elevation ranges exceeding that of the project site were excluded, and plant species with a California Rare Plant Rank (CRPR) of 3 and 4 were excluded as potential impacts to these species are not typically considered significant under CEQA (Rincon 2025).

General Biological Surveys

A field reconnaissance survey of the study area was conducted by Rincon Biologist Jacob Hargis on December 29, 2022, from 8:45 a.m. to 12:00 p.m. to document the existing site conditions and

evaluate the potential for presence of sensitive biological resources, including special-status plant and wildlife species, sensitive plant communities, potential jurisdictional waters, wildlife corridors and nursery sites, and locally protected resources. The biological survey study area included the proposed project, encompassing 8.57 acres, plus an additional 200-foot buffer surrounding the project. Weather conditions during the survey included temperatures of 54 to 56 degrees Fahrenheit, winds (0 to 2 miles per hour) with cloudy skies. The survey consisted of walking meandering transects throughout the study area, where accessible. The biologist visually scanned for special-status species (or sign thereof) and habitats suitable for these species. Binoculars were used to scan those areas otherwise inaccessible by foot, including the buffer area and to scan shrubs for the presence of nests.

The habitat requirements for each regionally occurring special-status species were assessed and compared to the type and quality of the habitats observed within the study area during the site visit.

Observed Plants

The project site contains dense Diegan Coastal Sage Scrub dominated by California sagebrush, California buckwheat together with laurel sumac, black sage, and coyote brush. Non-native, annual species such as *Brassica sp.* *Salsola*, and other herbaceous forbs and weedy species were present within the understory and intermittent open areas along the slope of the site. Clusters of coastal prickly pear (*Opuntia littoralis*) along the rocky outcroppings were observed in the southern portion sloped area of the site. A full list of floral species observed during the field reconnaissance survey conducted on December 29, 2022, can be found in Appendix C of Appendix D.1 of the EIR.

Focused Rare Plant Survey

Rincon botanist, Casey Clark, conducted a focused rare plant survey on June 16, 2023, and September 20, 2023. The survey results are included as Appendix D.2 of the EIR.

To optimize detection, the field survey was conducted during the appropriate phenological period to detect and identify the San Diego sand aster (i.e., May through September). The survey was conducted using systematic field techniques by walking parallel transects through the entire survey area. Special attention was given to areas with a high potential to support rare plant species (e.g., north-facing slopes, vegetation community interfaces, areas with unique soils, and other attributes required of species that have been previously documented). San Diego sand aster was not observed during the surveys and the surveys were conducted during an adequate rain year when the conditions were conducive for germination. No other special status plant species were detected, and none are expected based on the results of the focused rare plant survey.

Observed Wildlife

The majority of the wildlife species observed during the field reconnaissance survey were birds. Common bird species were observed within the study area and included California scrub-jay (*Aphelocoma californica*), California towhee (*Melospiza crissalis*), Anna's hummingbird (*Calypte anna*), white-crowned sparrow (*Zonotrichia leucophrys*), American crow (*Corvus brachyrhynchos*). Signs of mammal species observed included woodrat middens (*Neotoma sp.*) and coyote (*Canis latrans*) scat. Woodrat middens (nests) are large nests or dens made of woody debris, such as sticks, dead cacti, and bark. Please refer to Appendix D of Appendix D.1 of the EIR for a full list of faunal species observed.

Coastal California Gnatcatcher Protocol Survey

Rincon conducted protocol breeding season coastal California gnatcatcher (*Polioptila californica Polyoipia*; CAGN) for the proposed project to further evaluate presence/absence of the species. Surveys were conducted by Rincon biologist Kelly Rios who currently holds an Endangered and Threatened Species Permit issued by the United States Fish and Wildlife Service (USFWS), Permit TE 018909-6, under Section 10(a)(1)(A) of the Federal Endangered Species Act. The 15-day notification letter of intent to conduct protocol breeding season surveys for CAGN was sent to the USFWS Carlsbad office on April 18, 2023.

All CAGN surveys were conducted in accordance with the survey protocol for CAGN surveys within Multi-Habitat Planning Area (MHPA) areas, titled Section III of the USFWS Coastal California Gnatcatcher Presence/Absence Survey Protocol, issued February 28, 1997, and revised July 28, 1997. The protocol requires that between February 15 and August 30, a minimum of six surveys shall be conducted at least one week apart to determine presence/absence of CAGN.

A total of six surveys were conducted between May 3 and June 14, 2023. The six surveys occurred between 6:00 AM to 12:00 PM each day. Suitable Diegan Coastal Sage Scrub occurs within the project site boundaries, north and east of the project site, and west of the project site across Woodward Street. The study area consists of predominately Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Sage Scrub. Larger, more dense shrub cover within the community dominated by laurel sumacs (*Malosma laurina*) and California sage brush occurs in the northern portion of the survey area. Additional open space Multiple Habitat Conservation Program (MHCP) Reserve Habitat is adjacent to the project on the north and east sides (**Figure 3.3-1**).

During the 2023 CAGN protocol surveys, no individuals, pairs, or nests were observed within the study area or adjacent areas. CAGN had been previously identified in the Diegan Coastal Sage Scrub within the project site, including within the overall study area to the east and west, during USFWS protocol surveys that were conducted in 2018 and preconstruction surveys conducted in 2020 for the adjacent Mission 316 development project located south of the project site (KMEA 2020). The survey area for the Mission 316 protocol CAGN surveys totaled 28 acres, which included a 500-foot buffer around the 3.7-acre project to the south. These surveys recorded individuals foraging, nesting pairs, and two family groups within the project site. Individuals were also recorded within sage scrub habitat and designated MHCP Hardline Reserve to the west of the project site across Woodward Street. Foraging individuals were also observed and recorded to the adjacent area east of the project site, south of Silk Mill Place Road.

Foraging Crotch's Bumble Bee Survey

Alden Environmental conducted a foraging bumble bee survey for Crotch's bumble bee (CBB; *Bombus crotchii*) during the period of May 16 through July 12, 2024. Prior to beginning the survey, a habitat assessment was conducted to identify suitable foraging habitat for the CBB. The assessment included reviewing CDFW Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (2023), as well as reviewing available bumble bee data (iNaturalist and Bumble Bee Watch) and CNDDDB to identify any reported CBB observations in the site vicinity. In addition, current vegetation mapping prepared for the project, historic aerial photographs, and site photographs were reviewed to identify areas that may support suitable foraging resources (flowering plants) for the species as well as nesting locations. Potential habitat for the CBB on site was determined from those existing conditions.

According to the Survey Considerations (CDFW 2023), it is recommended that at least three site visits take place spaced 2 to 4 weeks apart during the period of highest detection probability for foraging CBB (i.e., the April – August Colony Active Period for the species) and when floral resources are present. Three site visits were made to the survey area approximately 3-5 weeks apart during the Colony Active Period when floral resources were present, May 16, 2024, June 6, 2024, and July 12, 2024.

One CBB was observed during the June 6, 2024 survey within the south central portion of the project site.

Additional *Bombus* species were also observed during each of the three surveys. Twelve Yellow-faced bumble bees (*Bombus vosnesenskii*), including one queen, were observed on May 16, 2024; twenty five, including one male, were observed on June 6, 2024; and sixteen were observed on July 7, 2024. Sixteen California bumble bee (*Bombus californicus*) were also observed on July 12, 2024. Other bee and wasp species observed throughout the survey included the European honey bee (*Apis mellifera*), Hover fly (*Syrphidae*), tarantula hawk (*Pepsis thisbe*), Robber fly (*Asilidae*), California digger bee (*Anthophora californica*), Mexican cactus fly (*Copestylum mexicanum*), carpenter bee (*Xylocopinae*), and Figeater beetle (*Cotinis mutabilis*).

Vegetation Communities

Vegetation classification was based on the classification systems provided in the Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008) to provide consistency with the San Diego Association of Governments (SANDAG) MHCP and modified as appropriate to reflect the existing site conditions. Where applicable, vegetation communities were further classified using A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) to better identify the species composition and provide consistency with CDFW classifications. Sensitive vegetation community ranking is based on MHCP habitat groups (SANDAG 2003). The MHCP designates six habitat group categories:

- Group A - Wetland Communities
- Group B - Rare Upland
- Group C - Coastal Sage Scrub
- Group D - Chaparral
- Group E - Annual Grassland
- Group F - Other

The following provides a description of the vegetation communities observed on the project site and study area. These communities are mapped in **Figure 3.3-2**.

Diegan Coastal Sage Scrub

This vegetation community is the most prevalent community within the study area (15.48 acres) and the project site (7.73 acres). The majority of the project site, as well as the study area to the north, supports high-quality Diegan Coastal Sage Scrub. This habitat community is also present within the study area to the south, east, and across Woodward Street to the west. Historical disturbance within the central and southern portions of the site identified 0.51 acres of a more Disturbed Diegan Coastal Sage Scrub community (discussed in more detail below), with evidence of revegetation in the last several years.

The community is dominated by low, soft-woody subshrubs that are most active in winter and early spring. Many taxa are facultatively drought-deciduous. Diegan Coastal Sage Scrub is typically on low moisture-availability sites such as steep, xeric (dry or with little moisture) slopes or clay-rich soils that are slow to release stored water.

The shrub layer is dense and dominated by laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*) and lemonade berry (*Rhus integrifolia*), with California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*), white sage (*Salvia apiana*), black sage (*S. mellifera*) and coyote brush (*Baccharis pilularis*) (Oberbauer et al. 2008). Several non-native species including tocalote (*Centaurea melitensis*), mustards (*Brassica* sp.), slender wild oat (*Avena barbata*) and ripgut brome (*Bromus diandrus*) are also common throughout this community. Diegan Coastal Sage Scrub is considered a sensitive community by the City, falling under Habitat Group C.

Disturbed Diegan Coastal Sage Scrub

This vegetation community comprises 1.10 acres within the study area, and approximately 0.51 acres of the project site and is structurally similar to Diegan Coastal Sage Scrub but has been subjected to historical anthropogenic disturbance from land use practices. An old access trail leading up from the southern area of the project site shows evidence of human disturbances, but vegetative regrowth of coastal sage scrub species was observed in those areas leading up to and including the central portion of the project site. This area appears to be previously disturbed, forming an open area, with sage scrub revegetating. This habitat is also found within the fuel management area for the Mission Villas 316 Project, along the southern portion of the project site. As a result, much of the Disturbed Diegan Coastal Sage Scrub appears to be revegetating and contains a higher proportion of bare ground and weedy species than the Diegan Coastal Sage Scrub species. Dominant shrub species include California buckwheat, California sagebrush, black sage, coyote brush, with golden yarrow (*Eriophyllum confertiflorum*), coastal prickly pear (*Opuntia littoralis*) and sparse herbaceous species, including giant woollystar (*Eriastrum densifolium*) and small seed sandmat (*Euphorbia polycarpa*) and large patches of open/bare ground. Disturbed Diegan Coastal Sage Scrub is considered a sensitive community by the City (despite being disturbed), falling under Habitat Group C.

Urban/Developed

Urban/Developed refers to areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Approximately 9.02 acres of land cover within the study area and 0.14 acres within the project site have been developed or altered, including public roadways, development, and the installation of a large retaining wall and concrete “v-ditch” from the development south of the project site.

Eucalyptus Woodland

Eucalyptus woodland habitats range from a single-species thicket with little to no shrubby understory to scattered trees over a well-developed herbaceous and shrubby understory. Typically, eucalyptus woodlands form a dense canopy with the overstory composition limited to one species of the genus, or mixed stands composed of several Eucalyptus species; few native overstory species are present within eucalyptus planted areas, except in small, cleared pockets (Oberbauer 2008). A dense stand of eucalyptus woodlands was identified adjacent to Woodward Street to the west comprising 0.24 acre, following the road from south to north, also adjacent to the riparian woodland habitat identified within

the study area. Eucalyptus trees intermix with Diegan Coastal Sage Scrub understory along the western portion of the study area across Woodward Street.

Disturbed Habitat

Disturbed habitats are areas that have been physically disturbed by previous legal human activity and are no longer recognizable as a native or naturalized vegetation association but continue to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or disturbance-adapted ruderal exotic species or shows signs of past or present animal usage such as grazing, that removes any capability of providing viable natural habitat for use to wildlife other than dispersal. Examples of disturbed land include areas that have been graded, repeatedly cleared for fuel management purposes, and/or have experienced repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites. Characteristic species found in disturbed habitats are invasive, non-native forb species and a limited number of grass species, including Brassica sp. and fountain grass (*Pennisetum spp.*) (Oberbauer et al. 2008). Disturbed habitat, comprising of 0.98 acre was observed within the study area along the southeastern slope and a small area to the west of Woodward Street. A large open pad, surrounded by revegetating disturbed coastal sage scrub comprises an additional 0.05 acres of disturbed habitat.

The disturbance along the southeast slope has impacted the naturally occurring vegetation community, establishing primarily non-native plant species adapted to disturbances including, shortpod mustard (*Hirschfeldia incana*), totalote (*Centaurea melitensis*), fountain grass (*Pennisetum setaceum*) and tree tobacco (*Nicotiana glauca*). Some native species are dispersed throughout the disturbed habitat, including coyote brush, California sagebrush, and Menzies' golden bush (*Isocoma menziesii ssp. menziesii*).

Southern Riparian Forest

Southern riparian forest habitat is typically found along streams and rivers with dominant characteristic species that include California sycamore (*Platanus racemosa*) and cottonwoods (*Populus sp.*) amongst other wetland plants. Approximately 0.48 acres of this habitat type is within the study area and was observed located just west of Woodward Street (Figure 3.3-2). This habitat type is associated with the San Marcos Creek freshwater forested/shrub wetland that runs between W. Borden Road and E. Mission Road; however, the creek lies outside of the study area (Rincon 2025). A concrete culvert outlet likely conveys flows underneath E. Mission Road and further south. Dense canopies of riparian deciduous trees comprised of California sycamore, cottonwoods, and willow (*Salix sp.*) with eucalyptus trees and an understory of upland scrub species were present. This area was visually observed from the project site and not closely inspected as access to adjacent private property is not under the control of the Applicant. Southern Riparian Forest is considered a sensitive community by the City, falling under Habitat Group A.

Rare Plant Survey/Special-Status Plants

The database queries identified 61 special-status plants within the San Marcos, California, United States Geological Survey (USGS) topographic quadrangle and eight surrounding quadrangles (Appendix D of EIR Appendix D.1). One species that is associated with disturbed habitat has a moderate potential to occur on site: San Diego sand aster (*Corethrogyne filaginifolia var. incana*). Focused surveys for San Diego sand aster were conducted during the appropriate blooming period (May through September) by Rincon in 2023. No individuals or populations of San Diego sand aster

were observed during the two focused surveys. No special-status plant species were observed on the project site during the field reconnaissance survey in 2022 or during the focused rare plant surveys in 2023.

Special-Status Wildlife Species

The review of biological databases resulted in the identification of 60 special-status wildlife species occurring within five miles of the study area. Of these, six species were determined to have at least a moderate potential to occur due to the presence of suitable habitat in the study area.

Three special-status wildlife species have been observed within the project site, CAGN, CBB, and Cooper's hawk (*Accipiter cooperii*). Three additional species have a high potential to occur on site: orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), and Bryant's woodrat (*Neotoma bryanti intermedia*). One species, rufous-crowned sparrow, has a moderate potential to occur based on suitable Diegan Coastal Sage Scrub foraging and nesting habitat present within the project site, 500-foot buffer, and potential habitat connectivity to surrounding areas. An additional ten wildlife species have a low potential to occur due to the presence of marginal habitat or that the species may use the project site temporarily during foraging or overnight roosting as described in Appendix D of EIR Appendix D.1. Due to the low probability of occurrence, they are not discussed further.

Coastal California Gnatcatcher

Coastal California gnatcatcher, a Federally Threatened, Species of Special Concern (SSC), and MHCP-covered species, is an obligate, permanent resident of Coastal Sage Scrub below 2,500 feet in Southern California. This species occurs in low Coastal Sage Scrub in arid washes and on mesas and slopes.

CAGN has been observed in the project site. Protocol surveys for the Mission Villas project to the south of the project site were conducted by KMEA in 2018 and preconstruction surveys were conducted by KMEA in 2020 (KMEA 2018, 2020). Results from the surveys are shown in the Biological Resources Map (**Figure 3.3-3**). As discussed previously, updated USFWS protocol surveys were conducted between May 3 and June 14, 2023, and no observations of CAGN were observed during the six surveys.

Crotch's Bumble Bee

CBB is now considered a state candidate for listing as endangered. CBB occurs primarily in California, adjacent foothills in southwestern California, and in southwest Nevada near the border (Xerces Society 2023). This species inhabits scrub and open grassland habitats with floral associations for foraging. Nests can be located underground in abandoned rodent nests, above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees (Xerces Society 2023). One CBB was detected in the Diegan Coastal Sage Scrub habitat within the central portion of the project site during the 2024 protocol survey.

Cooper's Hawk

Cooper's hawk, a Watch List and MHCP-covered species, is typically found in woodland, and forested habitats and is found throughout urban landscapes where cover and prey are available. They typically nest in riparian growths of deciduous trees, oaks, canyon bottoms, and pines. This species has a high potential to occur as a transient. The site contains small mammal and songbird prey availability with

dense eucalyptus and riparian woodland within the study area to the west that could provide suitable nesting habitat. The project site itself lacks tall trees, dense woodland, or riparian habitats that provide suitable nesting habitat for this species. A Cooper's hawk was observed flying over the project site during a previous pre-construction survey in 2020 for the Mission 316 Villas project, which is located immediately south of the project site.

Orange-Throated Whiptail

Orange-throated whiptail, a Watch List and MHCP-covered reptile species, requires intact Coastal Sage Scrub, with California buckwheat as the dominant species, and sage (*Salvia* sp.), yucca (*Yucca* sp.), cactus (*Opuntia* sp.), and sagebrush (*Artemisia* sp.) present. This species has a high potential to occur on site and within the study area due to the high suitability of Diegan Coastal Sage Scrub and Disturbed Coastal Sage Scrub, in which California buckwheat and California sagebrush are prevalent.

Coastal Whiptail

Coastal whiptail, an SSC, is found in deserts and semi-arid areas with sparse vegetation and open areas, and woodland and riparian areas. This species can occur in firm, sandy, or rocky soils. Coastal whiptail has a high potential to occur in the more open scrub areas.

Bryant's Woodrat

Bryant's woodrat, an SSC species, occurs in coastal scrub of Southern California from San Diego County to San Luis Obispo County. This species prefers moderate to dense canopies. Bryant's woodrat is particularly abundant in rock outcrops, rocky cliffs, and slopes and typically associates with cacti patches and dense undergrowth. This species typically overlaps with another *Neotoma* sp., the big eared wood rat (*Neotoma lepida*). Numerous woodrat stick nests "middens" were observed throughout the project site, although presence of the sensitive *Neotoma* subspecies was not confirmed. Further determination is needed to evaluate the two species by nest size, material, location; and proximity to cacti, rock outcroppings, water sources, and surrounding habitat. The Bryant's woodrat has a moderate potential to occur in the Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Scrub habitats within the project site and study area.

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow, a Watch List and MHCP-covered species, is found in open oak woodlands and dry uplands with grassy vegetation and bushes. This species is often found near rocky outcroppings, and occurs in coastal scrublands and chaparral areas. The Southern California rufous-crowned sparrow has a moderate potential to occur in the Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Sage Scrub habitats within the project site and study area.

Nesting Birds and Raptors

The habitats within the project site and study area, which include Diegan Coastal Sage Scrub, provide suitable nesting habitat for a variety of nesting bird species such as passerines and non-passerine terrestrial birds that may nest on the ground or within the scrub vegetation, including coastal California gnatcatcher and southern rufous crowned sparrow. The project site does not contain suitable habitat for raptor species due to the lack of large trees for nesting, however the large stand of eucalyptus trees and riparian woodland habitat within the study area across Woodward Street could provide nesting habitat for raptor species such as red-tailed hawks (*Buteo jamaicensis*) or Cooper's hawk (*Accipiter cooperii*). Ornamental palm trees associated with the residential houses on the upper

eastern slope off of Silk Mill Place occur within the study area. These trees could potentially provide low quality suitable nesting habitat for raptors. Nesting birds are protected pursuant to the California Fish and Game Code (CFCG) and Migratory Bird Treaty Act (MBTA).

Critical Habitat

Federally designated Critical Habitat does not occur within the study area or project boundaries.

MHCP Conservation Areas

MHCP Hardline Reserve open space habitat is shown in Figure 3.3-1. As shown in Figure 3.3-1, MHCP Hardline Reserve lands are located to the north, northeastern corner, southeast and west of the project site. The portions of the MHCP Hardline Reserve lands located in the northeastern and southeastern corners of the project site are likely misaligned and boundaries do not overlap within the project site but do still occur within the larger biological resources study area

3.3.2 Regulatory Setting

Federal

United States Army Corps of Engineers – Clean Water Act

Recognizing the potential for continued or accelerated degradation of the Nation's waters, the U.S. Congress enacted the Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act (33 U.S.C. 1344). The objective of the CWA is to maintain and restore the chemical, physical, and biological integrity of the waters of the United States. Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into the waters of the United States, including wetlands.

United States Fish and Wildlife Service – Endangered Species Act

The USFWS is responsible for enforcing the federal Endangered Species Act (ESA), Migratory Bird Treaty Act, and Wildlife Coordination Act, and reviews and comments on applications for Section 404 CWA permits submitted to the USACE. If the proposed project is determined to have an adverse effect on a species that is federally listed as threatened or endangered, consultation with the USFWS would be required. If the proposed project may result in “take” of a federally listed species, an incidental take permit would be required. “Take” is defined in the ESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” The project site does not contain any areas mapped as “critical habitat,” as mapped by USFWS.

United States Fish and Wildlife Service – Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed in 50 CFR 10.13. The regulatory definition of “migratory bird” is broad and includes any mutation or hybrid of a listed species and includes any part, egg, or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by USFWS, makes it unlawful “by any means or in any manner, to pursue, hunt, take, capture, [or] kill” any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the

take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

State

California Department of Fish and Wildlife

The CDFW has the authority to reach an agreement with an agency or private party proposing to affect intermittent or permanent wetlands habitat, pursuant to Sections 1601-1616 of the State Fish and Game Code. Section 1602 of the State Fish and Game Code requires notification to CDFW prior to diversion of, obstruction of, use of material from, or deposition of materials in any river, stream, or lake. In accordance with its policy of “no net loss of wetland habitats,” the Department requires mitigation for all impacts to any wetlands, regardless of acreage.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code §2050, et seq.) generally parallels the main provisions of the Federal ESA and is administered by the CDFW. Its intent is to prohibit “take” and protect state listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, the CESA also applies the take prohibitions to species petitioned for listing (state candidates).

Natural Community Conservation Planning

CDFW's Natural Community Conservation Planning (NCCP) program is an effort by the State of California, and numerous private and public partners, that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP program identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

Multiple Habitat Conservation Program (MHCP)- The MHCP is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in Northwestern San Diego County. The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species.

The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999 and although the City's Draft Subarea Plan has not yet been approved by the USFWS and CDFW, the plan is a component of the adopted MHCP, and is currently being used as a guide for open space design and preservation within the City. The intent of the City's Draft Subarea Plan is to identify a citywide preserve system that meets local and regional biological goals while minimizing fiscal and economic impacts to the City and adverse impacts on private property owners. To help achieve this goal, certain areas, known as focused planning areas (FPAs), have been designated with parcel-level preserve goals which would contribute to achieving local and regional conservation goals while minimizing adverse effects on property rights and property values.

The project site is located within the MHCP. However, the project site is not located within an FPA as defined in the MHCP and the City's Draft Subarea Plan.

Local

San Marcos General Plan

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of biological resources. The following goals and policies apply to the project:

- Goal COS-1: Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.
 - Policy COS-1.1: Support the protection of biological resources through the establishment, restoration, and conservation of high quality habitat areas.
 - Policy COS-1.2: Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.
- Goal COS-2: The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.
 - Policy COS-2.1: Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.
 - Policy COS-2.2: Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.
 - Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As shown in Table 3.8-12, the project is consistent with the applicable goals and policies.

3.3.3 Thresholds of Significance

CEQA Guidelines define "significant effect on the environment" as a "substantial or potentially substantial adverse change in the environment." CEQA Guidelines further indicate that there may be a significant effect on biological resources if the project would:

- Threshold #1: 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. Fish and Wildlife Service.
- Threshold #2: 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 Wildlife or U.S. Fish and Wildlife Service?

- Threshold #3: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
- Threshold #4: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As noted above, it was determined that there would be no impact to state or federally protected wetlands, and no impact to wildlife corridors and nursery sites. Section 5.2, Environmental Effects Found Not to be Significant – Biological Resources, of this EIR provides additional information on these topics. The Initial Study is included as Appendix B.1 of this document.

3.3.4 Project Impact Analysis

Development of the proposed project would require grading for site preparation which can result in direct or indirect impact to biological resources. Portions of the common open space area within Lot A would be preserved as biological habitat and subject to an open space easement. The project includes 5.15 acres of common open space – grades 10 percent and greater. The project site contains special-status biological resources, including sensitive vegetation communities and suitable habitat for nesting birds. As a condition of project approval, the applicant/developer/property owner shall pay Public Facility Fees, a portion of which go towards City-wide habitat conservation efforts.

Table 3.3-2 presents the types and acreage of each vegetation community/land cover type within the project site and the amount that would be impacted by development of the proposed project. These impact numbers include any fire fuel modification areas that would be required for the project. All fire fuel modification for the project would take place on site, no offsite work would be required. There is a total of 0.25 acres of existing fuel modification easements onsite that are within Diegan Coastal Sage Scrub habitat and are therefore designated as Impact Neutral Areas in the impact calculations (**Figure 3.3-2**).

Table 3.3-2. Vegetation Community/Land Cover Types with Project Impact Area

Habitat Group	Vegetation Community/ Land Cover Type	Sensitive?	Total Onsite (Acres)	Project Impact (Acres)
C	Diegan Coastal Sage Scrub	Yes	7.73	5.24
C	Disturbed Diegan Coastal Sage Scrub	Yes	0.51	0.26
F	Disturbed Habitat	No	0.14	0.05
F	Urban/Developed	No	0.05	0.03
Total			8.43	5.58

Source: Rincon 2025.

Threshold #1: 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. Fish and Wildlife Service.

Special-Status Plants Species

One special-status species, San Diego sand aster, was considered to have a moderate potential to occur. Neither San Diego sand aster, nor any other rare plant species were detected on-site during the survey. Since the reconnaissance survey was not conducted during the flowering period for potentially occurring sensitive plant species, additional focused rare plant surveys were conducted during the appropriate time in spring and summer 2023. Results from focused rare plant surveys conducted by Rincon in 2023 were negative. San Diego sand aster was not observed during the surveys; therefore, they are presumed absent and no impacts to special-status plant species are anticipated as a result of the project.

Special - Status Wildlife Species

Coastal California Gnatcatcher

CAGN has been identified in the Diegan Coastal Sage Scrub habitat within the project site, including within the overall study area to the east and west. USFWS protocol surveys were conducted in 2018 and preconstruction surveys were conducted in 2020 for the Mission 316 development project parcel south of the project site (KMEA 2020). These surveys recorded individuals foraging, nesting pairs, and two family groups within the project area. Individuals were also recorded within sage scrub habitat, designated MHCP Hardline Reserve to the west of the project site across Woodward Street. Foraging individuals were also observed and recorded adjacent to the project site on the east, south of Silk Mill Place Road. Protocol surveys conducted in 2023 did not identify any CAGN on the project site (Rincon 2023).

The project could directly impact CAGN through destruction of occupied nests during vegetation removal on the project site if vegetation clearance occurs during the CAGN nesting season (February 15 – August 31). Indirect impacts to CAGN due to construction noise and dust are also possible, which could cause nest failures due to parental abandonment.

The proposed project would directly impact CAGN through the permanent removal of 5.24 acres of suitable, intact Diegan Coastal Sage Scrub, and approximately 0.26 acre of Disturbed Diegan Coastal Sage Scrub (**Figure 3.3-4**) habitat types that are used by CAGN for most of its life history. The proposed development area is composed of both dense Diegan Coastal Sage Scrub and Disturbed Coastal Sage Scrub. CAGNs have been observed occupying this habitat during previous protocol and preconstruction surveys as described above.

CAGN that is present both on-site and in adjacent areas would also be potentially affected by indirect impacts associated with the project, such as dust, noise, human presence, nighttime lighting, increase in predators, and spread of non-native species into occupied habitat. These indirect impacts could result in nest failures or individual mortality of CAGN. The direct and indirect impacts to CAGN are **potentially significant (Impact BIO-1)** and mitigation is required.

- **Impact BIO-1** The proposed project has the potential to result in direct and indirect impacts to coastal California gnatcatcher.

Crotch's Bumble Bee

CBB has been identified in the south central portion of the project site. In 2024, three surveys were conducted consistent with the recommendations in the CDFW *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species* (2023). One CBB was observed during the June 6, 2024 survey. The Diegan Coastal Sage Scrub habitat (including Disturbed) on site supports suitable foraging and nesting resources for bumble bees as this habitat contains substantial nectar resources and burrowing animal species (lizards, gophers, etc.). Therefore, the site is considered suitable nesting and foraging habitat for species (Alden 2024). Removal of vegetation and grading of the project site has the potential to directly and indirectly impact CBB. The direct and indirect impacts to CBB are potentially significant (**Impact BIO-2**) and mitigation is required.

- **Impact BIO-2** Focused surveys found the Diegan Coastal Sage Scrub (including Disturbed) on site to be occupied by Crotch's bumble bee. Thus, there is potential for "take" of Crotch's bumble bee and adverse impacts may occur through the removal of occupied habitat.

Other Special-Status Wildlife

Orange-throated whiptail, coastal whiptail, Southern California rufous-crowned sparrow, Cooper's hawk, and Bryant's woodrat all have either a moderate or high potential to occur on the project site, primarily within the Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Sage Scrub. Southern California rufous-crowned sparrow and Cooper's hawks are highly mobile and would likely escape direct impacts from vegetation removal and grading activities associated with the project by moving into the undisturbed open space to the north, northwest, east, and southeast, unless they are nesting on or adjacent to the site, which is addressed further in Impact-BIO-4, below. Some mortality to the reptile species (Orange-throated whiptail and coastal whiptail) could occur during vegetation removal and grading, but project implementation is not expected to cause a significant impact to the species given the small number of individuals likely to occur within the 5.5 acres of sage scrub habitat to be removed. Woodrat middens were detected on site and individuals could be disturbed or harmed by project construction. The project could potentially impact several special-status wildlife species. This represents a **significant impact (Impact BIO-3)** and mitigation measures are required.

- **Impact BIO-3** The proposed project has the potential to result in direct and indirect impact to special-status wildlife species including Orange-throated whiptail, coastal whiptail, Southern California rufous-crowned sparrow, Cooper's hawk, , and Bryant's woodrat.

Nesting Birds and Raptors

The habitats within the project site and study area, which include Diegan Coastal Sage Scrub, provide suitable nesting habitat for a variety of nesting bird species such as passerines and non-passerine terrestrial birds that may nest on the ground or within the scrub vegetation, including coastal California gnatcatcher and southern rufous crowned sparrow. The project site does not contain suitable habitat for raptor species due to the lack of large trees for nesting, however the large stand of eucalyptus trees and riparian woodland habitat within the study area across Woodward Street could provide nesting habitat for raptor species such as red-tailed hawks or Cooper's hawk. Ornamental palm trees associated with the residential houses on the upper eastern slope off of Silk Mill Place occur within the study area. These trees could potentially provide low quality suitable nesting habitat for raptors.

The project could impact raptors and other nesting birds, including Cooper's hawk and Southern California rufous-crowned sparrow, respectively, if construction occurs while they are actively nesting on or adjacent to the project site (January-August). Impacts could occur through direct mortality with vegetation removal and grading or indirectly by nest abandonment, due to construction activities associated with the project such as noise, dust, nighttime lighting, human presence/disturbance, and an increase in predators. Cooper's hawk has been previously observed over the project site but along with other raptors is not expected to nest on the project site given the lack of trees, although they may nest within the riparian corridor adjacent to the project site. The loss of a nest due to construction activities would be a violation of CFGC Sections 3503, 3503.5, 3511, 3513 and 3800 and the MBTA, and considered a **significant impact (Impact BIO-4)**. Mitigation is required.

- **Impact BIO-4** The proposed project has the potential to impact nesting birds and raptors that are afforded protection under the California Fish and Game Code and the Migratory Bird Treaty Act.

Indirect Impacts

Indirect impacts are physical changes to the environment which are not immediately related to a project but may occur at some point in the future due to conditions introduced with implementation of the project. Indirect impacts include urban run-off, introduction of meso-predators (e.g., dogs and cats), invasive plant species, and noise and lighting effects. The project has the potential to result in **significant indirect impacts** to sensitive species (**Impact BIO-5**) and mitigation is required.

- **Impact BIO-5** The proposed project has the potential to result in indirect impacts to sensitive species due to urban run-off, introduction of meso-predators (e.g., dogs and cats), invasive plant species, and noise and lighting effects.

Threshold #2: 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 Wildlife or U.S. Fish and Wildlife Service?

There are no riparian habitats located on the project site (3.3-2). The riparian area located within the western portion of the study area is avoided by the project and separated from project activities by Woodward Street (Figure 3.3-2). Therefore, the project would not have a substantial adverse effect on riparian habitat.

The project would result in the direct removal of 5.5 acres of Diegan Coastal Sage Scrub (including Disturbed) that falls under the City's Habitat group C definition of Coastal Sage Scrub, which is considered a sensitive habitat. Impacts to vegetation communities are summarized in Table 3.3-1 and shown on Figure 3.3-4. Existing fuel modification easements total 0.25 acre and are designated as Impact Neutral Areas, and therefore excluded.

Impacts to Diegan Coastal Sage Scrub and Disturbed Coastal Sage Scrub would be considered a **significant impact (Impact BIO-6)** and mitigation is required.

- **Impact BIO-6** The proposed project would impact 5.24 acres of Diegan Coastal Sage Scrub and 0.26 acre of Disturbed Diegan Coastal Sage Scrub for a total of 5.50 acres of impact.

Threshold #3: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.

The Conservation and Open Space Element of the City's General Plan includes policies related to the protection of biological resources. The applicable policies, as well as the project's consistency with these policies, are presented below:

Conservation and Open Space Policy	Project Consistency
<p>Policy COS-1.1 Support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.</p>	<p>The project site contains suitable and high-quality Diegan Coastal Sage Scrub, with the exception of Disturbed Coastal Sage Scrub, including designated FPA Hardline Reserve habitat to the north and east. The FPA Hardline Reserve habitat is partly within the project site, but not within the proposed project impact area and thus vegetation within is not anticipated to be directly impacted from project implementation. Impacts to Diegan Coastal Sage Scrub has been identified as Impact BIO-6 and mitigation for impacts to Diegan Coastal Sage Scrub is identified in mitigation measure MM-BIO-6, in Section 3.3-6, Mitigation measure MM-BIO-6 requires a total of 5.5 acres of occupied CAGN Diegan Coastal Sage Scrub habitat to be preserved. This can be accomplished through off-site acquisition, in lieu fees, a purchase of credits from an approved mitigation bank, or a combination thereof as approved by the City's Planning Manager. Therefore, with implementation of mitigation measure MM-BIO-6, the project would not conflict with this policy.</p>
<p>Policy COS-1.2 Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive habitats.</p>	<p>The project site does not support any riparian areas, oak woodlands, or habitat linkages. Diegan Coastal Sage Scrub within the project site is considered sensitive (Impact BIO-6); however, mitigation measure MM-BIO-6 would require a total of 5.5 acres of Diegan Coastal Sage Scrub habitat to be preserved. This can be accomplished through off-site acquisition, in lieu fees, a purchase of credits from an approved mitigation bank, or a combination thereof as approved by the City's Planning Manager. Therefore, with implementation of mitigation measure MM-BIO-6, the project would not conflict with this policy.</p>
<p>Policy COS-2.1 Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.</p>	<p>The project site contains biologically sensitive open space, FPA Hardline Reserve habitat to the north, east, and west across Woodward Street. Impacts to Diegan Coastal Sage Scrub has been identified as Impact BIO-6; however, mitigation measure MM-BIO-6 requires a total of 5.5 acres of occupied CAGN Diegan Coastal Sage Scrub habitat be preserved. This can be accomplished through off-site acquisition, in lieu fees, a purchase of credits from an approved mitigation bank, or a combination thereof as approved by the City's Planning Manager. Therefore, with implementation of mitigation measure MM-BIO-6, the project would not conflict with this policy.</p>
<p>Policy COS-2.2</p>	<p>The project site was anticipated for development and is not identified as being within an FPA in the MHCP. The proposed</p>

Conservation and Open Space Policy	Project Consistency
Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.	project would impact Diegan Coastal Sage Scrub (Impact BIO-6) and mitigation is proposed (MM-BIO-6) to reduce the impact to this sensitive habitat to below a level of significance. This mitigation measure requires mitigating the loss of the habitat at a 1:1 ratio. This can be accomplished through on-site preservation, off-site acquisition, in lieu fees, a purchase of credits from an approved mitigation bank, or a combination thereof as approved by the City's Planning Manager. Therefore, with implementation of mitigation measure MM-BIO-6, the project would not conflict with this policy.
Policy COS-2.6 Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.	The site contains dense, low growing shrubs and scrub species and lacks mature trees. No mature trees were observed within the project site. The proposed project would plant 246 trees, as detailed in the landscape concept plan (Appendix A.2 of the EIR); therefore, implementation of the project would not conflict with this policy.

In summary, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impacts would be **less than significant**.

Threshold #4: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The project site is located within the MHCP, which identifies a series of FPAs within which some lands will be dedicated for preservation of native habitats. Biological Core and Linkage Areas (BCLAs) were designed to conserve sensitive species and corridors between areas of high-quality habitat and to provide avenues for wildlife movement between these areas. The project impact area is not located within an FPA, however FPA Hardline Reserve habitat is located partly within the northeastern and southeastern corners of the project site, as illustrated in Figure 2-1 of the Final MHCP Plan (AMEC et al. 2003). The project site is not within a BCLA, as illustrated in Figure 2-3 of the Final MHCP Plan (AMEC et al. 2003). When the FPA was initially created, it intentionally left out this project site (parcel) out, negating any potential impacts.

The proposed project could result in impacts to MHCP covered species, CAGN, other special-status wildlife species, and Diegan Coastal Sage Scrub, which is a sensitive vegetation community (Impact BIO-1 through Impact BIO-6). Implementation of mitigation measures have been identified (MM-BIO-1 through MM-BIO-6) which would reduce potentially significant biological resource impacts to below a level of significance.

Therefore, no conflicts with local policies, ordinances, or MHCP provisions are anticipated with the implementation of these mitigation measures.

3.3.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA

Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projects contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For the purpose of assessing the proposed project's cumulative impact with respect to biological resources the cumulative analysis is based upon a list approach. All of the cumulative projects within the City, identified in Table 2-4, are considered in this cumulative analysis.

The biological cumulative impact analysis focuses on those projects that would have a similar type of biological resource impact as the proposed project. The project has the potential to cause an impact to CAGN, CBB, other special-status wildlife species, nesting birds, as well as sensitive habitat (Diegan Coastal Sage Scrub).

The cumulative projects which remove Diegan Coastal Sage Scrub or other sensitive habitats would be required to mitigate their impacts at a ratio consistent with the MHCP and the City's Draft Subarea Plan. Cumulative projects which remove vegetation could also impact special-status species as well as nesting birds. Similarly, such projects would be required to implement mitigation that would require restrictions on construction timing, or the performance of pre-construction surveys to ensure that special-status species, and nesting birds would not be impacted. This is similar to the mitigation identified for the proposed project and would ensure that cumulative impacts are less than significant.

3.3.6 Mitigation Measures

Implementation of the following mitigation measure would be required as a condition of project approval:

California Coastal Gnatcatcher (Impact BIO-1)

MM-BIO-1a An updated presence/absence protocol survey of the project site and a 500-foot buffer around the project site shall be conducted by a qualified biologist with a valid United States Fish and Wildlife Service 10(a)(1)(A) permit to further evaluate the coastal California gnatcatcher (CAGN) territories that could be affected by short term project construction activities, including vegetation clearance, and long term habitat loss and indirect impacts. In accordance with the USFWS survey protocol, a minimum of six breeding season surveys shall be conducted at least 1 week apart from March 15, through June 30, pending the anticipated construction timeline for the project. The results of the survey shall be submitted to the City and USFWS upon completion.

If CAGN is detected during the protocol survey, vegetation clearing shall only be conducted between September 1 and February 14, outside of the breeding season for CAGN. If vegetation clearing must start outside of those dates, then focused nesting surveys would be conducted prior to vegetation clearing for the project site and a 500-foot buffer zone. No more than 3 days prior to the clearing of vegetation, a qualified biologist shall conduct a pre-construction clearance survey for CAGN to confirm that the vegetation on-site is not occupied by the species. If nests are found, they would be avoided by establishing a 500-foot non-disturbance buffer around the nest. Vegetation clearance may continue with regular biological monitoring if there is no indication of disturbance to the nest(s). If the vegetation

clearance is potentially disruptive to active nests a larger buffer may be implemented as determined by the qualified biologist. If CAGN are observed moving through the area during vegetation clearing activities, the project biologist may delay the removal of vegetation and/or grading until CAGN has left the area of their own volition.

If CAGN is found to be within the survey area (project site plus a 500-foot buffer) during protocol or pre-construction surveys, the following avoidance and minimization measures shall be implemented.

- a) To reduce potential noise impacts to nesting CAGN, a qualified biologist shall monitor noise levels with a noise monitoring device at an appropriate distance from the nest to determine if construction activity noise is above 60 dBA Leq, the standard level requested by the USFWS, or if noise levels above 60 dBA Leq have the potential to affect any CAGN nests.
- b) If/when an active CAGN nest is identified, an acoustician shall monitor noise at the edge of construction as directed by the qualified biologist. If noise levels continue to exceed 60 dBA Leq, the acoustician shall consult with the qualified biologist and provide requirements for the construction contractor to make operational and barrier changes to reduce noise levels to 60 dBA Leq during the breeding season (February 15 through August 31). Noise monitoring shall occur during operational changes and installation of barriers, as needed, to ensure their effectiveness. If the noise meets or exceeds the 60 dBA Leq threshold, or if the biologist determines that the activities in general are disturbing the nesting activities, the biologist shall have the authority to halt construction and shall consult with the USFWS to devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nesting coastal CAGN and the activities, and working in other areas until the young have fledged.

All active nests shall be reported within 24 hours to the USFWS upon detection.

MM-BIO-1b Long-Term Open Space Management

A long-term open space management plan shall be developed to minimize impacts of the residential development on the adjacent coastal California gnatcatcher (CAGN) and Diegan Coastal Sage scrub habitat. The adjacent area falls within a Multiple Habitat Conservation Program Hardline Reserve, occupied by CAGN, and additional mitigation measures are necessary to minimize impacts associated with increased human and domestic pet presence from the project. The plan shall include a program of education to reduce domestic and feral cat encroachment (using the program developed by the American Society for the Prevention of Cruelty to Animals). Use of invasive exotic plant species in landscaped areas adjacent to or near sensitive vegetation communities shall be restricted. The applicant shall encourage the use of native species in the landscaping plan and shall avoid the use of species listed in Lists A & B of the California Invasive Plant Council's list of Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999.

This list includes such species as pepper trees (*Schinus mole*), pampas grass (*Cortaderia selloana*), fountain grass, ice plant (*Carpobrotus sp.*), myoporum (*myoporum sp.*), black locust (*Robinia pseudoacacia*), capeweed (*Arctotheca calendula*), tree of heaven (*Ailanthus altissima*), periwinkle (*Vinca major*), sweet alyssum (*Lobularia maritima*), English ivy (*Hedera helix*), French broom (*Genista monspessulana*), Scotch broom (*Cytisus scoparius*), and Spanish broom (*Spartium junceum*). The plan shall also address permanent residential lighting to be directed away from the open space.

Crotch's Bumble Bee (Impact BIO-2)

- MM-BIO-2 Focused surveys found the Diegan Coastal Sage Scrub on site to be occupied by Crotch's bumble bee (CBB). Thus, there is potential for "take" of CBB and adverse impacts may occur through the removal of occupied habitat. However, the project would incorporate the following CBB avoidance measures to avoid "take" and significant impacts should the species remain a candidate for state listing.

Avoidance Measure for Crotch's Bumble Bee

Prior to the Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, The City shall verify the following project requirements regarding the CBB are shown on the construction plans. Should this species no longer be a potential candidate for listing at the time of the preconstruction meeting, then no avoidance measures shall be required.

To avoid impacts on CBB, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period (April 1 through August 31). If the removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a pre-activity (defined as any habitat disturbance) survey no more than three days prior to the initiation of construction activities to determine the presence or absence of CBB within the proposed area of disturbance.

A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and have completed a CBB detection/identification training by an expert CBB entomologist; or the biologist must have at least 20 hours of experience directly observing CBB.

The pre-activity survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained.

If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be CBB, then the Qualified Biologist shall obtain the required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey

Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable.

If pre-activity surveys identify CBB individuals on-site, the Qualified Biologist shall notify and consult with CDFW to establish, monitor, and maintain no-work buffers around the associated floral/nest resources. The size and configuration of the no-work buffer shall be based on the best professional judgment of the Qualified Biologist in consultation with CDFW. Construction activities shall not occur within the no-work buffers until the bees appear no longer active (i.e., associated floral resources appear desiccated and no bees are seen flying for three consecutive days indicating dispersal from the area). Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (Fish and Game Code section 86, 2062, 2067, 2068, 2080, 2085; California Code Regulations, Title 14, section 786.9) under CESA.

Survey data shall be submitted by the Qualified Biologist to the California Natural Diversity Database (CNDDDB) in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

Crotch's Bumble Bee Habitat

Should the species remain a candidate for listing, mitigation for the loss of CBB occupied Diegan Coastal Sage Scrub shall be conducted in conjunction with the Diegan coastal sage scrub mitigation described in MM-BIO-6. Specifically, the Diegan coastal sage scrub mitigation shall include habitat compensation at a minimum 1:1 ratio to also benefit the CBB. This mitigation may be satisfied through off-site acquisition, in lieu fees, purchase of credits from an approved mitigation bank, or a combination thereof. If necessary, habitat enhancement also may be incorporated, to be described in a Habitat Management and Monitoring Plan (i.e. planting of native Diegan coastal sage scrub flowering plant species known to support bumble bee populations, removal of invasive species, etc.). This species shall also be included in the Worker Environmental Awareness Program educational program described in MM-BIO-3a and BMP's implemented per MM-BIO-3c.

Direct and Indirect Impacts to Sensitive Wildlife Species (Impact BIO-3)

MM-BIO-3a Worker Environmental Awareness Program (WEAP)

The applicant shall implement a Worker Environmental Awareness Program (WEAP) for the construction crew that will be developed by a qualified biologist. Each employee (including temporary, contractors, and subcontractors) will receive the WEAP presentation on the first day of project work. They will be advised of sensitive species in the area and avoidance measures being implemented to protect them at the site. At a minimum, the WEAP will include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of federal and State laws, reporting requirements, and project features and conditions designed to reduce direct and indirect impacts

to these species, role of the Biological Monitor, and worker responsibilities to maintain compliance with mitigation measures while working at the site.

MM-BIO-3b Work Limit Delineations

Approved construction work area limits shall be delineated and marked clearly, by flagging or temporary orange construction fencing, in the field prior to vegetation removal. The marked boundaries shall be maintained and clearly visible to personnel on foot and by heavy equipment operators. Fencing shall be placed on the impact side of the work area to reduce the potential for encroachment and additional vegetation loss within adjacent open space. Fencing shall be put in place by a qualified surveyor per the project applicant's approved construction and grading plans. All temporary fencing shall be removed only after the conclusion of all grading, clearing, and construction. Employees shall strictly limit their activities and vehicles to the designated project areas, staging areas, and routes of travel. The biological monitor shall verify that the limits of construction have been properly staked and are readily identifiable. Intrusion by unauthorized vehicles outside of construction limits shall be prohibited, with control exercised by an on-site foreman. Access routes to the construction area outside of work hours shall be blocked with physical barriers, such as concrete blocks or large equipment.

MM-BIO-3c Biological Monitor and Construction BMPs

A City of San Marcos-approved, qualified biologist shall be present during all vegetation clearing and other activities with the potential to affect coastal California gnatcatcher (CAGN), orange throated whiptails, coastal whiptails, Bryant's woodrat, Coopers hawks, and southern rufus-crowned sparrow, nesting birds, and any other sensitive plant or wildlife resource, and will monitor the project for avoidance of unanticipated impacts to the aforementioned species and their habitats. Standard construction Best Management Practices will be implemented by the contractor to minimize potential impacts to sensitive species. The biologist shall have the authority to halt all associated project activities that may be in violation of the protective measures. Daily monitoring logs shall be maintained and a monthly report of compliance with biological resource measures will be provided to the City during construction. Standard Construction Best Management Practices shall include the following:

- Vehicle speeds will not exceed 10 miles per hour (mph) adjacent to CAGN habitat. Clear signage will be installed and maintained throughout the construction period.
- Placement of drip pans under parked equipment and vehicles.
- Regular inspection and maintenance of equipment to avoid spills and immediate containment of any spills.
- Chemicals. Herbicides, and pesticides will not be used.
- Pets and firearms will not be allowed at the site.
- Trash will be removed from the site daily or be stored in wildlife proof containers
- Stormwater protection (i.e., straw wattles, silt fence) will be employed to prevent spills, runoff, or sediment from entering nearby aquatic habitats. These materials will be weed free and no project debris or rubbish will be

allowed to enter into or be placed where it may be washed by rainfall or runoff in the wetlands.

- Staging/storage areas for equipment and materials will be located at least 100 feet away from the riparian areas. Equipment will be checked and maintained daily to prevent leaks of pollutants into the wetlands.
- No equipment maintenance will be carried out within 100 feet of the riparian area.
- All pipes, culverts, or similar structures with a 4-inch diameter or greater that are stored on the construction site overnight shall be thoroughly inspected for wildlife or nesting birds before the pipe is subsequently curried, capped, or otherwise used or moved in any way.
- To prevent inadvertent entrapment of wildlife during construction, all excavated, wells, steep-walled holes, or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day.
- Any construction lighting will be directed toward the work area and away from adjacent habitats.

MM-BIO-3d Woodrat Middens

Woodrat middens (nests) are large nests or dens made of woody debris, such as sticks, dead cacti, and bark. Middens were observed throughout the project site and within the project impact area. The project may contain both big-eared woodrat Bryant's woodrat and all middens will be treated as potentially sensitive. Within 30 days of initial site disturbance, a pre-construction survey shall be conducted for woodrat middens. All occupied woodrat middens shall be mapped and flagged for avoidance to the extent feasible, with a minimum of 10-feet surrounding the active midden. If avoidance is not feasible, middens will be disturbed "daylighted" by a qualified biologist one night before anticipated vegetation removal to allow for the rats to escape and passively relocate prior to disturbance of the area.

Nesting Birds and Raptors (Impact BIO-4)

- MM-BIO-4** If site clearing activities are conducted between January 1 and August 31, a qualified biologist shall conduct a nesting bird survey no more than 3 days prior to the start of such activities to identify actively nesting birds within the project site and a 500-foot buffer around the project site. If any nests are found, their locations shall be flagged and an appropriate avoidance buffer, ranging in size from 25 to 50 feet for passerines, and up to 500 feet for raptors depending upon the species and the proposed work activity. The non-disturbance buffer zone shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging materials. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No disturbance shall occur within this buffer until the qualified biologist confirms that breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, activities shall be conducted at the discretion of the qualified biologist and with monitoring and management to confirm that nesting birds and the nests are not disturbed. If no nesting birds are observed during the nesting survey or during other monitoring activities, then no further actions shall be necessary. A follow-up survey will be needed if site clearing does not occur within 3 days after

the initial survey and/or a pause in construction activity occurs for more than 7 days.

Indirect Impacts to Sensitive Species (Impact BIO-5)

Implementation of mitigation measures MM-BIO-3a through MM-BIO-3d, described above would reduce potential indirect impacts to sensitive species.

Impact to Sensitive Habitat (Impact BIO-6)

MM-BIO-6 The permanent loss of 5.5 acres of Diegan Coastal Sage Scrub, and Disturbed Diegan Coastal Sage Scrub shall be mitigated at a minimum 1:1 ratio. Section 5.2.1 of the Draft Subarea Plan for San Marcos references the preferred order of mitigation to be on-site mitigation, off-site acquisition, in-lieu fees, and mitigation credits. For mitigation purposes, the Diegan Coastal Sage Scrub and Disturbed Diegan Coastal Sage Scrub acreages on the project site that would be impacted have been combined as these two vegetation communities are considered to have similar sensitivity under the Multiple Habitat Conservation Program. Thus, 5.5 acres of occupied coastal California gnatcatcher Diegan Coastal Sage Scrub will be preserved by the project applicant through off-site acquisition, in lieu fees, a purchase of credits from Buena Creek Mitigation Bank or another approved mitigation bank, or a combination thereof as approved by the City of San Marcos Planning Manager and wildlife agencies prior to issuance of the grading permit. If on site or off-site habitat mitigation will be completed by the Applicant to satisfy the compensatory mitigation requirements, it shall be carried out in accordance with a Habitat Mitigation and Monitoring Plan (HMMP) that outlines the strategy for enhancement and maintenance of the habitat for locally sensitive species occupying Diegan Coastal Sage Scrub.

3.3.7 Conclusion

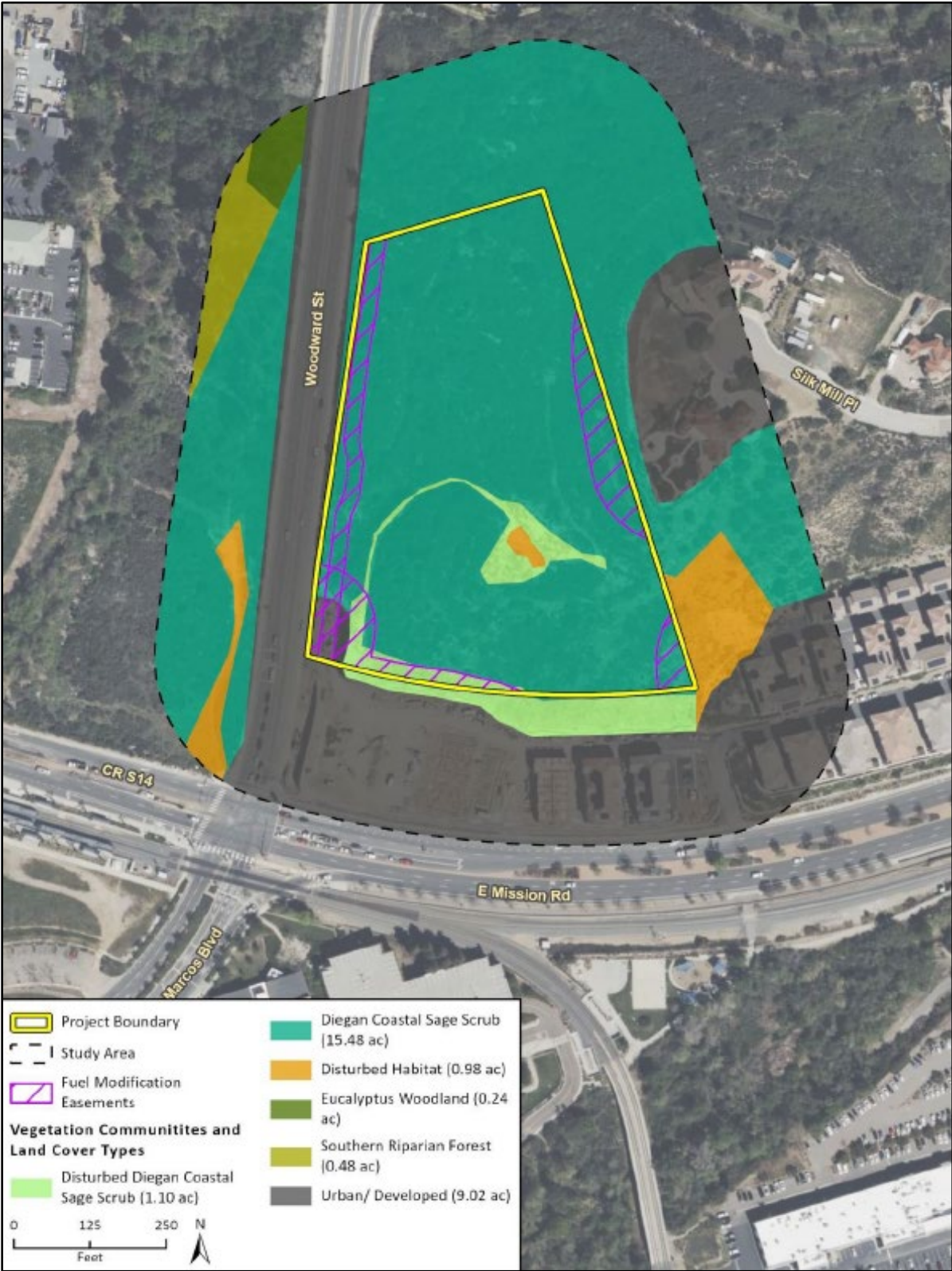
Development of the proposed project would result in potential direct and indirect impacts to CAGN, CBB, other special-status wildlife species, and nesting birds. Implementation of mitigation measures MM-BIO-1 through MM-BIO-6 would reduce potential direct and indirect impacts to sensitive wildlife species to below a level of significance. These measures require pre-construction surveys during the applicable nesting seasons and other measures to ensure that there are no direct impacts to CAGN, Bryant's woodrat, other sensitive species, and nesting birds.. The proposed project would also impact 5.5 acres of Diegan coastal sage scrub habitat. The project would mitigate the impact at a 1:1 ratio, as identified in mitigation measure MM-BIO-6. Per mitigation measure MM-BIO-6, 5.5 acres of CAGN-occupied Diegan Coastal Sage Scrub and disturbed Diegan coastal sage scrub would be preserved by the project applicant through off-site acquisition, in lieu fees, a purchase of credits from Buena Creek Mitigation Bank or another approved mitigation bank, or a combination thereof as approved by the City's Planning Manager and wildlife agencies prior to issuance of the grading permit. In addition, MM-BIO-2 includes consultation with CDFW, potentially an Incidental Take Permit, and requires that the habitat compensation for Diegan Coastal Sage Scrub includes enhancements to benefit CBB. The Diegan Coastal Sage Scrub mitigation identified under MM-BIO-6 would also serve as the habitat mitigation for CBB. In summary, all biological resources impacts would be reduced to below a level of significance.

Figure 3.3-1. MHCP Conservation Areas in Project Vicinity



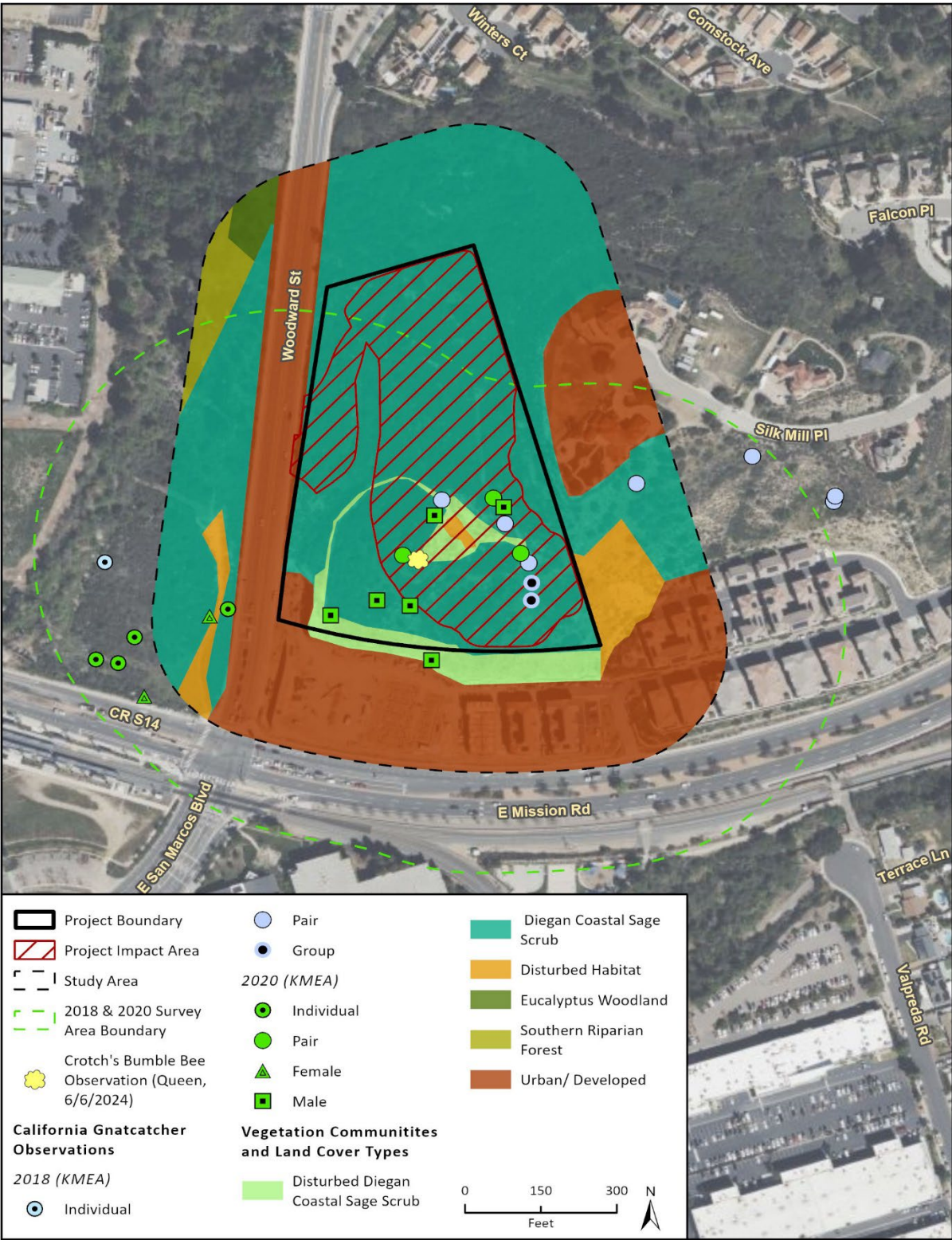
Source: Rincon 2025.

Figure 3.3-2. Vegetation Communities and Land Cover Types within Project Site and Study Area



Source: Rincon 2025.

Figure 3.3-3. Biological Resources Map



Source: Rincon 2025.

Figure 3.3-4. Vegetation Communities and Land Cover within Project Impact Area



Source: Rincon 2025.

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3.4 Cultural Resources

Introduction

This section identifies the cultural resources on the project site and analyzes the potential impacts of the proposed project on cultural resources. Cultural resources considered in this analysis include archaeological (precontact Native American [prehistoric] and non-Native American historic-era) resources, historical resources, unique archaeological resources, and human remains . Tribal Cultural Resources are analyzed in Section 3.12 of the Environmental Impact Report (EIR) ⁴.

The analysis in this section is based upon the following report prepared by ASM:

- *Archaeological Survey and Evaluation Report for the Woodward 46 Project, San Marcos, California* (ASM 2024)

Due to the confidential nature of the archaeological report, it is not included as a technical appendix to the EIR. The archaeological resources inventory report included a record search, literature review, correspondence with Native American contacts, and field survey. The analysis also considers the *California Environmental Quality Act (CEQA) Guidelines Appendix G* and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.⁵

In the Initial Study checklist prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the proposed project to have an adverse impact on historic resources since none were identified on the site. Section 5.4, Environmental Effects Found Not to be Significant – Cultural Resources of this EIR provides additional information on this topic.

Table 3.4-1 summarizes the project- and cumulative-level cultural resources impacts, by threshold.

Table 3.4-1. Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	No Impact	No Impact	No Impact
#2 – Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant
#3 – Disturb any human remains, including those interred outside of dedicated cemeteries.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant

⁴ Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

⁵ <http://www.san-marcos.net/work/economic-development/general-plan>

3.4.1 Existing Conditions

Records Search

Previous Cultural Resources Reports

A records search request was submitted to South Coastal Information Center (SCIC), San Diego State University on December 30, 2022. The records search results identified that 81 previous cultural resources studies have been conducted within one mile of the project area, with three studies that intersected the proposed project area. One archaeological study was conducted by Carrico (WESTEC) in 1976. Three other regional overview studies) of the larger overall area can also be considered encompassing the current project area, though the level of investigation and applicability of the results towards the current study are at-best supplementary (ASM 2024).

Previously Recorded Cultural Resources

The SCIC records search did not identify any cultural resources within the project area. The records search identified 40 previously recorded cultural resources within a one-mile radius of the project location with none identified as intersecting the project area. Two cultural resources (SDI-21254 and SDI-23161) have been previously recorded in the vicinity of the proposed project area.

SDI-23161 was recorded in 2018 as a multi-component site consisting of four bedrock milling features, sixteen historic features and historic debris. No subsurface deposits were identified during testing and the site was recommended not eligible to the California Register of Historic Resources (CRHR).

SDI-21254 was recorded in 2014 as the ruins of a historic structure and was recommended not eligible to the CRHR. During construction monitoring in 2015 a prehistoric cultural deposit was identified consisting of a scatter of lithic artifacts, marine shell, and historic artifacts. One piece of possible human remains was identified during monitoring. The City of San Marcos and the San Luis Rey Band of Mission Indians consulted and further testing at the site identified 157 prehistoric artifacts. The site was recommended not eligible to the CRHR, however due to the possible human remain, the site was determined to be significant under CEQA (ASM 2024).

No historical addresses are located within the project area; however, three historical addresses were previously recorded within one mile of the project area including, the San Marcos Forest Fire Station Gas & Oil House and two single family residences. The San Marcos Forest Fire Station Gas & Oil House (P-37-014081) was previously recommended eligible for the National Register of Historic Places (NRHP) under Criteria A and D, however it was reevaluated and determined not eligible based on its current condition in 2023. (ASM 2024).

Archival Research

In addition to the SCIC records search, ASM conducted an on-line review of historical aerial photographs of the project area and general vicinity, to help determine the possible development and land use of the project area in the past. The earliest-available aerial images of the property were from 1928 and the most recent google earth image dates to 2021. **Table 3.4-2** summarizes the historical aerial photographic review.

Table 3.4-2. Historical Aerial Photograph Review

Date	Description
1928	Project area consisted of two graded areas with a dirt road connecting the two.
1938	At least one of the roadways appears to have been abandoned.
1953-1964	Between 1953 and 1964, another episode of disturbance is visible on the aerial imagery.
1980	A four-sided feature is visible in these graded areas.
1987	The four-sided feature is no longer visible.
Post 1987	Activity in the project area appears to be sporadic and included clearing of some of the previously cut roadways.
2021	In the most-recent google earth images dating to 2021, a small approximately 7-x-10-ft feature is visible in the southern portion of the project area. During the survey, it was determined that this feature was an abandoned asphalt-related machine.

Source: ASM 2024.

Natural Setting

The project area lies on the coastal plain of San Diego County in the Coastal Province and western Peninsular Range Province. The coastal strip has a 130-km-long shoreline and is comprised of raised Pleistocene marine and non-marine terraces ranging from 20 to 5 km in width. Cretaceous, Tertiary, and Quaternary marine and non-marine sedimentary deposits define these terraces, which have been extensively modified by erosion. Drainages of varied catchment size are closely spaced along the coast, and lagoons have formed at the mouths of many of these rivers. San Marcos is part of the central coastal plain (ASM 2024).

The project site is currently undeveloped, vacant land. Per the biological resources report prepared for the project, the majority of the project area is very rugged with large boulder outcroppings, with a steep hillside sloping down towards the Mission Villas development south of the project site (Rincon 2025). Elevation ranges from 754 feet above mean sea level (amsl) from the east, 700 feet from the northern boundary of the project, sloping down to 615 feet in the southwestern portion. The site generally slopes from higher elevation to the north and east downward towards Woodward Street. Large boulders were observed distributed throughout the site. No drainages occur on the project site. The project site contains Diegan Coastal Sage Scrub (including disturbed) and the developed Woodward Street. The central portion of the project site shows a history of anthropogenic disturbances with disturbed habitat, trash, and old equipment observed (Rincon 2025).

Archaeological Context

Archaeological fieldwork along the southern California coast has yielded a diverse range of human occupation extending from the terminal Pleistocene into the Ethnohistoric period. A variety of different regional chronologies, often with overlapping terminology, have been used in coastal southern California, and they vary from region to region. Today, the prehistory of San Diego County is generally divided into three major temporal periods: Paleoindian, Archaic, and Late Prehistoric. These time periods are characterized by patterns in material culture that are thought to represent distinct regional

trends in the economic and social organization of prehistoric groups. The following information on these periods is from the archaeological resources survey and evaluation report for the project by ASM (2024).

Paleoindian Period

The antiquity of human occupation in the New World has been the subject of considerable debate over the last few decades. A widely accepted model is that humans first entered the western hemisphere between 12,000 and 15,000 years B.P. While there is no firm evidence of human occupation in coastal southern California prior to 12,000 B.P., dates as early as 23,000 B.P. and even 48,000 B.P. have been reported. The amino acid racemization technique used to date these sites has been largely discredited, however, by more recent accelerator radiocarbon dating of early human remains along the California coast. Despite intense interest and a long history of research, no widely accepted evidence of human occupation of North America dating prior to 15,000 B.P. has emerged (ASM 2024).

The Paleoindian period begins with Clovis occupation, a widespread phenomena in North America. Noted for its distinctive tool kit characterized by fluted points, Clovis occupation dates to the end of the Pleistocene, from 11,200 B.P. to 10,600 B.P. The Paleoindian period in San Diego County is considered to date to the terminal Pleistocene and the early Holocene, from at least 10,000 B.P. to 8500/7500 B.P. Although no Clovis sites are documented in the region, occasional isolated fluted points have been recovered. A variety of terms have been proposed for Paleoindian assemblages in the southern California region. Rogers, the first to temporally order the archaeological assemblages of the region, introduced and later discarded the terms Scraper-Makers, Malpais and Playa to label early lithic industries of the region then coined the term San Dieguito, still widely used today, to refer to the earliest artifact assemblages in San Diego County. San Dieguito assemblages are composed almost entirely of flaked stone tools, including scrapers, choppers, and large projectile points. Until recently, the near absence of milling tools in San Dieguito sites was viewed as the major difference between Paleoindian economies and the lifeways which characterized the later Archaic period (ASM 2024).

The terminal Pleistocene San Dieguito adaptation occurred within a climatic period of somewhat cooler and moister conditions than exist presently. The range of possible San Dieguito economic adaptations and the interpretation of the San Dieguito complex as a big game hunting tradition are based primarily on materials from the Harris Site. Subsequently, it was hypothesized that differences between San Dieguito and the subsequent La Jolla artifact assemblages may reflect functional differences rather than temporal or cultural variability (ASM 2024).

Archaic Period

The Archaic period (similar to the Encinitas tradition and the Millingstone horizon) began between 9,000 and 8,500 years ago and ended between 1,300 and 800 years ago. A distinction is often made between coastal shell midden sites (La Jolla complex) and inland non-shell midden sites (Pauma complex). Shell middens are generally characterized by flaked cobble tools, basin metates, manos, discoids, and flexed burials. Three temporal phases have been distinguished within the Archaic period (ASM 2024).

Initial Archaic exploitation of the San Diego area littoral zone is generally considered to have entailed sizable semisedentary populations focused around resource-rich bays and estuaries. Shellfish were interpreted as a dietary staple; plant resources (both nuts and grasses) were also an important dietary component, while hunting and fishing were less important. This adaptive strategy remained largely unchanged for several thousand years. The La Jolla Complex reached its population and cultural climax between 7000 and 4000 years ago when there was a plentiful supply of shellfish in the lagoons along

the coast. Major changes in human adaptations occurred after 4,000 years ago when estuarine silting was considered to have become so extensive as to cause a decline in associated shellfish populations. A major depopulation of the coastal zone has been postulated, with settlements shifting inland to a river valley orientation, intensifying exploitation of terrestrial small game and plant resources, possibly including acorns. The coast was abandoned or only seasonally occupied, with a possible slight increase in coastal occupation after 1,600-1,200 years ago (ASM 2024).

Late Prehistoric Period

The Late Prehistoric period is generally considered to have begun between 1,300 and 800 years ago or the equivalent of between A.D. 700 and 1250. Local regional cultural complexes have been distinguished between the northern area (San Luis Rey complex), southern coastal area (Yuman complex), and the southern inland area (Cuyamacha complex). In general, this period was characterized by the appearance of small pressure-flaked arrow points (Cottonwood Triangular and Desert Side-notched points) indicative of bow and arrow technology, the appearance of ceramics, the replacement of flexed inhumations with cremations, the possible appearance of the mortar and pestle, and an emphasis on inland plant food collecting and processing, especially of acorns. The precise timing of the introduction of these items is still debated due to the poor chronological resolution and bioturbation at multicomponent sites. In addition, recent research is revealing the persistence of inhumations throughout most of the late Holocene in northern coastal San Diego (ASM 2024).

Explanations for the origin of the Late Prehistoric period vary. It has been speculated that Uto-Aztecan-language speakers migrated from the deserts to the southern coast of California at least 1,000-1,500 years ago. Some archaeologists have embraced this hypothesis and correlated it with the origins of the Late Prehistoric period. The Luiseño and Kumeyaay were initially discussed under the rubric of the Mission Indians and were distinguished from earlier shell-midden and scraper-maker cultures. Archaeologists later argued for continuity in occupation from the Archaic to the Late Prehistoric period and distinguished three phases of shell middens. It was believed that the Kumeyaay culture of 500 years ago was the result of earlier migration of Yuman populations from the coast to the Colorado River (perhaps as the result of an influx of Shoshone populations in northern San Diego County), adaptation to this new riverine setting and adopting traits from adjacent populations in the Southwest, and subsequent movement back to the coast at the onset of the Late Prehistoric period. Subsequently, scholars have emphasized several cultural processes to explain Late Prehistoric cultural developments including: a chronological gap, cultural continuity and the addition of new traits, a population replacement, or that several factors were at play (ASM 2024).

The San Luis Rey complex in the northern inland area was generally applied to the north coast region. It has been suggested that the San Luis Rey I phase began around A.D. 1400 and included small triangular arrow points, manos, portable metates, mortars, pestles, Olivella beads, and stone pendants. The San Luis Rey II phase differed only in the addition of ceramics and pictographs around A.D. 1750. It was further hypothesized that the lower portions of the San Luis Rey drainage had sedentary villages with limited use of marine resources. The Late Prehistoric period has been paradigmatically linked with the subsequent ethnohistoric record, and direct historical analogies assume considerable adaptive stability for populations, linguistic groups, and their territorial extent as documented by Europeans (ASM 2024).

Ethnographic Context

The Post-Contact period began in A.D. 1769 with the Spanish establishment of the Mission San Diego de Alcalá. Yet Spanish explorers first encountered Native Americans in the San Diego area in A.D. 1542

when Cabrillo landed at Point Loma along San Diego Bay. The local inhabitants would have been negatively affected by protohistoric transmission of diseases via sea visits and through contact with Native Americans in the Baja California region. Portolá's A.D. 1769 expedition from San Diego to Monterey documented a series of Native American coastal villages in the San Diego area, typically situated along the region's major drainages. The subsequent establishment of the San Juan Capistrano Mission in 1776 and the San Luis Rey de Francia Mission in 1798 further impacted traditional coastal settlement systems. Acculturation, assimilation, and the introduction of Old World diseases greatly disrupted and reduced Native American populations, and by the early 1800s traditional coastal villages were largely abandoned. As a result, we know very little about traditional coastal life, except what can be gleaned from mission records. Nineteenth and twentieth century ethnohistoric reconstructions provide only minimal insight into coastal adaptations – particularly with respect to such issues as cultural complexity, population densities, and regional interaction – and are built from the perspective of remnant inland populations and their occasional seasonal exploitation of a littoral zone dominated and largely controlled by European settlers (ASM 2024).

From north to south, coastal San Diego was occupied by the Juaneño, Luiseño, and Kumeyaay Native American groups. The Juaneño and Luiseño are Uto-Aztecan speakers whose territory ranged from Agua Hedionda Lagoon (or possibly Batiquitos Lagoon) in the south to Aliso Creek in Orange County, to near Santiago Peak in the northeast, and to the Palomar Mountain area in the southeast. They are linguistically and culturally related to the Gabrielino and the Cahuilla. The terms Juaneño and Luiseño are derived from association with the San Juan Capistrano and San Luis Rey missions respectively, along the coast. Some archaeologists recognized Juaneño as a dialect of Luiseño, while others viewed the Juaneño as part of the Luiseño on the basis of cultural and linguistic similarities. Little or nothing is known about the coastal Juaneño-Luiseño, and hence the following ethnohistoric observations are largely based on inland Luiseño (ASM 2024).

During this period, the Luiseño people had a fairly rigid social structure and a moderately high population density. Maximum population estimates at Spanish contact range from 5,000 to 10,000. With a territory extending for almost 4,000 km², maximum population density estimates range from 1.25 to 2.5 persons per km² (3.3 to 6.7 persons per mi²). It has been estimated that the Luiseño included approximately 50 villages of 200 individuals each, or using Portolá expedition observations, that village size was closer to 60. Recent research with mission records suggests that village size varied significantly in the eighteenth century, with larger villages such as Topome along the Santa Margarita River consisting of multiple clans (ASM 2024).

The Luiseño are divided into several autonomous lineages or kin groups based on patrilineal descent groups and a patrilocal residential pattern. Each Luiseño lineage is based around an autonomous village that held collective ownership over a well-defined territory for hunting and gathering, and violations of trespass were punished. Village territories may have ranged from as little as 10 km² near the coast along major drainages such as the San Luis Rey River to as much as 100 km² elsewhere. A variety of shorter-term residential camps (such as for acorn gathering) and specialized localities occurred within each village territory. There are varied estimates for the length of the annual stay at the main village, and it has even been suggested that a bipolar pattern with two permanent base camps, one in a major valley and another in the mountain region (ASM 2024).

Notably, strong differences in social status, ascribed leadership roles, and elaborate ritual paraphernalia existed. Leadership includes hereditary chiefs and council members who have specialized knowledge and authority over specific religious, economic, and warfare issues. Leaders conduct elaborate ceremonies; ritual and ceremonial specialists maintained ceremonial knowledge in

secrecy and passed on the knowledge to only one heir. These leaders and specialists made use of fenced-in ceremonial structures, located in the village center (ASM 2024).

Economic activities take place on the community and the extended household level and varied significantly between coastal and inland areas. Community-wide efforts included fire management for game drives, and systematic use of fire to facilitate grasslands and increase yields of key plants and animals. Such burning was regularly mentioned in early Spanish accounts. Acorns, gathered in upland areas, have been considered the most important food source. Seeds from grasses, manzanita, sage, sunflowers, lemonade berry, chia, and other plants were also used, along with various wild greens and fruits. Deer, antelope, small game, and birds were exploited. Coastal marine animals utilized as food included sea mammals, fish, crustaceans, and mollusks. Near-shore fishing was done from light balsa reed or dugout canoes. Some accounts indicate that coastal communities exploited local shellfish in the winter, and during times of stress the interior Luiseño traveled to the coast to obtain shellfish, fish, and even some land mammals. Most inland groups also had fishing and gathering locations on the coast which they visited annually when the tides were low or when the inland resources were scarce, typically from January through March (ASM 2024).

Rigid gender division of labor did not exist, but women generally collected plant resources and men hunted. Houses were dispersed throughout villages. Lowland village houses were conical structures covered with tule bundles, and other structures included sweathouses, ceremonial enclosures, ramadas, and acorn granaries. Domestic implements included wooden utensils, baskets, ceramic cooking and storage vessels, and milling tools. Hunting implements included bow and arrow, curved throwing sticks, nets, and snares. Nets and hooks made of shell and bone were used for fishing (ASM 2024).

Project Specific Ethnographic Context

Villages were often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Along with being located near water sources, keeping in mind that modern development has drastically changed the presence and frequency of water sources. While no placenames or villages were identified as being directly associated with the project area there are several in the larger vicinity of the project (ASM 2024). Many place names have multiple possible spellings and meanings derived from different sources. Nearby place names include Panakara and Mehel-om-pom-pauvo to the south and multiple habitation areas along the San Luis Rey River watershed to the north including Wiasamai, (a village east of Mission San Luis Rey) Wagaumaj (village site near Guajome), Kwalam (village site along the San Luis Rey River) and Tomkav (village at Monserrate) (ASM 2024).

In addition to placenames there are several habitation areas in the larger vicinity of the project area. SDI-5633 located approximately 2-miles west of the project area was identified as a habitation or specialized area. A data recovery at SDI-5633 placed the occupation of the site circa A.D. 1170 to A.D. 1690. The site also contains evidence of an earlier occupation, likely during the Archaic Period, based on the presence of large milling tools and Coso obsidian. It was identified as a habitation area used primarily for hunting and for projectile point production and milling of plant seeds. W-1556 / SDI-5641 located approximately two miles west of the project area is recorded as a habitation site consisting of an artifact laden midden soil overlooking the San Marcos Valley flood plain. The site contained an extensive artifact deposit with hearths, milling features, and human remains. SDI-11068A/B (known as the Twin Oaks Valley Ranch site), located approximately two miles north of the project area, contained large amount of shell fragments and fish bone, bedrock milling features. It also contains a

high number of ceramics and ceramic types, bow pipes, effigies and a wide variety of milling implements.

Other major habitation areas within the region include SDI-9822 (known as the Deer Springs Site) located approximately four miles north of the project area and included a red pictograph that also contained pecking. SDI-12,209, located approximately three and one-half miles to the south east, contains a habitation area with significant subsurface deposits and a rock art panel, showing this habitation area was an important location along Escondido Creek (ASM 2024).

Tribal Correspondence and Coordination

ASM coordinated with Native American tribes as part of the archaeological study. A summary is provided below. The results of separate government-to-government consultation between the City and tribes are provided in Section 3.12 of this EIR.

On January 25, 2023, ASM requested a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC) for the project area. The SLF consists of a database of known Native American resources. The NAHC replied on March 1, 2023, and the SLF search came back negative. The NAHC provided a list of Native American tribes and individuals/organizations with traditional geographic association that might have knowledge of cultural resources in this area. Due to the long response time from the NAHC, the City advised that a Native American monitor from Rincon should participate in the survey. Shuuluk Linton and Destiny Cocholo, monitors for Rincon, attended the survey.

Outreach letters were mailed March 1, 2023, to all Native American representatives included on the NAHC contact list. These letters attempted to solicit additional information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project area. The following responses have been received to date:

- On March 2, 2023, Ray Teran of the Viejas Band of Kumeyaay Indians responded that the project site has cultural significance to the Kumeyaay Nation and to contact the San Pasqual Band of Mission Indians.
- March 14, 2023, Cami Mojado of the San Luis Rey Band of Mission Indians responded via phone call that the San Luis Rey Band would like formal consultation with the City and would like to be involved in the project. Ms. Castells from ASM informed Ms. Mojado of the survey results and that testing of the resource would be taking place and the San Luis Rey could provide a Native American monitor for the testing. Shelly Padilla attended the testing on March 17, 2023.
- On March 20, 2023, Shuuluk Linton, Tribal Historic Preservation Coordinator of the Rincon Band of Luiseño Indians responded that the Rincon Band has specific concerns that the project may impact resources and recommends conducting an archaeological study and that a Rincon Tribal Monitor attend the survey. The Rincon Band also requested to consult directly with the lead agency.
- On March 21, 2023, Daniel Tsosie of the Campo Band of Mission Indians responded that an archaeologist and Native American monitor should be on site.

- On April 4, 2023, Charlene Elliott, Director Sycuan Cultural Resources Center and Museum responded that the project is within the boundaries of the Kumeyaay Nation's traditional territory and Sycuan would like to engage in consultation with the City.
- On April 26, 2023, Cami Mojado of the San Luis Rey Band of Mission Indians responded by letter requesting further discussion of the project and Native American monitoring.
- On April 28, 2023, Angelina Gutierrez, THPO, San Pasqual Band of Mission Indians responded that they would like to engage in formal government to government consultation under AB-52.

Archaeological (Prehistoric) Resources

An ASM archaeologist conducted an intensive level pedestrian survey of the proposed project area on January 6, 2023. ASM surveyed the entire 8.6-acre project site in transects spaced approximately 15 meters (m) apart wherever possible. Rincon Native American monitors Shuuluk Linton and Destiny Colocho were also present and assisted in the survey. Most of the survey area was covered in dense vegetation which limited movement and obscured the ground surface, so efforts were primarily focused on examining bedrock outcrops for evidence of milling and available visible soils.

The project area is located on a hillside slope and was covered with mature coastal sage scrub habitat. The soils in the upland portions of the property were noted to be shallow with granitic rock outcrops occurring throughout. There was a section of the southern end of the property, which was relatively flat. However, this appears to be the result of extensive grading in the past. An open concrete drain was present along the eastern boundary of the parcel, following slope contours. There appears to have been a graded access road that passes through the property in a roughly south-to-north orientation, however, this roadway was overgrown with dense vegetation. An abandoned transient campsite was noted in the northwestern portion of the project area.

The pedestrian survey identified a small prehistoric site, described below. Site recording included the definition of site boundaries and documentation of features. Detailed sketch maps were made, demonstrating the relationship of the site's location to topographic features and other landmarks. ASM then completed California State DPR 523 site records for submittal to the SCIC and assignment of primary numbers and site trinomials. Recordation efforts included the plotting of the site on a USGS 7.5-minute quad map. Digital photographs were taken to document specific features of the site, as well as the general character of the survey area. These are on file at ASM (ASM 2024).

P-37-040572/CA-SDI-23456

During the survey, a small prehistoric site, comprised of two bedrock milling outcrops was identified. The surrounding vicinity was intensively surveyed, but no associated artifacts were located. The site was located in an area of dense vegetation with extremely limited (<5%) ground surface visibility. The bedrock milling features were recorded as P-37-040572/CA-SDI-23456. Bedrock milling feature 1 measures 3x2 m and contains an 18x9 centimeter (cm) milling slick. The bedrock was nearly flush with the ground surface and covered in lichen and was highly exfoliated due to natural weathering processes. Bedrock milling feature 2 was on a multifaceted 10x10 m granitic bedrock outcrop and the milling slick measured 10x9 cm. The milling slick is located on a 1 m tall component of the outcrop and was in very poor condition due to extensive exfoliation caused by natural weathering. The two slicks were both relatively ephemeral and did not appear to be well developed as a result of extensive use. No associated artifacts or cultural materials were identified at the site (ASM 2024).

Subsurface Testing Methods and Results

Subsurface testing was conducted on March 17, 2023, by ASM Archaeologists and Saving Sacred Sites Luiseño Native American Monitor Shelly Padilla. Due to a lack of ground surface visibility and scarcity of artifacts on the surface a two-phase approach to resource evaluation was implemented to evaluate the significance of P-37-040572/CA-SDI-23456. First, testing included site mapping, surface collection, and excavation of a series of shovel test pits (STPs) to define site boundaries and to establish whether subsurface deposits were present. STPs excavation consisted of 30-cm diameter holes excavated in 20-cm levels. The excavation continued until either two sterile levels were reached, or decomposing granite or bedrock was reached. All soils were dry screened using 1/8th inch mesh screening.

In total, six STPs were excavated within P-37-040572/CA-SDI-23456. As no artifacts were identified on the surface the placement of the STPs were based on the proximity to the milling features, slope, and available ground surface. The STPs were placed adjacent to and between the bedrock milling outcrops to explore the potential for intact subsurface deposits. The six 30-cm diameter STPs were distributed throughout the site, based on an attempt to place units near each milling outcrop while also being heavily limited in placement by dense vegetation and rock outcrops.

The STPs were negative for artifacts or evidence of intact archaeological deposits. As no artifacts were recovered, additional excavation of a 1x1m unit was not required and no laboratory processing, artifact analysis, or curation was needed.

Resource Evaluation

During the survey, P-37-040572/CA-SDI-23456 was identified as a prehistoric archaeological site containing two bedrock milling features containing a single milling slick each. The two slicks were both relatively ephemeral and did not appear to be well developed as a result of extensive use. No associated artifacts or cultural materials were identified at the site. To determine if any subsurface archaeological deposits were present six STPs were excavated in the vicinity of the bedrock milling. All six STPs were negative.

In the assessment of the historical significance of the site in the project area, a number of factors were considered, including:

- the poor condition of the bedrock milling outcrops;
- the lack of artifacts associated with the bedrock milling features;
- the lack of surficial or subsurface cultural deposits associated with the features; and
- the lack of ability to make a temporal assessment of the site's period of occupation.

As a prehistoric site, any potential for eligibility lies in the research potential of the bedrock milling outcrops or in associated archaeological deposits associated with the bedrock milling features. The poor condition of the milling features and total lack of any surficial or subsurface deposits precludes the possibility of the site being considered eligible to the CRHR. The site was not found to have any temporally diagnostic artifacts or features. In addition, the poor condition of the discovered milling slicks prevents additional investigation of the slicks themselves via protein residue analysis, microbotanical study, or other analytical methods. Subsurface testing determined that the site has a complete lack of subsurface component, and no surficial deposits were identified. Therefore, the research potential of P-37-040572/CA-SDI-23456 has been exhausted by the ASM testing program

and it does not have the potential to provide additional information. Therefore, P-37-040572/CA-SDI-23456 is recommended as not eligible for listing in the CRHR under Criterion 4 because it has poor research potential. The site is limited to prehistoric materials and thus is not eligible under Criteria 1-3 of the CRHR. Site P-37-040572/CA-SDI-23456 does not qualify as a historical resource or unique archaeological resource under CEQA (PRC §5024.1, Title 14 CCR, Section 4852).

3.4.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to cultural resources, including state and local guidelines.

Federal/State

Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regards to potentially ancestral human remains associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

The category termed “Traditional Cultural Properties” in discussions of cultural resource management performed under federal auspices is also potentially relevant to prehistoric sites. “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. Examples of properties possessing such significance include the following:

- 1 A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- 2 A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- 3 An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- 4 A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and/or
- 5 A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

State

Native American Historic Cultural Sites

The Native American Historic Cultural Sites law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are

discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to one year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, required all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Health and Safety Code 7050.5

This code establishes that any person who knowingly mutilates, disinters, wantonly disturbs, or willfully removes any human remain in or from any location without authority of the law is guilty of a misdemeanor. It further defines procedures for the discovery and treatment of Native American remains.

Health and Safety Code 8010-8011

This code is intended to provide consistent state policy to ensure that all California Indian human remains and cultural material are treated with dignity and respect. The code extends policy coverage to non-federally recognized tribes and federally recognized groups.

Assembly Bill 2461

The section provides procedures for private land owners to follow upon discovering Native American human remains. Land owners are encouraged to consider culturally appropriate measures if they discover Native American human remains as set forth in California PRC 5097.98.

Local

San Marcos General Plan Conservation and Open Space Element

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of archaeological and historic resources. The following goals and policies apply to the project:

- Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.
- Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.
 - Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.

- Policy COS-11.2: Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.
- Policy COS-11.3: Identify opportunities for adaptive reuse of historic sites and buildings to preserve and maintain their viability.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12, the project is consistent with the applicable General Plan goals and policies pertaining to cultural resources.

San Marcos Archaeological and Historical Resources Consultant Guidelines

The City of San Marcos published guidelines for archaeological and historical resources consultants in January 2023. The guidelines are generally meant to aid third party consultants who prepare archaeological or architectural history inventories, surveys, evaluations, and other technical documents. These guidelines include information pertaining to the minimum qualifications, records searches, tribal outreach, pedestrian surveys, reporting, research design, findings, discussion and evaluations, management conclusions, references, and appendices of inventories, surveys, evaluations, and other technical documents (City of San Marcos 2023). ASM prepared the archaeological resources inventory report in accordance with these guidelines.

3.4.3 Thresholds of Significance

The determination of significance for cultural resources is based on *CEQA Guidelines Appendix G*. Impacts to cultural resources would be significant if the proposed project would:

- **Threshold #1:** Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- **Threshold #2:** Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- **Threshold #3:** Disturb any human remains, including those interred outside of dedicated cemeteries.

3.4.4 Project Impact Analysis

The project site is vacant. Ground disturbing activities can result in impacts to archaeological resources if they are present on the project site. The following analysis discusses the potential for the project to have cultural resources.

Threshold #1: Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

As detailed in Section 15064.5(a) of the CEQA Guidelines, the term "historical resources" shall include the following:

- (1) 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 14 CCR, Section 4850 et seq.)

- (2) 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 a 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.
- (3) 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 a 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 14 CCR, Section 4852) including the following:
 - (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - (B) Is associated with the lives of persons important in our past;
 - (C) 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
 - (D) Has yielded, or may be likely to yield, information important in prehistory or history.
 - (E) 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.

ASM carried out a formal evaluation of significance of site P-37-040572/CA-SDI-23456. Because it was found to not meet the eligibility criteria for the CRHR or NRPP, P-37-040572/CA-SDI-23456 was determined to not be a historical resource under CEQA. Therefore, there would be **no impact** to known historical resources by the proposed project.

Threshold #2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

The project will include the removal of a portion of site P-37-040572/CA-SDI-23456. The eastern feature of the site will be capped and preserved in place. However, this site is recommended not eligible for listing in the CRHR, and therefore it does not qualify as a historical resource or unique archaeological resource under CEQA. No other archaeological resources were identified during the survey of this project (ASM 2024).

Due to the presence of a prehistoric cultural resource within the project area and additional prehistoric and historic resources recorded in very close proximity to the project area, as well as low ground

surface visibility across the project area, there is the potential that vegetation clearing and ground disturbing activities at the project area may reveal previously undiscovered archaeological resources on the project site. In addition, since the project area is near the confluence of an unnamed drainage and San Marcos Creek, it has a high sensitivity for prehistoric archaeological resources. This represents a **potentially significant impact (Impact CR-1)** and mitigation is required.

- **Impact CR-1** Due to grading and ground disturbing activities, the proposed project has the potential to impact unidentified archaeological resources on the project site.

Threshold #3: Disturb any human remains, including those interred outside of dedicated cemeteries.

The archaeological resources field survey conducted for the project did not identify any human remains or find any indications that they would be expected to be found on the project site. However, there are several habitation areas in the larger vicinity of the project area. If human remains are encountered during project construction, there is a **potential for a significant impact (Impact CR-2)**.

- **Impact CR-2** There is a potential for project construction activities to disturb previously unidentified human remains on the project site.

State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. Adherence to State Health and Safety Code Section 7050.5 is mandated and is reiterated as a mitigation measure in Section 3.4.6.

3.4.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to *CEQA Guidelines Section 15130(b)(1)(A)(B)*, an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to cultural resources, the cumulative analysis is based upon a list approach to determine the proposed project’s contributing effect on potential cumulative impacts on cultural resources. All of the cumulative projects identified in Table 2-4 are considered in this cumulative analysis.

Archaeological Resources

While removal of a portion of site P-37-040572, CA-SDI-23456 was determined to be less than significant, it was determined that there could be a potential for unidentified resources to be encountered subsurface during project grading. Other cumulative projects would be required to assess the potential for impacts to archaeological resources and provide mitigation measures or avoidance measures to reduce significant impacts to cultural resources consistent with the requirements of CEQA and the City. Additionally, the lead agency is required to consult with tribes pursuant to the requirements of SB 18 and/or AB 52. The City requires standard conditions of approval related to construction monitoring by an archaeologist to ensure there are no inadvertent impacts to archaeological resources. Cumulative impacts would be **less than significant**.

3.4.6 Mitigation Measures

Mitigation measures MM-CR-1 and MM-CR-2 would reduce potential impacts to cultural resources and human remains to below a level of significance. Additional measures for tribal cultural resources are provided in Section 3.12.

MM-CR-1: Unanticipated Discovery Procedures

In the event of the unanticipated discovery of cultural resources, all ground disturbing activity at that location shall temporarily halt or be diverted. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. A Qualified Archaeologist shall be retained to assess the discovery. If the resource is determined to be associated with Native American culture, it will be considered a tribal cultural resource and subject to MM-TCR-8. Non-Native American resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource and a potentially significant archaeological resource that is associated with Native American culture, then the Qualified Archaeologist, Tribes, Native American monitors, and City shall coordinate on appropriate treatment.

Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist) will be minimally documented in the field. All unearthed archaeological resources will be collected, temporarily stored in a secure location until analysis and documentation are complete. If a determination is made that the archaeological resources are considered potentially significant by the Qualified Archaeologist, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods.

In the event that curation of archaeological resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility within San Diego County and the curation shall be guided by California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections. The City shall provide the Applicant/Owner final curation language and guidance on the project grading plans prior to issuance of the grading permit, if applicable, during project construction. The Applicant/Owner shall be responsible for all repatriation and curation costs and provide to the City written documentation from the curation facility that the curation has been completed.

MM-CR-2: Human Remains

As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment

could occur as prescribed by law. As further defined by State law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the Most Likely Descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in situ (in place) until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the Most Likely Descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

3.4.7 Conclusion

Based upon the analysis presented in Section 3.4.4, the potential exists for impacts to previously unidentified archaeological resources during project grading. These potentially significant impacts to archaeological resources and human remains would be mitigated to below a level of significance through implementation of mitigation measures MM-CR-1 and MM-CR-2. With incorporation of these mitigation measures, cultural resources impacts would be reduced to below a level of significance.

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3.5 Energy

Introduction

This section describes the existing setting of the project site with respect to energy use and conservation, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

Appendix G and Appendix F of the California Environmental Quality Act (CEQA) Guidelines requires that an environmental impact report (EIR) discusses the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy to ensure that energy implications are considered in project-related decision-making processes. As such, this section analyzes the energy impacts of the proposed project. Specifically, this section summarizes the existing conditions in the project area, discusses the regulatory framework, and discloses estimated energy use during the construction and operational phases of the proposed project. This analysis considers the electricity, natural gas, and transportation fuel (petroleum) demand of the proposed project.

The analysis is based on the following report, which is included as **Appendix E** of this document⁶:

- *Energy Usage Letter, Woodward 46 Specific Plan (SP-22-0005, SP22-0006, GPA22-0004 MFSD22-0005, TSM22-0004)*, prepared by LDN Consulting, September 6, 2023. (LDN 2023)

Table 3.5-1 summarizes the project- and cumulative-level energy impacts, by threshold.

Table 3.5-1. Energy Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Threshold #1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Threshold #2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

⁶ Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

3.5.1 Existing Conditions

The environmental setting for the proposed project related to electricity, natural gas, and petroleum, including associated service providers, supply sources, and estimated consumption, is discussed below.

Electricity

California uses more energy than all other states except Texas. However, due to the state's energy efficiency building standards and efficiency and conservation programs, California's energy use per capita is less than in almost all other states (except Hawaii). In 2022, California was the nation's fourth-largest electricity producer and accounted for about 5% of all U.S. utility-scale (1-megawatt and larger) power generation. Renewable resources, including hydropower and small-scale (less than 1-megawatt) customer-sited solar photovoltaic (PV) systems, supplied about half of California's total in-state electricity generation. In 2022, natural gas-fired power plants provided 42% of the state's total net generation. Coal fuels only a small amount of California's in-state net generation, all of it from one industrial cogeneration plant. California imports more electricity than any other state and typically receives between one-fifth and one-third of its electricity supply from outside of the state. In 2022, in-state utility-scale electricity generation equaled about four-fifths of California's electricity sales, and the rest of the state's supply came from out of state. Wildfires in California and surrounding states threaten both imports of electricity and transmission within the state (EIA 2023a). California consumed 251,869,136 gigawatt hours of electricity in 2022 (EIA 2023b).

San Diego Gas & Electric (SDG&E) provides electric and natural gas services to a population of 1.4 million business and residential accounts. SDG&E distributes energy service through 1.49 million electric meters and 905,000 natural gas meters in a 4,100-square-mile service area that includes San Diego County and southern Orange County (SDG&E 2022a). SDG&E is a subsidiary of Sempra Energy and would provide electricity to the proposed project.

The Path to Net Zero: A Decarbonization Roadmap for California (*Roadmap*) examines the implications to the State and SDG&E service area of transitioning to a carbon neutral (net zero emissions) economy by 2045, as mandated in the California Climate Crisis (See Section 3.5.2 Regulatory Setting below). Electricity is expected to play a central role in decarbonization. Clear priorities include the need to expand electrification and supplies of solar and wind power, invest in a diverse set of electric generation resources that will help ensure the electric grid is reliable and lastly, to provide much larger volumes of clean fuels.

Electrification is central to decarbonizing the transportation and building sectors. As such, electricity usage and demand are expected to increase. According to the *Roadmap*, the State of California can expect a 96% projected increase in electric consumption between 2020-2045 and a 60% projected increase in net peak demand for the same period. SDG&E projects approximately a 100% increase in electric consumption for its service area between 2020 and 2045 and an 85% increase in net peak demand. California had 85 gigawatt (GW) total capacity in 2020 and is projected to need 356 GW of capacity by 2045. As described in the California Air Resources Board (CARB) 2022 Scoping Plan for Achieving Carbon Neutrality, the scale of transformation needed over the next decade to avoid the worst impacts of climate change and meet ambitious climate goals is extraordinary. This is why Governor Newsom and the Legislature invested over \$15 billion in climate action through the 2021/2022 California Comeback Plan, and why the 2022–2023 budget marks the beginning of the California Climate Commitment—the governor's multi-year plan to invest \$54 billion in climate action. This plan includes \$2.1 billion for clean energy investments, such as long duration storage, offshore

wind, green hydrogen, and industrial decarbonization (CARB 2022a). California is planning to expand and reinforce its electrical grid through investment and regional cooperation, increase in-state renewable energy as well as renewable energy imports, increase storage, particularly behind the meter PV storage, work toward changing consumer behavior (e.g., charging electric vehicles during the day when solar energy is available) and investing in development and implementation of technology that allow electric vehicles (EVs) to transmit energy back into the grid.

SDG&E believes meeting carbon neutrality will require installing 40 GW of new battery storage as well as 20 GW of dispatchable generation from 100% clean hydrogen generation by 2045. Moreover, in addition to existing natural gas generation, they believe that 4 GW of electricity from natural gas with carbon capture and sequestration will be needed to support reliability as the electric sector decarbonizes. Combined, these flexible resources can provide clean electricity when the sun is not shining and the wind is not blowing and ensure that high electricity demand during the summer months can be reliably met (SDG&E 2022b). SDG&E's 2022 Individual Integrated Resource Plan (IIRP) is designed to meet key statutory requirements related to ensuring system reliability, reducing greenhouse gas (GHG) emissions with the best-fit resources at the lowest possible cost, and satisfying the State's Renewables Portfolio Standard program goals. To that end, SDG&E is anticipating procuring 56 percent of its power from renewable resources for the 2021-2024 RPS Compliance Period, which is well above the State's 38.4-percent requirement.

Additionally, within SDG&E's service area, charging infrastructure will help to enable transportation electrification. SDG&E projects 900,000 EVs will operate in their service area in 2030 and 3,230,000 EVs in 2045. Similarly, 180,000 EV chargers are projected in SDG&E's service area in 2030 and 640,000 EV chargers are projected in 2045 (SDG&E 2022b).

Natural Gas

California is the nation's second-largest natural gas consumer (after Texas). Total natural gas consumption in 2021 totaled 2,101 billion cubic feet. In 2021, about 33% of the natural gas delivered to California consumers went to the state's industrial sector, and about 31% went to the electric power sector, where it fuels more than two-fifths of the state's total electricity generation. The residential sector, where three in five California households use natural gas for home heating, accounted for 22% of natural gas use, and the commercial sector consumed about 12%. The transportation sector used about 1% as compressed natural gas vehicle fuel. California's natural gas output has declined steadily since 1985, and the state now accounts for less than 1% of the nation's total natural gas reserves and production. California's natural gas production is less than one-tenth of the state's total consumption (EIA 2023a).

The California Public Utility Commission (CPUC) regulates natural gas utility rates and services provided by Pacific Gas and Electric Company (PG&E), Southern California Gas Company, SDG&E, Southwest Gas and several smaller natural gas utilities. SDG&E provides natural gas service to the Counties of San Diego and Orange and would provide natural gas to the proposed project. SDG&E is a wholesale customer of SoCalGas and currently receives all its natural gas from the SoCalGas system (CPUC 2021).

Petroleum

California is the nation's second-largest consumer of refined petroleum products, after Texas, and accounts for about 8% of U.S. total consumption. In 2021, California was the nation's largest consumer of jet fuel and the second-largest consumer of motor gasoline, after Texas. The transportation sector

used about 83% of the petroleum consumed in the state. The industrial sector accounted for about 13% of state petroleum use, and the commercial sector consumed about 3%. The residential sector, where about 1 in 27 California households heat with petroleum products, mostly propane, used about 1%. A minimal amount of petroleum is used for electricity generation. Total petroleum consumption was estimated to be 605 million barrels (EIA 2023a).

Technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled (VMT). Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

California requires that motorists use, at a minimum, a specific blend of motor gasoline called CaRFG (California Reformulated Gasoline) to reduce emissions from motor vehicles. California refineries produce cleaner fuels in order to meet state environmental regulations. Refineries in the state often operate at or near maximum capacity because of the high demand for those petroleum products and the lack of interstate pipelines that can deliver those cleaner fuels into the state (EIA 2023a).

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. California is part of the West Coast Green Highway, an extensive network of electric vehicle DC fast charging stations located along Interstate 5, and the state has more than 14,000 public electric vehicle charging stations. As of December 31, 2021, California had more than 563,000 registered all-electric vehicles, the most of any state. California also requires all public transit agencies to gradually transition to 100% zero-emission bus (ZEB) fleets. Beginning in 2029, all transit agency new bus purchases must be ZEBs (EIA 2023a). Further, Executive Order N-79-20 calls for elimination of new internal combustion passenger vehicles by 2035. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own. The primary mechanism for achieving the Zero-Emission-Vehicle target for passenger cars and light trucks is the Advanced Clean Cars II Program discussed below in Section 3.5.2 Regulatory Setting.

As stated above, SDG&E's Decarbonization Roadmap projects 900,000 EVs will operate in their service area in 2030 and 3,230,000 EVs in 2045. Similarly, 180,000 EV chargers are projected in SDG&E's service area in 2030 and 640,000 EV chargers are projected in 2045 (SDG&E 2022b).

Gasoline and other vehicle fuels are commercially provided commodities and would be available to the proposed project through commercial outlets.

Existing Infrastructure

The proposed project is within the SDG&E service area and would connect to the existing SDG&E infrastructure within Woodward Street, within the existing right-of-way.

3.5.2 Regulatory Setting

Federal, state, and local agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, CPUC and California Energy Commission (CEC) are two agencies with authority over different aspects of energy. Relevant federal, state, and local energy-related regulations are summarized below. This information helps to place the impact analysis within its proper regulatory context.

Federal

Federal Energy Policy and Conservation Act (1975)

The Federal Energy Policy and Conservation Act established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act (2007)

The Energy Independence and Security Act of 2007 (EISA) aims to increase energy security, develop renewable energy production and improve vehicle fuel economy. The following are provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum. The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as “RFS2” and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.

- EISA established new categories of renewable fuel, and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green” jobs.

State

The discussion below focuses primarily on those policies, regulations, and laws that directly pertain to energy-related resources. Many policies, regulations, and laws targeted to the reduction of GHG emissions are expected to achieve co-benefits in the form of reduced demand for energy-related resources and enhanced efficiencies in the consumption of energy-related resources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided, and identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, a second Energy Action Plan was adopted by the CEC and CPUC to reflect various policy changes and actions of the prior two years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based in part on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an “update” that examines the state's ongoing actions in the context of global climate change.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (2002) requires the California Energy Commission to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. (Pub. Res. Code § 25301(a)).

The CEC adopts an Integrated Energy Policy Report (IEPR, pronounced eye'-per) every two years and an update every other year. The most current report is the *2023 Integrated Energy Policy Report Update* which covers a broad range of topics, including accelerated connection of clean energy, California energy demand forecast, potential growth of hydrogen in California, updates on key issues including gas system decarbonization, benefits of the clean transportation program and energy efficiency.

California Renewables Portfolio Standards

Senate Bill 1078 (2002)

This bill established the California Renewables Portfolio Standards (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2011), 350 (2015), and 100 (2018)

Senate Bill (SB) 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 set a three-stage compliance period: by December 31, 2013, 20% shall come from renewables; by December 31, 2016, 25% shall come from renewables; and by December 31, 2020, 33% shall come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California by 2045. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Greenhouse Gas Reduction

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, the California Air Resources Board (CARB) prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies and the use of renewable resources and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

SB 375 Sustainable Communities and Climate Protection Act (2008)

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code, Section 65080, SB 375 requires metropolitan planning organizations (San Diego Association of Governments) to include a Sustainable Communities Strategy in its regional transportation plan. The main focus of the Sustainable Communities Strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also a part of a bigger effort to address other development issues within the general vicinity, including transit and VMT, which influence the consumption of petroleum-based fuels.

Assembly Bill 1279, California Climate Crisis Act (September 2022)

This Bill requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels and directs CARB to work with relevant state agencies to achieve these goals.

Senate Bill 1020, 100% Clean Electric Grid (September 2022)

This bill creates clean electricity targets of 90% by 2035 and 95% by 2040 with the intent of advancing the state's trajectory to the existing 100% clean electricity retail sales by 2045 goal.

The 2022 CARB Scoping Plan for Achieving Carbon Neutrality

The 2022 Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon. The plan calls for a need to take an unprecedented transformation and aggressively seek reductions to reduce the need of fossil fuels by moving to zero emission transportation, electrifying the cars, buses, trucks, and trains. The plan relays on external controls and requires partnership and collaboration with the federal government, other U.S. states, and other jurisdictions around the world for California to succeed in achieving its climate targets.

California Title 24 Building Energy Efficiency Standards

The Title 24 Building Energy Efficiency Standards serve to reduce wasteful, uneconomical, and unnecessary uses of energy for the state. They are designed to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. They include requirements in the Energy Code (Title 24, Part 6) and voluntary energy efficiency provisions in CALGreen (Title 24, Part 11). The California Energy Commission is responsible for adopting, implementing, and updating these standards every three years.

Energy Code (Title 24, Part 6) Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Because homes and businesses use nearly 70 percent of California's electricity and are responsible for a quarter of GHG emissions, the CEC was mandated

to periodically update and adopt building standards to increase energy efficiency of buildings and reduce GHGs. Part 6 of Title 24 implemented this mandate so that every three years the CEC updates the Energy Code for new construction and renovations to existing residential and non-residential buildings (CEC 2022).

The 2019 Title 24 standards were approved and adopted by the California Building Standards Commission in December 2018. The standards required that all low-rise residential buildings shall have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output is equal to or greater than the dwelling's annual electrical usage. Notably, net energy metering rules limit residential rooftop solar generation to produce no more electricity than the home is expected to consume on an annual basis. Single-family homes built with the 2019 standards used about 7% less energy due to energy efficiency measures versus those built under the 2016 standards, while new nonresidential buildings used about 30% less energy mainly to lighting upgrades (CEC 2018).

The 2022 Building Energy Efficiency Standards (Energy Code) improves upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 building code went into effect January 1, 2023 and focused on four key areas in new construction: encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality (CEC 2022).

California Green Building Standards Code (Title 24, Part 11).

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards required mandatory reduction in indoor and outdoor water use, diversion of demolition waste, mandatory inspections of energy systems, inclusion of electric vehicle charging stations for designated parking spaces and use of low-pollutant-emitting exterior and interior finish materials.

The current CALGreen standards were last updated in 2022 and went into effect January 1, 2023. The standards focus on battery storage system controls, demand management, heat pump space and water heating, and building electrification. The 2022 CALGreen update eliminates the two-tiered menu of compliance prerequisites and enforces a single tiered menu of provisionary options. Mandatory requirements include many updated EV charging requirements for multi and single family developments.

State Vehicle Standards

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan (State Alternative Fuels Plan) to increase the use of alternative fuels in California. The CEC prepared the plan in partnership with CARB and in consultation with the other state, federal, and local agencies. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

AB 1493 (2002), EO S-1-07 (2007), and EO B-16-12 (2012)

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO₂) emissions, AB 1493 was enacted in 2002. AB 1493 requires CARB to set GHG emission standards for passenger vehicles and Executive Order (EO) S-1-07 sets a declining Low Carbon Fuel Standard to reduce the carbon intensity of California passenger vehicle fuels. EO B-16-12 supports and facilitates the development and distribution of Zero Emissions Vehicles (ZEVs).

Advanced Clean Cars Program (2012 and 2022), EO N-79-20 (2020), and Clean Miles Standard and Incentive Program (2018)

In January 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015 through 2025 that combined standards for smog producing pollutants and greenhouse gases into one program. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide fuels for clean cars.

CARB's latest rule (2022) is known as Advanced Clean Cars II which continues the concept of increasing stringency for fuel-efficiency standards and increasing the number of ZEVs. California enjoys the largest zero-emission vehicle market in the nation with more than 16% of new vehicles sold being zero-emissions or plug-in hybrids. The regulations are two-pronged. First, it amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions (CARB 2023).

EO N-79-20 calls for elimination of new internal combustion passenger vehicles by 2035. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own. The primary mechanism for achieving the ZEV target for passenger cars and light trucks is the Advanced Clean Cars II Program discussed above.

As part of the Executive Order, the Governor's Office of Business and Economic Development (GO-Biz) was tasked with preparing a Zero-Emission Vehicle Market Development Strategy along with the accompanying California State agency ZEV Action Plans.

In addition to the Advanced Clean Cars II, the Clean Miles Standard regulation will also help enable the goal of 100 percent ZEV sales in 2035 by creating demand for ZEVs. This regulation has aggressive

requirements for electric miles that will transition ride-hailing fleets to zero-emission operations starting in 2023 and ramping up through 2030.

AB 2700, Transportation Electrification: Electrical Distribution and Grid Updates (2022)

This law will enable more strategic-grid planning and investment to ensure California has the grid it needs to accommodate widespread transportation electrification when needed to meet the state's carbon neutrality goals. With more-strategic planning and investment, AB 2700 will help ensure the electrification of the transportation sector is cost-effective, facilitates progress towards the state's goals, and maximizes benefits for all utility customers. Supported by a broad coalition of environmental, equity, labor, fleet, utility, and EV charging organizations, AB 2700 directs utilities to conduct strategic grid planning and investment to ensure the grid is proactively prepared to accommodate all the new electric cars and trucks coming over the next decade thanks to state goals and regulations like the Advanced Clean Cars, Advanced Clean Trucks, and Advanced Clean Fleets rules. It requires fleet data already collected by state agencies to be shared with California utilities, so that they can use that data in their existing grid planning processes to better anticipate electricity demand and propose necessary upgrades.

Local

SDG&E Integrated Resource Plan

The Integrated Resource Planning ("IRP") process is the statewide approach to electric resource planning established by SB 350 that is intended to achieve California's GHG emissions reduction goals for the electric sector in a manner that preserves reliability and ensures reasonable cost. According to SDGE's 2022 Individual Integrated Resource Plan (IIRP), SDG&E supports the State's ambitious efforts to reduce GHG emissions and is committed to the State's vision of a clean energy future. In its study, *The Path to Net Zero: A Decarbonization Roadmap for California*, SDG&E lays out an implementable strategy for achieving statewide decarbonization while continuing to prioritize grid reliability, affordability, and equity. SDG&E's IIRP is designed to meet key statutory requirements related to ensuring system reliability, reducing GHG emissions with the best-fit resources at the lowest possible cost, and satisfying the State's Renewables Portfolio Standard program goals. To that end, SDG&E is anticipating procuring 56 percent of its power from renewable resources for the 2021-2024 RPS Compliance Period, which is well above the State's 38.4-percent requirement.

SDG&E's IIRP submits two Conforming Portfolios that achieve targets of 30 and 25 million metric tons (MMT) for the year 2035. SDG&E's Conforming Portfolios demonstrate that it is well positioned to achieve the State's climate and reliability goals under both the 25 MMT and 30 MMT benchmark scenarios. This advantage is due in part to the following:

- SDG&E's early compliance with RPS requirements, with around 56 percent of its energy mix expected from renewable resources in Compliance Period 4 (2021- 2024);
- SDG&E's aggressive adoption of energy storage; and
- The absence of coal resources in SDG&E's portfolio.

While SDG&E's portfolio is primarily made up of solar and natural gas resources, SDG&E's modeling resulted in planned existing and new resources consisting primarily of solar, storage, and wind resources, with small amounts of demand response and firm, zero-emitting resources (e.g., geothermal). The total capacity of these planned existing and new resources in 2035 is 1,546

megawatts (MW). SDG&E is fully compliant with RPS and long-term contracting requirements (SDG&E 2022a).

SDG&E Path to Net Zero

The SDG&E *Roadmap* examines the implications of the transition to net zero emissions for the state and the region that SDG&E serves. It also includes SDG&E's recommendation for California to achieve carbon neutrality and is the first publicly available analysis to use the industry standard for electric reliability and industry modeling software in modeling how to decarbonize California by 2045. Although the state reduced GHG emissions by ~36 MMT from 2009 to 2019, it will need to reduce emissions at 4.5 times the pace of historical reductions going forward to reach Net Zero by 2045. The *Roadmap* aims to advance current research on California's decarbonization pathways. As many other studies have highlighted, electricity is expected to play a central role in decarbonization. Clear priorities include the need to expand electrification and supplies of solar and wind power, invest in a diverse set of electric generation resources that will help ensure the electric grid is reliable and lastly, to provide much larger volumes of clean fuels.

Electrification is central to decarbonizing the transportation and building sectors under the *Roadmap*. It is estimated that electric generation capacity will need to increase to 356 gigawatts (GW) by 2045 in California to meet this increasing demand for clean electricity, approximately four times the capacity that existed in 2020. The *Roadmap* foresees in-state solar and wind generation providing the bulk of this capacity. Wind and solar are excellent resources for providing low-cost clean energy, but to help ensure reliability, the California electric system must also develop more flexible resources, such as energy storage and clean dispatchable generation. This is especially important as the need for clean, reliable electricity increases from transportation and building electrification. SDG&E believes this will require installing 40 GW of new battery storage as well as 20 GW of dispatchable generation from 100% clean hydrogen generation by 2045. Moreover, in addition to existing natural gas generation, they believe that 4 GW of electricity from natural gas with carbon capture and sequestration will be needed to support reliability as the electric sector decarbonizes. Combined, these flexible resources can provide clean electricity when the sun is not shining and the wind is not blowing and ensure that high electricity demand during the summer months can be reliably met (SDG&E 2022b).

City of San Marcos General Plan

The City's General Plan includes various policies related to reducing GHG emissions and the co-benefit of reducing energy consumption. Applicable policies include the following:

Land Use and Community Design Element

- Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.
- Policy LU-2.3: Promote landscaping (e.g., native, drought tolerant plants) that minimizes demands on water supply.
- Policy LU-2.7: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.
- Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.

Conservation and Open Space Element

- Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.
- Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.
- Policy COS-4.8: Encourage and support the generation, transmission, and use of renewable energy.

Environmental Justice

- Policy EJ-1.13: Encourage energy conservation and the use of alternative energy sources within the community.
- Policy EJ-1.14: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.
- Policy EJ-1.15: Encourage and support the generation, transmission, and use of renewable energy.

The project's consistency with applicable General Plan goals and policies is discussed in Table 3.8-12 of Section 3.8, Land Use. As detailed in Section 3.8.4, the project is consistent with the applicable General Plan goals and policies pertaining to energy.

City of San Marcos Climate Action Plan

Consistent with AB 32, the City adopted a Climate Action Plan (CAP) in September 2013 as a long-range plan to reduce GHG emissions and mitigate climate change impacts associated with City government operations and with implementation of the City's General Plan. An updated CAP was adopted on December 8, 2020. The 2020 CAP builds on the efforts and strategies identified in the City's 2013 CAP, and establishes GHG emission targets and identifies achievable, locally based actions to reduce GHG emissions from municipal and community activities.

According to the CAP, energy use in the City includes electricity and natural gas consumption, which accounted for 39 percent of the City's total emissions in 2012. Two strategies would reduce emissions from electricity and natural gas consumption by increasing building energy efficiency and the use of renewable energy sources. Legislative reductions from State energy efficiency and renewable energy programs will contribute to reducing transportation emissions by increasing the amount of renewable energy available statewide and improving energy efficiency requirements for new developments. At the local level, GHG emissions reductions would be achieved by improving energy efficiency of new developments beyond State requirements, both increasing the amount of renewable energy generated locally, and reducing the amount of non-renewable energy consumed locally. The success of these strategies relies on coordination with local utilities, organizations, and agencies, participation from the community, and administration of new or revised local policies and programs.

The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. Strategies and measures related to energy include the following:

- Strategy 4: Increase Building Energy Efficiency Electricity and natural gas consumption in buildings accounts for a majority of GHG emissions from the energy sector. Although legislative reductions related to State actions will help reduce emissions associated with building energy, additional reductions are achievable by increasing building efficiency in the City. This strategy aims to reduce emissions by reducing energy used by residential consumers through increased energy efficiency. This strategy includes one measure that would reduce the City's emissions by approximately 1,280 MTCO₂e in 2030.
 - Measure E-1: Require New Residential Developments to Install Alternatively-Fueled Water Heaters. Starting in 2022, require all new single-family and multi-family residential projects to install non-natural gas water heaters. Non-natural gas water heater options include electric HPWH, instantaneous electric, electric tank solar water heater with HPWH backup, or solar water heater with electric tank backup
- Strategy 5: Increase Renewable and Zero-Carbon Energy: Over a quarter of the City's GHG emissions in 2012 were generated through the consumption of fossil fuels for the purpose of electricity generation (i.e., natural gas-fired or coal power plants). Transitioning from fossil fuels to renewable energy electricity generation will reduce emissions and provide a more sustainable source of electricity. The City would reduce emissions by increasing renewable energy generated locally and participating in a community choice aggregation (CCA) or similar program to increase the amount of grid supplied renewable energy. This strategy includes two measures that would reduce the City's emissions by approximately 35,100 MTCO₂e in 2030. Additional activities that would support this strategy would occur through partnerships with local and regional agencies.
 - Measure E-2: Require Installation of PV systems at New Non-Residential Developments. Starting in 2022, require all new non-residential developments to install PV systems with a minimum of two watts per square foot of gross floor area.
 - Measure E-3: Increase Grid-Supply Renewable and Zero-Carbon Electricity. Join a program to increase grid-supply renewables and zero-carbon electricity to 95 percent by 2030 with a maximum customer opt-out rate of three percent.

As part of the CAP, the City developed a CAP Consistency Review Checklist (CAP Checklist). The purpose of the checklist is to implement the GHG emissions reduction measures from the CAP that apply to new discretionary development. New developments that demonstrate consistency with relevant CAP strategies would not conflict with the City's ability to achieve the identified GHG reduction target through implementation of applicable measures. Projects that emit fewer than 500 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year would not be subject to the measures of the CAP. Per the CAP Checklist, multifamily residential projects of 55 dwelling units or less are considered to emit fewer than 500 MT CO₂e per year. Since the project proposes 46 multifamily units, the CAP measures are not required.

3.5.3 Thresholds of Significance

According to *Appendix G of the State CEQA Guidelines*, the proposed project would have a significant impact related to energy if it would:

- Threshold #1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

- Threshold #2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.4 Project Impact Analysis

Threshold #1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project proposes up to 46 multi-family residential units situated on an 8.57-acre site. Each garage would be wired to accommodate an electric vehicle (EV) charger. The project would meet the latest Title 24 requirements at the time building permits are requested.

The Energy Usage Letter (LDN 2023) prepared for the proposed project includes a quantification of anticipated energy consumption during construction and operation. As explained in more detail below, the Energy Usage Letter concluded that implementation of the proposed project would not result in wasteful, inefficient, or unnecessary impacts related to electricity, natural gas or petroleum during construction or operations and impacts would be less than significant.

Construction

Construction of the proposed project is expected to occur over a 10 to 11-month duration. Grading will consist of approximately 41,989 cubic yards (CY) of cut material and 50,270 CY of fill material. It is possible that the site may balance but to be conservative, the environmental analysis assumes that the export of approximately 8,281 CY of material would be required. Assuming 15 cy per truck, that would equate to 553 trips spread over approximately 23 working days for a total of 24 truck trips per day associated with export.

Electricity

Temporary electric power usage during construction would stem primarily from electronic equipment, including electrically powered hand tools, lighting, computers and heating, ventilation, and air conditioning inside temporary construction trailers. Electricity used for construction activities would be temporary and would not be considered wasteful, inefficient, or unnecessary consumption of energy resources. Impacts related to electricity consumption during project construction are determined to be **less than significant**.

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Any minor amounts of natural gas that may be consumed as a result of construction would be temporary and negligible and would not have an adverse effect on the environment; therefore, impacts would be **less than significant**.

Petroleum

The majority of the energy used during construction would be from petroleum. Energy usage for construction equipment is best estimated using total horsepower hours (HP-h) and an assumed thermal efficiency of 30%. Based on the equipment, quantity, work time, and horsepower, the project would require a total of 712,343 HP-h as shown in **Table 3.5-2**. Based on this, the project would consume roughly 43,172 gallons of diesel for construction. Proper maintenance of all construction equipment per manufacturer recommendations is included as a project design feature.

Construction energy from workers, vendors and haulage are based on the estimated VMT for the total construction duration which is 141,769 miles for the proposed project. In California, the average fuel economy for on-road vehicles is 24.1 miles per gallon or 0.0415 gallon per mile. Based on this, the vehicular trips would consume roughly 5,883 gallons during construction (LDN 2023).

In total, construction of the project is estimated to consume a total of 49,055 gallons of petroleum from off-road equipment and worker vehicle and vendor truck trips during the construction phase. Within the County, the estimated petroleum use in 2024 would be 1.5 billion gallons per year (CARB 2022b). On-road vehicles are regulated by state and federal regulations and vehicular fleet efficiencies are improving each year. Additionally, all construction equipment shall be maintained as needed per manufacturer recommendations. The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during project construction would be temporary and minimal and would not be wasteful or inefficient, impacts related to energy use during construction would be **less than significant**.

Table 3.5-2 Proposed Construction Phase and Duration Equipment

Equipment Identification	Duration (Days)	Hours per Day	Horsepower (HP)	Load Factor	Quantity	Horsepower Hours (HP-h)
Site Preparation	10					
Rubber Tired Dozers		8	367	0.4	3	35,232
Tractors/ Loaders/ Backhoes		8	84	0.37	4	9,945.6
Grading	30					
Excavators		8	36	0.38	1	3,283.20
Crushing Processing Equipment		8	310	0.30	1	22,320.00
Graders		8	148	0.41	1	14,563.20
Rubber Tired Dozers		8	367	0.4	3	105,696.00
Tractors/ Loaders/ Backhoes		8	84	0.37	3	22,377.60
Building Construction	230					
Cranes		7	367	0.29	1	171,352.30
Forklifts		8	82	0.2	3	90,528.00

Equipment Identification	Duration (Days)	Hours per Day	Horsepower (HP)	Load Factor	Quantity	Horsepower Hours (HP-h)
Generator Sets		8	14	0.74	1	19,062.40
Tractors/ Loaders/ Backhoes		7	84	0.37	3	150,116.40
Welders		8	46	0.45	1	38,088.00
Paving	20					
Pavers		8	81	0.42	2	10,886.40
Paving Equipment		8	89	0.36	2	10,252.80
Rollers		8	36	0.38	2	4,377.60
Architectural Coating	40					
Air Compressors		6	37	0.48	1	4,262.40
Total Horsepower Hours						712,343.90
Total Diesel Fuel (Gal) @ 16.5 hp-h/gal						43,172.36

Source: LDN 2023.

Notes: The equipment list is based upon equipment inventory and estimates within CalEEMod 2020.4.0

Operations

Electricity

The operation of the project would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage.

Based on the air quality modeling, the project would on average consume 155,980 kilowatt hours (kWh) of electricity each year. California consumed 251,869,136 gigawatt hours of electricity in 2022 (EIA 2023b and consumption is expected to increase as a result of electrification of the building and transportation sectors needed to meet ambitious climate goals. To meet these goals, the State has created a multi-year plan to invest \$54 billion in climate action including clean/renewable energy investments, expansion and reinforcement of the energy grid and increasing energy storage (CARB 2022a). Reductions from Title 24 of the California Building Code (2019) were accounted for in the calculations and would improve the efficiency of the project in terms of energy consumption. The 2022 Title 24 standards have not yet been included into CalEEMod 2020.4.0 but would essentially further reduce energy consumption.

In summary, although electricity consumption would increase at the project site due to project implementation, the project would be required to comply with Title 24 by implementing energy-efficiency measures. Furthermore, the project would be subject to the Title 24 building code that is adopted at the time building permits are obtained and thus may be subject to a more stringent energy standard than what was assumed herein. For these reasons, electricity consumption of the project would not be considered inefficient, wasteful, or unnecessary, and impacts would be **less than significant**.

Natural Gas

Based on the air quality modeling, the project would on average consume 325,608 thousand British thermal units (kBtu) of natural gas per year. As previously discussed, the project would be subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Prior to building permit application, the applicant would ensure that project plans would meet Title 24 requirements applicable at that time, as required by state regulations, through their plan review process.

In summary, although natural gas usage would increase due to project implementation, project design features would be implemented, and usage would be decreased through green building standards. For these reasons, the natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be **less than significant**.

Petroleum

Vehicle travel to and from the project site would be the largest contributor to petroleum use. At full buildout, the project would generate 368 average daily trips (ADT). Based on CalEEMod outputs, the estimated project trips would account for 887,661 miles traveled annually. As noted above, the average fuel economy for on-road vehicles is 24.1 miles per gallon or 0.0415 gallon per mile. Based on this, vehicular trips would consume roughly 36,838 gallons annually during operations. Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used by residents is expected to increase. As RPS increases and as electric vehicle operations become more standardized, energy consumption and efficiency will decrease. Additionally, each garage would be wired to accommodate EV chargers. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time.

In summary, although the project would increase petroleum use during operation, the use would be a small fraction of the statewide use (605 million barrels) and due to efficiency increases, would diminish over time. Given these considerations, petroleum consumption associated with the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be **less than significant**.

Threshold #2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction

The majority of the energy used during construction would be from petroleum. On-road vehicles are regulated by state and federal regulations and vehicular fleet efficiencies are improving each year. Additionally, all construction equipment shall be maintained as needed per manufacturer recommendations. The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Therefore, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Operation

Section 3.5.2 includes a description of all the federal, state, and local policies and programs that the project would be required to comply with. The proposed project would follow applicable energy standards and regulations during the construction phases. The proposed project would be built and

operated in accordance with all existing, applicable building regulations at the time of construction, including Title 24 Building Standards, Building Energy Efficiency Standards (Energy Code), and California Green Building Standards. Additionally, each garage would be wired to accommodate EV chargers, which will help meet state goals toward carbon neutrality and elimination of new internal combustion passenger vehicles. For the reasons stated, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

3.5.5 Cumulative Impact Analysis

Potential cumulative impacts on energy would result if the proposed project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation. The cumulative projects within the areas serviced by the energy service providers would be applicable to this analysis; this includes existing aging structures that are energy inefficient. Projects that include development of large buildings or other structures that would have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use.

As described previously, the proposed project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary use of energy due to various design features and adherence to applicable requirements. Similar to the proposed project, the cumulative projects would be subject to CALGreen, which provides energy efficiency standards for commercial and residential buildings. CALGreen would implement increasingly stringent energy efficiency standards that would require the proposed project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy. Future development would also be required to meet even more stringent requirements, including the objectives set in the AB 32 Scoping Plan. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Advanced Clean Cars Program and Clean Miles Standard would serve to reduce the transportation fuel demand of cumulative projects. In consideration of cumulative energy use, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Thus, the proposed project would not contribute to a cumulative impact to the wasteful or inefficient use of energy. As such, the proposed project would not result in a cumulatively considerable contribution to a potential cumulative impact. **Impacts are less than significant.**

3.5.6 Mitigation Measures

Impacts would be less than significant, and no mitigation measures are required.

3.5.7 Conclusion

The Energy Usage Letter prepared by LDN (2023) included a quantitative analysis of energy use during construction and operation. The analysis demonstrated that construction energy consumption (primarily petroleum) would be temporary and minimal. The proposed project would comply with regulatory requirements and building standards as well as ensuring that all construction equipment is

maintained per manufacturer's specifications. As such, the proposed project would not result in the wasteful or inefficient use of energy, and impacts would be **less than significant**.

The analysis concluded that while operations of the proposed project would consume more energy at the project site under existing conditions, the project would be required to comply with Title 24 by implementing energy efficiency measures. For these reasons, the project's energy consumption (electricity, natural gas, and petroleum) would not be considered inefficient, wasteful, or unnecessary, and impacts would be **less than significant**.

Additionally, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing energy consumption, including the City's General Plan policies. As a result, impacts would be **less than significant**.

3.6 Geology and Soils

Introduction

This section analyzes the potential for impacts related to geology and soils for the proposed project, including seismic activity, liquefaction, landslides, loss of topsoil, soil erosion, soil stability and soil expansion.

The following report has been prepared to help analyze the geological and geotechnical impacts of the proposed project and is included in its entirety in **Appendix G** of the Draft Environmental Impact Report (EIR):

- *Preliminary Geotechnical Evaluation – Proposed Residential Development, APN 220-210-49-00, Northeast of Woodward & Mission, San Marcos, California.* Prepared by GeoTek. Dated May 16, 2019.

In the Initial Study checklist prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact associated with the ability of soils to support the use of septic or alternative wastewater systems as no septic or alternative wastewater systems are included as part of the project. Since the proposed project would be served by Vallecitos Water District for sewer service, no septic or alternative wastewater systems are proposed. Section 5.4, Environmental Effects Found Not to be Significant – Geology and Soils, of this EIR provides additional information on these topics.

A summary of the project- and cumulative-level geology and soils analysis, by threshold, is provided in **Table 3.6-1**.

Table 3.6-1. Geology and Soils Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 - 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#4 - Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#5 - Result in substantial soil erosion or the loss of topsoil?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#6 - 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#7 - Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#8 - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.6.1 Existing Conditions

This section details the existing conditions on the project site including topography, soils, groundwater, and the project site's location to major faults.

Site Conditions

The project site is located northeast of Woodward Street and E. Mission Road in San Marcos. The site is generally bounded to the west by Woodward Street, to the north by a natural slope, to the east by residential development, and to the south by a natural slope descending to E. Mission Road and a multi-family residential development. The site is located in a hillside setting with topography generally ascending from the north, west, and south site boundaries to the eastern boundary of the site. Site surface conditions generally consist of dense natural vegetation and outcrops of boulders. The site area appears vacant, with a local area which appears to have been cut to a level pad. Access is achieved via an unpaved road off Woodward Street and wraps around the west side of the slope to a localized level pad. Fill areas appear to be attributed to the access road and level pad. Total relief across the site is on the order of 100± feet, with surface drainage directed towards the southwest. Topographically, elevation ranges from 754 feet above mean sea level (amsl) in the eastern portion of the project site down to 615 feet amsl in the southwestern portion of the project site. Steep natural gradients exist in the central, northeastern, and northwestern portions of the property. These slope areas are locally as steep as 1:1 (horizontal to vertical) in gradient and expose Monzogranite (granitic)

bedrock materials. Relatively small earthen fill slope areas (unmapped) were also noted along the access road and edges of the level pad (Geotek 2019).

Soils

Regionally, the project site is located in the Peninsular Ranges geomorphic province. The Peninsular Ranges province is one of the largest geomorphic units in western North America. The Peninsular Ranges extend roughly 975 miles from the north and northeasterly adjacent the Transverse Ranges geomorphic province to the tip of Baja California. This province varies in width from about 30 to 100 miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province. The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks (Geotek 2019).

Based on field observations and review of published geologic maps, the project site area is locally underlain by sporadic undocumented fill materials, colluvium, and Cretaceous age crystalline bedrock. The following is a brief description of the subsurface materials encountered (Geotek 2019).

Undocumented Fill

Some undocumented fill soils were locally observed in the vicinity of the level pad in the southern vicinity of the site and along the unpaved access road that wraps around the western side of the site. As observed, the undocumented fill generally consisted of silty sand with some cobbles and small boulders. Other areas of undocumented fill (unmapped) are also likely present on the site. Undocumented fill soils are not considered suitable for support of structural site improvements but may be re-used as engineered fill if properly placed (Geotek 2019).

Colluvium (Not Mapped)

Colluvial soils are anticipated to be present in drainage swales or in localized areas on the site in relatively lower gradient slopes. Colluvial materials were not directly observed, however are anticipated to generally consist of clayey sands that are organic in nature. In general, the colluvium is likely thinner (i.e., bedrock is shallower) where slope gradients are steeper and in steep areas, might not be present at all (Geotek 2019).

Bedrock

The most recent regional geologic map showing the overall site geology shows Mesozoic-aged meta-sedimentary bedrock at the surface across the site, however during Geotek's site evaluation, Cretaceous age plutonic bedrock tonalite-monzogranite (granite) was observed across the property, with outcrops and partially exposed core stones of bedrock materials. In the exploratory trenches, weathered to less weathered tonalite bedrock materials were encountered and observed to excavate primarily as red brown silty sand with gravel, cobble, and small boulder size fragments. Granitic bedrock materials were also observed on the adjacent surrounding properties, most notably to the east, north and south (Geotek 2019).

Groundwater

Groundwater is not anticipated to be within 50 feet of the ground surface at the project site and is not anticipated to be a factor in site development. Localized perched groundwater could be present but is also not anticipated to be a factor in site development (Geotek 2019).

Seismicity

The geologic structure of the entire southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The project site is in a seismically active region. No active or potentially active fault is known to exist at this site nor is the site situated within an Alquist-Priolo Earthquake Fault Zone or a Special Studies Zone. No faults were identified on geologic maps for the immediate study area (Geotek 2019).

Seismic hazards may be primary, such as surface rupture and/or ground shaking, or secondary, such as liquefaction or dynamic settlement.

Surface Fault Rupture

Surface fault rupture is a break in the ground surface during, or as a consequence of, seismic activity. Fault rupture occurs most often along pre-existing fault traces. As discussed above, no active or potentially active fault is known to exist at this site nor is the site situated within an Alquist-Priolo Earthquake Fault Zone or a Special Studies Zone. No faults are identified for the immediate study area. Accordingly, the potential for fault surface rupture on the project site is low.

Liquefaction/ Seismic Settlement

Liquefaction describes a phenomenon in which cyclic stresses, produced by earthquake induced ground motion, create excess pore pressures in relatively cohesionless soils. These soils may thereby acquire a high degree of mobility, which can lead to lateral movement, sliding, consolidation and settlement of loose sediments, sand boils and other damaging deformations. This phenomenon occurs only below the water table, but, after liquefaction has developed, the effects can propagate upward into overlying non-saturated soil as excess pore water dissipates.

The factors known to influence liquefaction potential include soil type and grain size, relative density, groundwater level, confining pressures, and both intensity and duration of ground shaking. In general, materials that are susceptible to liquefaction are loose, saturated granular soils having low fines content under low confining pressures.

The liquefaction potential and seismic settlement potential on this site is considered to be negligible, due to shallow bedrock and absence of a shallow groundwater table (Geotek 2019). The project site is identified as having Zero Susceptibility for liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (City of San Marcos 2012).

Other Seismic Hazards

Evidence of ancient landslides or slope instabilities at the site was not observed during the investigation. Thus, the potential for landslides is considered negligible. Rockfall potential should be further assessed when site development plans become available and during grading construction. The potential for secondary seismic hazards such as seiche and tsunami is considered to be remote due to site elevation and distance from an open body of water (Geotek 2019).

Paleontological Resources

The project site lies within the Peninsular Ranges Geomorphic Province of southern California. This province consists of a series of ranges separated by northwest trending valleys; subparallel to branches of the San Andreas Fault. The Peninsular Ranges geomorphic province is one of the largest

geomorphic units in western North America, extends from the Transverse Ranges geomorphic province and the Los Angeles Basin, south to Baja California. It is bound on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province. Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Major fault zones and subordinate fault zones found in the Peninsular Ranges Province typically trend in a northwest-southeast direction.

Within the Peninsular Ranges Geomorphic Province, the project site lies within the Peninsular Ranges Region. This region is primarily underlain by plutonic igneous rocks that formed from the cooling of molten magmas deep within the earth's crust. These magmas were generated during subduction of an oceanic crustal plate that was converging on the North American Plate between 120 and 90 million years ago. Over this long period of time, extensive masses of plutonic rocks accumulated within the crust. Intense heat associated with these plutonic intrusions metamorphosed the ancient sedimentary rocks that were already there. These metasediments are now preserved in the Peninsular Ranges Region as marbles, slates, schist, quartzites, and gneiss. Younger undeformed sedimentary rocks occur in various areas of the Peninsular Ranges Region. According to the *County of San Diego Guidelines for Determining Significance of Paleontological Resources*, known fossil occurrences in the Peninsular Range are extremely rare though some areas may have a high to moderate potential to contain paleontological resources (County of San Diego 2009).

The Peninsular Ranges Region contains paleontological resources in Quaternary alluvial and alluvial fan deposits in many of the mountain valleys. Geologic formations that are composed either of volcaniclastic (derived from volcanic sources) or metasedimentary rocks, are considered to have marginal resource potential. No resource potential is assigned to geologic formations that are composed entirely of volcanic or plutonic igneous rock, such as basalt or granite, and therefore do not have any potential for producing fossil remains (County of San Diego 2009).

According to the Preliminary Geotechnical Evaluation prepared for the project (Geotek 2019), the geologic conditions underlying the site consist of undocumented artificial soils and colluvium (not mapped). The most recent geologic map showing overall site geology (Kennedy 2007 as cited in Geotek 2019) shows Mesozoic-aged meta-sedimentary bedrock at the surface across the site. However, based on Geotek's site evaluation, Cretaceous age plutonic bedrock granite was observed across the property, with outcrops and partially exposed core stones of bedrock materials.

Given the project site supports plutonic bedrock granite and colluvium, it would not be characterized as having a high or moderate potential for paleontological resources.

3.6.2 Regulatory Setting

This section describes the federal, state, and local regulations related to geology and soils.

Federal

Federal Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 provides a set of mitigation plan requirements that emphasize State and local jurisdictions to coordinate disaster mitigation planning and implementation. States are encouraged to complete a "Standard" or an "Enhanced" Natural Mitigation Plan. "Enhanced" plans demonstrate increased coordination of mitigation activities at the State level, and if completed and approved, will increase the amount of funding through the Hazard Mitigation Grant Program. California's updated State Hazard Mitigation Plan was adopted and approved by the Federal

Emergency Management Agency (FEMA) Region IX in 2007. The City of San Marcos is one of the communities covered by the 2023 County of San Diego Multi-Jurisdictional Hazard Mitigation Plan, which is a countywide plan that identifies risks posed by natural and manmade disasters.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

USGS Landslide Hazard Identification Program

The United States Geological Survey (USGS), in fulfillment of the requirements of Public Law 106-113, created the National Landslide Hazards Program to reduce long-term losses from landslide hazards by improving understanding of the causes of ground failure and suggesting mitigation strategies. FEMA is the agency responsible for the long-term management of natural hazards.

International Building Code

The International Building Code (IBC) is a model building code developed by the International Code Council that provides the basis for the CBC. The purpose of the IBC is to provide minimum standards for building construction to ensure public safety, health, and welfare. Prior to the creation of the IBC, several different building codes were used; however, by the year 2000, the IBC had replaced these previous codes and is updated every three years. The 2021 IBC code is currently in effect.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act is the State law that focuses on hazards from earthquake fault zones. The purpose of this law is to mitigate the hazard of surface fault rupture by regulating structures designated for human occupancy near active faults. As required by the act, the California Geological Survey has delineated Earthquake Fault Zones along known active faults in California.

California Geologic Survey

The California Geologic Survey provides guidance with regard to seismic hazards. The California Geologic Survey's Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (2008), provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigation.

California Surface Mining and Reclamation Act

Enacted to promote conservation and protection of significant mineral deposits, the California Surface Mining and Reclamation Act requires that all cities address in their General Plans the significant

aggregate resources classified by the State Geologist and designated by the State Mining and Geology Board. The law also ensures that significant aggregate resources are recognized and considered before land use decisions are made that may compromise the availability of these resources.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was enacted in 1997 to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to map areas subject to seismic hazards. A geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design before development permits will be granted. Additionally, the Act requires a Standardized Natural Hazards Disclosure Statement form to be completed by real estate sellers if a property is within one of the designated natural hazards areas.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act (effective June 1, 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.” SHMA specifies two ways in which this disclosure can be made:

- The Local Option Real Estate Transfer Disclosure Statement as provided in Section 1102.6a of the Civil Code; or
- The Natural Hazard Disclosure Statement as provided in Section 1103.2 of the Civil Code.

The Local Option Real Estate Disclosure Statement can be substituted for the Natural Hazards Disclosure Statement if it contains substantially the same information and substantially the same warning as the Natural Hazards Disclosure Statement. Both the Alquist-Priolo Act and the SHMA require that real estate agents, or sellers of real estate acting without an agent, disclose to prospective buyers that the property is located in an Alquist-Priolo Earthquake Fault Zone or Seismic Hazard Mapping Zone.

California Uniform Building Code

The California Code of Regulations (CCR), also known as Title 24, California Building Standards Codes contain the laws regarding the construction of buildings. Title 24, Part 2 of the California Uniform Building Code (UBC) specifies standards for geologic and seismic hazards, other than surface faulting. Chapter 23 of the California UBC addresses seismic safety, and includes regulations for earthquake-resistant design and construction. The 2022 Triennial Edition of the Title 24, California Building Standards Code went into effect January 1, 2023.

Local

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

To comply with the Disaster Mitigation Act of 2000, the County of San Diego prepared the Multi-Jurisdictional Hazard Mitigation Plan in 2010. The plan serves as both a county-wide plan and a plan for local jurisdictions that identifies risks posed by natural and human-made disasters before a hazard event occurs. This plan was last revised in 2023 to reflect changes to both the hazards threatening San Diego County, as well as the programs in place to minimize or eliminate those hazards. The plan includes overall goals and objectives shared by many jurisdictions, as well as specific goals, objectives,

and mitigation action items for each of the participating jurisdictions, including the City of San Marcos, developed to help minimize the effects of the specified hazards that potentially affect their jurisdiction.

San Marcos General Plan Safety Element

The Safety Element of the San Marcos General Plan contains several policies pertaining to natural geologic hazards. The following goal and policies apply to the project:

- Goal S-1: Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.
 - Policy S-1.1: Reduce the risk of impacts from geologic and seismic hazards by applying current and proper land use planning, development engineering, building construction, and retrofitting requirements.
 - Policy S-1.2: Investigate specific groundwater levels and geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture, liquefaction, or other geologic hazards are suspected.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use. As detailed in Table 3.8-12, the project is consistent with the applicable goals and policies.

3.6.3 Thresholds of Significance

As defined in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, project impacts to geological resources are considered significant if the project would:

- Threshold #1: 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;
- Threshold #2: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking;
- Threshold #3: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction;
- Threshold #4: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;
- Threshold #5: Result in substantial soil erosion or the loss of topsoil;
- Threshold #6: 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;
- Threshold #7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;
- Threshold #8: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

As noted above, it was determined that there would be no impact associated with the ability of soils to support the use of septic or alternative wastewater systems. Section 5.4, Environmental Effects Found

Not to Be Significant – Geology and Soils, provides additional information on these topics. The Initial Study is included in Appendix B.1.

3.6.4 Project Impact Analysis

This section provides a project-level impact analysis for the eight thresholds related to geology and soils. The proposed project would be graded to create building pads for future multi-family residential uses, and associated infrastructure. Grading for the project would consist of approximately 41,989 cubic yards (CY) of cut material and 50,270 CY of fill material for a difference of 8,281 CY. If suitable, the excess material would be used as backfill and the site would balance. If it is not suitable, the fill would be exported from the site. The project design incorporates retaining walls to manage the topography of the site and create areas for the access driveway and building pads. The proposed retaining walls include slump block, geogrid, and soil nail styles, depending on the location within the project. There is existing netting along the Woodward Street frontage to minimize the potential for rock and debris fall onto the roadway. As noted on the proposed grading plans for the project, a portion of this netting would be removed to accommodate the project grading. The netting would be re-anchored to the new top of slope or as recommended by the soils engineer during project construction.

The import and export of earth material is guided by Section 17.32.080 of the City's Municipal Code and prior to any import of soils, a haul route would be submitted for review and approval by the City Engineer. Additionally, grading and other earth moving activities are restricted to the hours of 7:00 AM and 4:30 PM, Monday through Friday, per Section 17.32.180 of the City's Municipal Code.

The project would implement all recommendations from the preliminary geotechnical investigation (Geotek 2019). These recommendations include general provisions related to the site as well as specific recommendations related to foundation design, concrete design, and corrosion. The detailed recommendations are included in Chapter 5 of the geotechnical report, which is included as Appendix G of this document.

Threshold #1: 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?

The project site is located within a seismically active region, as is all of southern California; however, the project site is not located on or adjacent to any known active faults. According to the California Earthquake Hazard Zone Application, the City of San Marcos is not identified as a jurisdiction affected by Alquist-Priolo Earthquake Fault Zones (California Department of Conservation 2023). Therefore, the site is not located within a currently established Alquist-Priolo Earthquake Fault Zone.

Project structures would be designed in accordance with the California Building Code (CBC) (2022 or most current version at time of building) for resistance to seismic shaking. The project would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of the State of California Occupational Safety and Health Administration (Cal/OSHA).

As stated above, the project would implement all recommendations from the preliminary geotechnical investigation (Geotek 2019). These recommendations include general provisions related to the site as well as specific recommendations related to foundation design, concrete design, and corrosion.

With adherence to all regulations and recommendations, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. Impacts would be **less than significant**.

Threshold #2: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The proposed project is located in tectonically-active southern California. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, and the intensity and the magnitude of the seismic event. Per the geotechnical study, the site is not located within a currently established Alquist-Priolo Earthquake Fault Zone.

As described in Threshold #1, the project would be designed in accordance with the latest CBC, current design specification of the Structural Engineers Association of California, other applicable regulations, all applicable requirements of Cal/OSHA, and recommendations from the preliminary geotechnical investigation (Geotek 2019). With adherence to all regulations and recommendations, impacts related to seismic ground shaking would be **less than significant**.

Threshold #3: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Seismic-related Ground Failure

The geotechnical study indicated that there are no active faults mapped on the project site and the site is not located within a mapped Alquist-Priolo Earthquake Fault Zone. Accordingly, the potential for fault surface rupture on the project site is low.

Liquefaction

Liquefaction occurs when loose, saturated, generally fine sands and silts are subjected to strong ground shaking. The soils lose shear strength and become liquid; potentially resulting in large total and differential ground surface settlements as well as possible lateral spreading during an earthquake. Seismically induced settlement can occur in response to liquefaction of saturated loose granular soils, as well as the reorientation of soil particles during strong shaking of loose, unsaturated sands.

The project site is identified as having Zero Susceptibility for liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (City of San Marcos 2012). Per the geotechnical study, the liquefaction potential and seismic settlement potential on the project site is considered to be negligible, due to shallow bedrock and absence of a shallow groundwater table (Geotek 2019). Therefore, the project would not result in seismic-related ground failure, including liquefaction. Impacts would be **less than significant**.

Threshold #4: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Per the geotechnical report, evidence of ancient landslides or slope instabilities at the project site was not observed during the investigation. Thus, the potential for landslides is considered negligible. Rockfall potential would be further assessed during grading and construction. Further, the project site is identified as having Zero Susceptibility for soil slip, surficial landslides, or liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (City of San Marcos 2012). Therefore, the project

would not directly or indirectly cause potentially substantial adverse effects, including the risk of loss, injury or death involving landslides. Impacts would be **less than significant**.

Threshold #5: Result in substantial soil erosion or the loss of topsoil?

Proposed site improvements require grading and possible soil export of approximately 8,281 cy of material. The project would be under the State Water Resources Control Board (SWRCB) General Construction Permit, which prohibits sediment or pollutant release from the project site and requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of best management practices (BMPs) that would incorporate erosion and sediment control measures during and after grading operations to stabilize these areas. Therefore, the proposed project would incorporate BMPs and recommendations that would minimize erosion and loss of topsoil. Additionally, the project's proposed landscape plan includes a mix of trees, shrubs, and groundcover which would further minimize soil erosion and top soil loss. The landscape plan and planting palette is included in **Appendix A.3**. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil. Impacts would be **less than significant**.

Threshold #6: 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?

Based upon the geotechnical report prepared for the project (Geotek 2019), evidence of ancient landslides or slope instabilities at this site was not observed during the geotechnical investigation. Thus, the potential for landslides is considered negligible. Rockfall potential would be further assessed during grading. Further, the project site is identified as having Zero Susceptibility for soil slip, surficial landslides, or liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (City of San Marcos 2012).

Site preparation and fill material replacement would be completed consistent with the recommendations in the geotechnical investigation (Geotek 2019). Grading would be accomplished under the observation and testing of the project geotechnical engineer and engineering geologist or their authorized representative in accordance with the recommendations and earthwork specifications of the geotechnical investigation and the current grading ordinance of the City of San Marcos.

In summary, the proposed project would incorporate techniques and recommendations that would minimize the potential for unstable conditions that could result in on- or off-site, landslide, lateral spread, subsidence, liquefaction, or collapse. Impacts would be **less than significant**.

Threshold #7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

According to the geotechnical investigation, the surficial soils consist of undocumented artificial fill, colluvium, and Cretaceous age plutonic bedrock. Soil near subgrade would be classified as "very low" expansive. With adherence to the geotechnical report recommendations, which include removal and compaction during grading, impacts related to expansive soils would be **less than significant**.

Threshold #8: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The proposed project site lies within the Peninsular Ranges Geomorphic Province of southern California. According to the Preliminary Geotechnical Evaluation prepared for the project (Geotek

2019), the geologic conditions underlying the site consist of undocumented artificial soils and colluvium (not mapped). The most recent geologic map showing overall site geology (Kennedy 2007 as cited in Geotek 2019) shows Mesozoic-aged meta-sedimentary bedrock at the surface across the site. However, based on Geotek's site evaluation, Cretaceous age plutonic bedrock granite was observed across the property, with outcrops and partially exposed core stones of bedrock materials.

According to the *San Diego County Guidelines for Determining Significance of Paleontological Resources*, no resource potential is assigned to geologic formations that are composed entirely of volcanic or plutonic igneous rock, such as basalt or granite, and therefore do not have any potential for producing fossil remains. Given the project site supports plutonic bedrock granite and colluvium, it would not be characterized as having a high or moderate potential for paleontological resources. Therefore, it is very unlikely that paleontological resources would be disturbed during grading activities for the project, and impacts would be **less than significant**.

3.6.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to *CEQA Guidelines Section 15130(b)(1)(A)(B)*, an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to geology and soils, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to geology and soils. All of the cumulative projects identified in Table 2-4 are considered in this cumulative analysis.

Due to the localized nature of geology and soils, cumulative projects would address potential impacts to geology and soils on a project-by-project basis, as potential geologic hazards and soil composition varies by site. Each cumulative project would be required to assess individual and site-specific geologic conditions, which would inform construction and development of each site. All cumulative development would be subject to similar requirements to those imposed and implemented for the proposed project and would be required to adhere to applicable regulations, standards, and procedures.

Further, as discussed in Section 3.6.4, the project site has very low potential to yield paleontological resources. Thus, impacts to paleontological resources from implementation of the project would be less than significant. It is expected that cultural resources studies would be prepared for all cumulative projects to assess potential paleontological impacts. For the cumulative projects that are within sensitive areas for paleontological resources, the expectation is that mitigation measures would be included to require consultation with a paleontologist or a construction monitor to ensure that impacts to this resource do not occur. As such, the proposed project would not result in significant cumulative impacts for geology and soils. Impacts would be **less than significant**.

3.6.6 Mitigation Measures

Based upon the analysis presented in Sections 3.6.4 and 3.6.5, project and cumulative impacts related to geology and soils would be less than significant. Therefore, no mitigation measures are required.

3.6.7 Conclusion

Based upon the analysis presented in Sections 3.6.4 and 3.6.5, impacts associated with seismicity, liquefaction, landslides, erosion/loss of topsoil, compressible soils, and expansive soils, would be less than significant. The project would adhere to all recommendations in the preliminary geotechnical investigation prepared for the project (Geotek 2019). Due to the fact that the project site supports plutonic bedrock granite and colluvium, it would not be characterized as having a high or moderate potential for paleontological resources and impacts would be less than significant.

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3.7 Hydrology and Water Quality

Introduction

This section identifies the existing hydrologic and water quality conditions on the project site and analyzes the potential impacts of the proposed project on hydrology and water quality. The analysis in this section is based upon the following reports which are included as **Appendix H and I** of this Environmental Impact Report⁷:

- *Priority Project Hydrology Study for Cornerstone Communities Woodward, APN No. 220-210-49*, prepared by Excel Engineering, June 14, 2023 (Excel 2023).
- *Priority Development Project Stormwater Quality Management Plan (SWQMP) Cornerstone Communities Woodward, Woodward Street, San Marcos, CA*, prepared by Excel Engineering, September 22, 2022 (Excel 2022).

The preliminary drainage report and SWQMP discusses applicable hydrologic volume and storm water requirements and analyzes peak flow anticipated for preliminary design of the on-site storm drain system. The analysis in this section also considers the *California Environmental Quality Act (CEQA) Guidelines Appendix G* and applicable State and Local regulations, including the City of San Marcos General Plan.

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that the project would have no impact on the following hydrology/water quality-related issue areas: groundwater supplies depletion, and risk release of pollutants due to project inundation in flood hazard, tsunami or seiche zones. Therefore, these issues are not discussed further in this EIR section. Section 5.8, Environmental Effects Found Not to be Significant – Hydrology and Water Quality of this EIR provides additional information on these topics.

Table 3.7-1 summarizes the project- and cumulative-level hydrology and water quality impact analysis by threshold.

Table 3.7-1. Hydrology/Water Quality Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1: Violate any water quality standards or waste discharge requirements or other substantially degrade surface or groundwater quality?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2: 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

⁷ Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#3: 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: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4: 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: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#5: 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: impede or redirect flood flows?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#6: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#7: Result in significant alteration of receiving water quality during or following construction?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#8: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#9: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#10: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#11: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.7.1 Existing Conditions

This section details the existing hydrology, water quality and groundwater conditions on the project site.

Site Hydrology

The project site is currently vacant and undeveloped. The project fronts onto Woodward Street and E. Mission Road. The property drains primarily by overland flow to an existing storm drain system located at the southwest corner of the project site. There are three discharge locations, or points of confluence (POC) on the site. POC-1 is located at the southwest corner of the project site with a 100-year peak flow of 16.14 cubic feet per second (cfs). POC-2 is located at the southeastern corner of the project site with the 100-year peak flow of 7.87 cfs, and POC-3 is at the northwest edge of the project site with the 100-year peak flow of 2.17 cfs (Excel 2023).

On-Site Drainage

The upper east side of the project site drains westerly to the existing 18 - and 24-inch storm drain pipes, then drains to POC-1 (southwest corner of the site). The lower east side of the project site drains southerly to the existing 18- and 24-inch storm drain pipes, then to POC-2 (southeast corner of the site). AT the most northern portion of the project site, surface runoff drains northerly to POC-3 (northwest edge of the site).

Off-Site Drainage

At the northeast part of the project site, approximately 0.2 acres offsite are conveyed through the site, then drains to POC-3. At the middle east edge of the project site, approximately 0.15 acres of offsite areas drainage is conveyed through the site then drains to POC-1. In addition, at the lower east part of the project site, approximately 1.21 offsite acres, drains to POC-2.

Water Quality

The proposed project is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into eleven hydrologic units. The project site is located in the Richland Hydrologic Subarea (904.52) within the San Marcos Hydrologic Area (HA) (904.5) of the Carlsbad Watershed (Hydrologic Unit (904). The project site discharges to a public storm

drain system which flows to an un-named tributary that flows to San Marcos Creek (passing through Lake San Marcos) to Batiquitos Lagoon, which discharges to the Pacific Ocean.

The Carlsbad Watershed Management Area (WMA) is approximately 211 square miles and is formed by a group of six individual watersheds in northern San Diego County. The WMA is bordered by the San Luis Rey River WMA to the north and by the San Dieguito River WMA to the south. It reaches inland nearly 24 miles to just northeast of Lake Wohlford. The maximum elevation of the WMA is approximately 2,400 feet and it extends to sea level at the Pacific Ocean. The Carlsbad WMA is made up of six distinct Hydrologic Areas (HA)s: Loma Alta, Buena Vista Creek, Agua Hedionda, Encinas, San Marcos, and Escondido Creek. The WMA includes the entire Cities of Carlsbad, San Marcos and Encinitas and portions of the cities of Oceanside, Vista, Escondido, Solana Beach, and San Diego County unincorporated areas.

The San Marcos HA is the second largest within the WMA. It is about 36,000 acres in area and comprises approximately 28% of the Carlsbad WMA. The major receiving waters within the Hydrologic Area are San Marcos Creek, Encinitas Creek, Batiquitos Lagoon, and the Pacific Ocean. San Marcos Creek originates on the western slopes of the Merriam Mountains in west central San Diego County and discharges to the Pacific Ocean, 14.6 miles away, via Batiquitos Lagoon. Encinitas Creek is another one of the major tributaries in the HA, originating in the hills southwest of Questhaven Road and paralleling El Camino Real before it converges with San Marcos Creek at the southeastern corner of Batiquitos Lagoon. The highest elevation within the HA is approximately 1,540 feet above mean sea level (amsl). Lake San Marcos is the largest impoundment within the HA. The San Marcos HA is primarily located in the cities of San Marcos, Carlsbad, Encinitas, and the County of San Diego, with a small portion in Escondido.

The San Marcos HA has two distinctive areas separated by the Lake San Marcos impoundment – the Upper and Lower San Marcos HA areas. The Upper Hydrologic Area includes drainage areas in the County of San Diego, and the cities of San Marcos and Escondido, that runoff through Upper San Marcos Creek to Lake San Marcos. The Lower Hydrologic Area consists of portions of the cities of Carlsbad, Encinitas, San Marcos, and Vista (Carlsbad Watershed Management Area 2022).

Within the Water Quality Control Plan for the San Diego Basin (San Diego Basin Plan), San Marcos Creek and Batiquitos Lagoon, located downstream of the project site, are identified as having numerous beneficial uses. For San Marcos Creek, these beneficial uses are: Agricultural Supply (AGR), Contact Water Recreation (REC1), Non-Contact Water Recreation (REC2), Warm Freshwater Habitat (WARM) and Wildlife Habitat (WILD). For Batiquitos Lagoon, these uses are: REC1, REC2, Preservation of Biological Habitats of Special Significance (BIOL), Estuarine Habitat (EST), WILD, Rare, Threatened, or Endangered Species (RARE), Marine Habitat (MAR), Migration of Aquatic Organisms (MIGR), and Spawning, Reproduction, and/or Early Development (SPWN). The Basin Plan includes numerical and qualitative water quality objectives to protect the listed beneficial uses for each water body.

The San Marcos Creek system consists of a number of water bodies that are listed as impaired under Section 303(d) of the Clean Water Act. In accordance with Section 303(d) of the 1972 Federal Clean Water Act (CWA), the State Water Resources Control Board (SWRCB) has established a list of “impaired water bodies.” San Marcos Creek is listed on the 2020-2022 Integrated Report (CWA Section 303(d)/305(b)) List of Impaired Water Segments as being impaired for Nutrients (nitrogen and phosphorus), Metals (selenium), Total Toxics (toxicity), Other Causes (Benthic Community Effects), Pesticides (bifenthrin, dichlorodiphenyldichloroethylene (DDE) and pyrethroids), Pathogens (indicator bacteria), and total dissolved solids. Further downstream, Batiquitos Lagoon is also listed as being impaired for

toxicity. Furthermore, San Marcos Lake was identified under Section 303(d) of the Clean Water Act as impaired due nutrients (ammonia as nitrogen and phosphorous, and metals (copper) (SWRCB 2022).

3.7.2 Regulatory Setting

This section details the applicable federal, state, and local regulations pertaining to hydrology and water quality.

Federal

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The standard for flood protection is established by FEMA, with the minimum level of flood protection for new development determined to be the one percent-annual exceedance probability (i.e., the 100-year flood event). Per FEMA's Flood Insurance Rate Map Number 06073C0793G, the project site is not located within a 100-year flood hazard area (FEMA 2012).

Federal Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. 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 1977.

Under the CWA, the U.S. Environmental Protection Agency (USEPA) has implemented pollution control programs such as setting wastewater discharge standards for industry. The USEPA has also set water quality standards for 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.

Section 303(d) of the Clean Water Act

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that would not attain water quality objectives after implementation of required levels of treatment by point-source dischargers (municipalities and industries). Section 303(d) requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. The TMDL is the amount of loading that the water body can receive and still be in compliance with water quality objectives. The TMDL can also act as a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. The TMDL prepared by the state must include an allocation of allowable loadings to point and non-point sources, with consideration of background loadings and a margin of safety. The TMDL must also include an analysis that shows the linkage between loading reductions and the attainment of water quality objectives. The USEPA must either approve a TMDL prepared by the state or, if it disapproves the state's TMDL, issue its own. National Pollutant Discharge Elimination System (NPDES) permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDL. After implementation of the TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list would be remediated.

National Pollutant Discharge Elimination System

The NPDES permit system was established in the federal CWA to regulate municipal and industrial discharges to surface waters of the U.S. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that USEPA must consider in setting effluent limits for priority pollutants.

Non-point sources are diffuse and originate from a wide area rather than from a definable point. Non-point pollution often enters receiving waters in the form of surface runoff but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such non-point sources are generally exempt from federal NPDES permit program requirements. However, three types of non-point source discharges are controlled by the NPDES program: non-point source discharge caused by general construction activities, the general quality of stormwater in municipal stormwater systems, and discharges associated with industrial operations. The 1987 amendments to the CWA directed the federal EPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by USEPA that are not included in Phase I.

In accordance with NPDES regulations, in order to minimize the potential effects of construction runoff on receiving water quality, the State requires that any construction activity that disturbs one acre or more must obtain a General Construction Activity Stormwater Permit. Permit applicants are required to prepare a stormwater pollution prevention plan (SWPPP) and implement best management practices (BMPs), such as erosion and sediment control and non-stormwater management measures, to reduce construction effects on receiving water quality.

Examples of typical BMPs implemented in SWPPPs include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

State

California Water Code Division 7 (Porter-Cologne Act)

The California Water Code contains provisions regulating water and its use. Division 7 establishes a program to protect water quality and beneficial uses of the state water resources including groundwater and surface water. The SWRCB and RWQCB administer the program and are responsible for control and water quality. They establish waste discharge requirements, oversee water quality control planning and monitoring, enforce discharge permits, and establish ground and surface water quality objectives.

State Water Resources Control Board

In California, the SWRCB has broad authority over water-quality control issues for the State. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the State by the Federal government under the CWA. Other State agencies with jurisdiction over water quality regulation in California include California Department of Public Health

(for drinking water regulations), the California Department of Pesticide Regulation, the California Department of Fish and Wildlife, and the Office of Environmental Health and Hazard Assessment.

In accordance with Section 303(d) of the CWA, the SWRCB has established a list of “impaired water bodies.” Impaired water bodies in this watershed, as listed in the SWRCB 303(d) impaired waters list, include San Marcos Creek. San Marcos Creek is listed on the 2014-2016 CWA Section 303(d) List of Impaired Water Segments as being impaired for DDE, phosphorus, sediment, toxicity, and selenium. Batiquitos Lagoon is also listed as being impaired for eutrophic, indicator bacteria, sediment, siltation, and toxicity. San Marcos Lake was identified under Section 303(d) of the Clean Water Act as impaired due to high concentrations of nitrogen and nutrients.

Regional Water Quality Control Board

The project site is situated within the jurisdiction of the San Diego RWQCB (Region 9). The San Diego RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction.

The project site is located within the Richland Hydrologic Subarea (904.52) of the San Marcos Hydrologic Area (904.5) of the Carlsbad Watershed Hydrologic Unit (904). Water quality objectives for San Marcos Creek and Batiquitos Lagoon are specified in the Water Quality Control Plan for the San Diego Basin (Basin Plan) prepared by the RWQCB in compliance with the federal CWA and the Porter-Cologne Act. The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water in the lagoon and creek. Because the City of San Marcos is located within the RWQCB’s jurisdiction, all discharges to surface water or groundwater are subject to the Basin Plan requirements.

In May 2013, the San Diego RWQCB adopted Order R9-2013-0001, the new municipal NPDES permit for 39 municipal, county government, and special district entities located in southern Orange County, southwestern Riverside County, and San Diego County who own and operate large municipal separate storm sewer systems (MS4s) which discharge storm water runoff and non-storm water runoff to surface waters throughout the San Diego Region. This permit has requirements for development projects to minimize or eliminate the impacts of such development on water quality. The proposed project is subject to the requirements of the municipal permit as it is implemented via the Carlsbad Watershed Jurisdictional Urban Runoff Management Program. The specific requirements include the selection of appropriate BMPs to avoid, prevent, or reduce the pollutant loads entering the storm drain system and receiving waters. The permit was amended in February 2015 by Order R9-2015-0001 and in November 2015 by Order R9-2015-0100.

Provision D.1.a of Order R9-2013-0001 requires the San Diego Stormwater Co-permittees to continue water monitoring programs established within previous Orders and pursuant to the approved Hydromodification Management Plan (HMP) (January 2011). The City of San Marcos is one of the co-permittees.

To comply with Order R9-2013-0001, as amended, the updated September 2018 County of San Diego BMP Design Manual was developed to provide County-specific project design and post-construction storm water requirements for development projects and replace the prior San Diego Regional Model Standard Urban Stormwater Mitigation Plan (SUSMP). The City of San Marcos adopted its own BMP Design Manual in February 2016 and updated it in February 2023. The BMP Design Manual was used to recommend BMPs and low impact development (LID) features for the proposed project. LID is an approach to land development that uses multiple small-scale natural detention and filtration features to manage stormwater as close to its source as possible. LID employs principles such as preserving

and re-creating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

Local

Carlsbad Watershed Management Area Water Quality Improvement Plan

The Carlsbad WMA Water Quality Improvement Plan (WQIP) is a requirement of stormwater regulations adopted by the RWQCB according to Order No. R9-2013-0001, as amended by Order Nos. R9 2015-0001 and R9-2015-0100. The goal of the WQIP is to protect, preserve, enhance, and restore water quality of receiving water bodies. These improvements in water quality will be accomplished through an adaptive planning and management process that identifies the highest priority water quality conditions within the watershed and implements strategies to address them. Agencies involved in the development of the WQIP include the County of San Diego and the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. The purpose of the Carlsbad WMA WQIP is to guide the Responsible Agencies' Jurisdictional Runoff Management Programs (JRMP)s toward achieving improved water quality in MS4 discharges and receiving waters. Through the WQIP, priorities and goals are established, and strategies selected for implementation through the Responsible Agencies' JRMPs to progress toward improvements in water quality. This approach establishes the WQIP as the overarching plan that each Responsible Agency will use to develop and implement their jurisdictional programs. Responsible Parties' JRMPs contain the strategies, standards, and protocols by which each Responsible Agency will implement their individual program in response to the priorities and goals established in the WQIP. The WMA collective watershed strategy identifies nutrients as high priority water quality pollutants in the San Marcos Creek HA (Carlsbad Watershed Management Area 2022).

The Carlsbad WMA WQIP includes several major components:

- **Priority Water Quality Conditions:** after assessing available data sets, the water quality conditions in the watershed were prioritized and several were identified as those on which Responsible Agencies would focus their program efforts. These are identified as highest and priority water quality conditions. This does not mean that other water quality conditions or pollutants are to be ignored. To the contrary, many water quality conditions are related to one another in terms of the strategies selected to address them. Selected strategies to address priority water quality conditions are also effective at addressing many other pollutants and water quality conditions. The highest priority water quality condition for Escondido Creek and San Elijo Lagoon are indicator bacteria.
- **Numeric Goals and Schedules:** the WQIP establishes goals related to the highest priority water quality conditions. Furthermore, schedules for achieving these goals are included in the WQIP. Together, the goals and schedules establish the targets that the Responsible Agencies use for both establishing their programs as well as measuring progress and achievement. Each highest priority water quality condition has established interim and final goals and schedules.
- **Strategies and Schedules:** the WQIP identifies the strategies, or activities/BMPs, that the Responsible Agencies will implement to address the priority water quality conditions to progress towards achieving the numeric goals within the schedules identified. In addition to identifying the strategies, the WQIP identifies schedules for development (in some cases) and implementation of the strategies.

The Carlsbad WQIP was originally submitted to the RWQCB in June 2015 and after revisions based on RWQCB comments, an acceptance letter from the Regional Board was issued on November 22, 2016. A 2021 update has been initiated, primarily to incorporate an assessment of bacteria data for Agua Hedionda Lagoon and revisions noted in prior Annual Reports. The 2021 WQIP was submitted to the Regional Board in January 2021 and the revised WQIP was accepted in December 2021.

City of San Marcos Jurisdictional Runoff Management Plan

The Order (NPDES Permit CAS0109266) requires the City of San Marcos to develop and implement a JRMP that identifies and describes the methods that the City will use to eliminate significant pollutants from the City's Storm Water Conveyance System. The purpose of the City's JRMP is to implement strategies that effectively prohibit non-stormwater discharges to the MS4 and reduce the discharge of pollutants in stormwater to the maximum extent practicable (MEP). Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies (City of San Marcos 2017).

San Marcos Storm Water Standards

The City has adopted its own BMP Design Manual (updated in February 2023) and the proposed project must comply with the standards and regulations contained therein. General requirements include the following:

- Onsite BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible.
- Structural BMPs must not be constructed within waters of the United States.
- Onsite BMPs must be designed and implemented with measures to avoid the creation of nuisance or pollution associated with vectors (e.g., mosquitos, rodents, or flies).

San Marcos General Plan

Conservation and Open Space Element

The following are applicable goals and policies from the City of San Marcos General, Conservation and Open Space Element related to hydrology and water quality:

- Goal COS-6: Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos subwatersheds.
- Policy COS-6.2: Promote watershed stewardship as the community norm.
- Goal COS-7: Achieve sustainable watershed protection for surface and ground water quality that balances social, economical, and environmental needs.
- Goal COS-8: Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.
 - Policy COS-8.1: Identify pollutants of concern in each subwatershed for groundwater and surface water.
 - Policy COS-8.4: Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm

water treatment, runoff reduction measures, BMPs, LID, hydromodification strategies consistent with the Current San Diego RWQCB Municipal Stormwater NPDES Permit, and all future municipal stormwater permits.

Safety Element

The following goal and policy in the City of San Marcos General Plan, Safety Element are applicable to flooding and flood control:

- Goal S-2: Minimize the risk to people, property, and the environment due to flooding hazards.
 - Policy S-2.2: Require existing private development to take responsibility for maintenance and repair of structures to resist flood damage.

Land Use and Community Design Element

The following goal and policies in the City of San Marcos General Plan, Land Use and Community Design Element are applicable to storm water drainage facilities:

- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
 - Policy LU-2.7: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.
- Goal LU-15: Flood control and storm water drainage facilities: ensure adequate flood control and storm water drainage is provided by the community.
 - Policy LU-15.1: Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and receiving waters.
 - Policy LU-15.2: Improve inadequate or undersized drainage/flood control facilities to solve both small neighborhood and large regional drainage and flood control problems.
 - Policy LU-15.3: Avoid, to the extent possible, development in floodplain and flood prone areas.
 - Policy LU-15.4: Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.

Environmental Justice Element

The following goal and policies in the City of San Marcos General Plan, Environmental Justice Element are applicable to storm water drainage facilities:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
 - Policy EJ-1.5: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce stormwater runoff (See Policy LU-2.7).
 - Policy EJ-1.17: Identify pollutants of concern in each subwatershed for groundwater and surface water (See Policy COS-8.1).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12, the project is consistent with the applicable goals and policies.

City of San Marcos Ordinances

The Storm Water Management and Discharge Control Ordinance (San Marcos Municipal Code Chapter 14.15) requires that all new development and redevelopment activities comply with the stormwater pollution prevention requirements. These stormwater pollution prevention requirements, which are described in detail in Section 14.15.050 of the Municipal Code "Reduction of Pollutants in Storm Water," include construction, development, and redevelopment, and residential BMPs.

3.7.3 Thresholds of Significance

Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* provides thresholds for determining significant environmental impacts related to hydrology and water quality. In addition to the Appendix G thresholds, the City has included additional thresholds for analysis of hydrology and water quality topics. A project may be deemed to have a significant impact on hydrology/water quality if the project would:

- Threshold #1: Violate any water quality standards or waste discharge requirements or other substantially degrade surface or groundwater quality.
- Threshold #2: 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.
- Threshold #3: 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: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Threshold #4: 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: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Threshold #5: 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: impede or redirect flood flows.
- Threshold #6: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
- Threshold #7: Result in significant alteration of receiving water quality during or following construction.
- Threshold #8: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

- Threshold #9: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?
- Threshold #10: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?
- Threshold #11: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?

As identified earlier in this section, impacts related issue area: risk release of pollutants due to project inundation in flood hazard, tsunami or seiche zones as well as impacts to groundwater recharge are not discussed in this section. Chapter 5.0, Environmental Issues Found Not to be Significant, provides additional information on this topic.

3.7.4 Project Impact Analysis

The following analysis discusses the potential for the proposed project to result in impacts to hydrology and water quality. A Hydrology Study and Priority Development Project (PDP) Storm Water Quality Management Plan were prepared for the project by Excel Engineering (2022 and 2023) and are included in Appendices I and J. As a condition of project approval, the applicant/developer/property owner shall pay Public Facility Fees, a portion of which go towards City-wide drainage improvements.

Post-Development Drainage Pattern

This proposed project is a mixed-use multifamily residential construction of 46 residential units on an 8.57 acre lot. Improvements include new storm drain pipe systems, which includes stormwater filtration and detention features, driveways, parking areas, and associated landscape areas.

The proposed grading plan would maintain the location of the existing three outfalls (POC-1, POC-2, and POC-3). The project proposes two bio-filtration basins, BMP-A in the northeast and BMP-B in the west. In general, the post development runoff would pass through an underground storage pipe and biofiltration basins prior to exiting the site. Underground storage pipe 1 would be designed to be used for peak flow detention and low flow control, meeting hydromodification requirements as well as reducing increased runoff. Surface flow generated by proposed impervious surfaces would first drain to storage pipe 1, then to BMP-A, and finally to POC-1. Storage pipe 2 would only be used for peak flow detention. Surface flow would drain to storage pipe 2 and then POC-3. All off-site water will be conveyed around the project site through brow ditches and there will be no co-mingled flows on site. (Excel 2022).

Post- Development Outfall POC-1

Both bio-filtration basins (BMP-A on the northeast and BMP-B on the northwest) would drain to the existing outfall POC-1. The outfall of this system is tied into an existing curb inlet box. This plate has an orifice that meets the hydromodification criteria. The middle part of the project site would include proposed multifamily units, parks, and street improvements. The proposed impervious area would route surface runoff northerly through proposed storm drain storage pipe 1 then to BMP-A (northeast side of the site). After the runoff gets treated in BMP-A, it would then flow southwesterly to POC-1 (southwest corner of the site). The western part of the project site would include a proposed graded

slope, existing slope, and the proposed driveway. This part of the project would drain surface flow southwesterly to POC-1 (Excel 2022).

Post- Development Outfall POC-2

The rest of the project, the eastern part, would route stormwater southeasterly to the existing 12- and 18- inch storm drain pipes and then to POC-2, which is located at the southeast corner of the project site.

Post- Development Outfall POC-3

At the east side of the property, the project proposes to build brow ditches to direct surface flow northerly to the proposed 36-inch storage pipe 2, then follow the existing site slope and drain to POC-3, which is located at the north edge of the site near Woodward Street.

Biofiltration and Site BMPs

As discussed above, two biofiltration basins are proposed to mitigate the storm water quality for the project (BMP-A and BMP-B). Biofiltration facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Biofiltration facilities have limited or no infiltration. They are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Nutrient sensitive media will be used in the biofiltration basins to provide treatment as San Marcos Creek is a 303(d) listed water body impaired by nutrient pollutant sources. The biofiltration basins would be constructed in conformance with the City's BMP Design Manual which includes requirements for vector control. Per the BMP Design Manual (Pages 4-1 and 4-2), onsite BMPs must be designed and implemented with measures to avoid the creation of nuisances or pollution associated with vectors (e.g., mosquitos, rodents, or flies). Projects shall comply with this requirement by incorporating design, construction, and maintenance principles to drain retained water within 96 hours and minimize standing water. Design calculations shall be provided to demonstrate the potential for standing water ponding at surface level and accessible to mosquitos has been addressed. For water retained in biofiltration facilities that are not accessible to mosquitoes this criteria is not applicable (i.e., water ponding in the gravel layer, water retained in the amended soil, etc.). (City of San Marcos 2023). The BMP Design Manual further states (Page 6-11), "This standard applies to, but is not limited to, detention basins, underground storage vaults, and the above-ground storage portion of LID facilities. When this standard cannot be met due to large, stored runoff volumes with limited maximum release rates, a vector management plan may be an acceptable solution if approved by the City of San Marcos (City of San Marcos 2023).

The biofiltration basins would be subject to regular inspection and maintenance. The property owner is required, pursuant to the City's Municipal Code Section 14.15 and the BMP Design Manual, to enter into a stormwater management and discharge control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits. A maintenance agreement shall be recorded with the City of San Marcos, clarifying maintenance roles and responsibilities. These comprehensive inspection and maintenance requirements will be included as conditions of approval for the proposed project.

In addition to the biofiltration features and underground storage pipes for peak flow retention, which are considered structural BMPs, the proposed project would also incorporate source control and site design BMPs as identified in the preliminary SWQMP for the proposed project (Appendix I). Source control BMPs include but are not limited to 1) preventing illicit discharges into the MS4; 2) stenciling

the future on-site public road storm drain inlets; and 3) protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal.

Site design BMPs include but are not limited to 1) maintaining natural drainage pathways and hydrologic features; 2) conserving natural areas, soils, and vegetation; 3) minimizing impervious areas; 4) minimizing soil compaction; 5) runoff collection; and 6) landscaping with native or drought tolerant species.

Threshold #1: Violate any water quality standards or waste discharge requirements or other substantially degrade surface or groundwater quality?

Pollutants generated by development projects could include sediments, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. These pollutants can make their way to drainages and watercourses where they can degrade surface water quality, and in some cases groundwater quality. The project would discharge to an un-named tributary that flows to San Marcos Creek, which discharges to Batiquitos Lagoon, which discharges to the Pacific Ocean (Excel 2022).

The proposed project would comply with all applicable water quality standards and waste discharge requirements. The proposed project includes a comprehensive water quality management approach that includes the use of underground storage pipes, brow ditches, biofiltration features and source control and site design BMPs to ensure that there would not be an increase in pollutant discharge to receiving waters. No flow-thru treatment BMPs are proposed to be implemented on site in lieu of retention or biofiltration. The stormwater management design for the project was developed following the forms and checklists found in the BMP Design Manual for Permanent Site Design, Storm Water Treatment and Hydromodification Management (City of San Marcos 2023).

The BMP Design Manual provides the guidance necessary to comply with the performance standards presented in Order R9-2013-0001 as amended (RWQCB 2015). This order indicates that discharges from MS4s must not cause or contribute to the violation of water quality standards in any receiving water (RWQCB 2015, Page 18).

Potential construction-related impacts to receiving water quality could include siltation and erosion, the use of fuels for construction equipment, and the generation of trash and debris from the construction site. In accordance with NPDES regulations, the State requires that any construction activity that disturbs one acre or more must obtain a General Construction Activity Stormwater Permit. Permit applicants are required to prepare a SWPPP and implement BMPs, including erosion and sediment control and non-stormwater management measures, to reduce construction effects on receiving water quality. Since the proposed project includes disturbance to more than one acre, a General Construction Activity Stormwater Permit from the SWRCB would be required prior to the issuance of a grading permit. A SWPPP would also be developed and implemented in accordance with the appropriate Risk Level, as determined by the City Engineer. Preparation and implementation of the SWPPP would ensure compliance with the provisions of the NPDES General Permit.

As previously noted, the proposed project has been designed to comply with the land development requirements of Order R9-2013-0001 as amended and the BMP Design Manual. These requirements were used to recommend BMPs for the proposed project to ensure there would be no impacts. Long-term water quality and HMP requirements are mitigated through appropriate design requirements for commercial, parking lot, and street land uses. The proposed project is therefore in compliance with the RWQCB MS4 permit.

In summary, the proposed project would not violate any water quality standards or waste discharge requirements. Impacts would be **less than significant**.

Threshold #2: 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?

This section analyzes the potential for the proposed project to alter existing drainage patterns in a way that results in substantial erosion or siltation on- or off-site.

Short Term (Project Construction)

The project site is currently vacant. Grading will consist of approximately 41,989 cubic yards (cy) of cut material and 50,270 cy of fill material requiring an export of approximately 8,281 cy of material. The proposed project would incorporate construction BMPs in compliance with the General Construction Permit and SWPPP. In addition to underground storage pipes, brow ditches and the biofiltration features, which are considered structural BMPs, the proposed project would also incorporate construction BMPs which could include measures to avoid temporary erosion and sedimentation, pollutant prevention BMPs to avoid stormwater pollutants during construction and general good housekeeping of the construction site. These requirements are detailed in Appendix B (Construction BMP Manual) of the City's JRMP. These BMPs have been designed in a manner to be consistent with the requirements of the BMP Design Manual (City of San Marcos 2023) which requires that no pollutants are discharged to the MS4s. Per the BMP Design Manual (Page 1-4) all development projects, or phases of development projects, are required to implement temporary erosion, sediment, good housekeeping, and pollution prevention BMPs to mitigate storm water pollutants during the construction phase. Short term, construction-related impacts would be **less than significant**.

Long Term (Project Operation)

The proposed project would increase the area of impervious surface on the project site. If not carefully planned for, increased runoff from impervious surfaces could cause alterations to drainage courses, increases in erosion and siltation. However, the proposed project has been designed to carefully handle runoff and to meet regulatory requirements to ensure that post-development runoff quantities and rates are similar to or less than the pre-development condition.

The drainage study for the proposed project identifies the pre- and post-development conditions for runoff rates and quantities (Excel 2023, Table 1, Q100 Analysis Results). The 100-year existing/predevelopment total flows from the project area are approximately 26.18 cubic feet per second (cfs). In the post development condition, the flows would increase to 29.68 cfs. However, with storage and retention, the flows would be 18.51 cfs. Runoff quantities and rates would be less than in the post-development condition due to the incorporation of biofiltration and source control and site design BMPs.

As discussed above, the post-development condition of the project site includes underground storage pipes, brow ditches and two biofiltration basins. These biofiltration features would include hydromodification and water quality treatment before discharging runoff to the storm drain system. The storm drain system would convey discharge to an un-named tributary that flows to San Marcos Creek which discharges to Batiquitos Lagoon, and ultimately the Pacific Ocean. Additionally, the project would implement source control and site design BMPs, which could include but are not limited to 1) preventing illicit discharges into the MS4; 2) stenciling the future on-site public road storm drain inlets; and 3) protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal. Site design

BMPs include but are not limited to 1) maintaining natural drainage pathways and hydrologic features; 2) conserving natural areas, soils, and vegetation; 3) minimizing impervious areas; 4) minimizing soil compaction; 5) runoff collection; and 6) landscaping with native or drought tolerant species.

Attachment 2 C of the preliminary SWQMP (Appendix I) includes a critical course sediment yield analysis. The project boundary was compared with the areas of the County with Potential Critical Coarse Sediment Yield Areas (CCSYA). There are two areas of the project site that have the potential to provide critical coarse sediment to downstream waterbodies. Area 1 is located northwesterly of the project adjacent to the proposed driveway. This potential critical coarse sediment is located under the existing roadway (Woodward Street) and is therefore developed. This area has a 5.7% (or category 1) slope. Category slope 1 areas are not relevant for critical coarse sediment assessment. Runoff from this area flows southwesterly away from the project site and would not impact the site. Area 2 is located northeasterly and upstream of the project site. This potential critical coarse area is classified as scrub/shrub vegetation cover with greater than 40% (or category 4) slope. Runoff from this area drains toward the site. The assessment concluded that while the project site has limited areas with the potential to contribute coarse sediment, the local area in which the site is situated does not produce enough annual soil loss to be considered a source of Coarse Critical Sediment and warrants no protection or further action. This is based on evaluation of the ground cover, underlying geology, and the average slope of the local site areas (Excel 2022).

In summary, implementation of the proposed project would not increase the rate or quantities of runoff beyond the pre-development condition. The proposed project therefore meets the applicable peak flow discharge requirements (Excel 2023). The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site (e.g., downstream). Long term impacts would be **less than significant**.

Threshold #3: 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: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As identified in response to Threshold #2, the proposed project would increase the area of impervious surface on the project site which could increase runoff flow rates or volumes. However, the proposed project has been designed to carefully handle runoff and meet regulatory requirements to ensure that post-development runoff quantities and rates are similar or less than the pre-development condition. Specifically, post-development runoff rates would be less than in the pre-development condition due to the incorporation of structural (storage pipes, brow ditches and biofiltration basins), source control and site design BMPs (Excel 2023). Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Impacts would be **less than significant**.

Threshold #4: 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: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project proposes a comprehensive approach to stormwater and drainage management. This includes two biofiltration basins and source control and site design BMPs that would detain and retain

stormwater flows from the project site. The treated stormwater from the biofiltration features (water quality and hydromodification) would be discharged to the storm drain system. Since the runoff will be treated for hydromodification before it enters the system, no changes to downstream flow rates or storm drain capacity are expected.

As described above, the proposed project would not generate increased runoff volumes. Additionally, project-related runoff would be adequately treated prior to discharge into planned drainage systems via storage pipes, brow ditches, biofiltration basins and other BMPs such that the proposed project would not provide substantial additional sources of polluted runoff (Excel 2023). Off-site storm drains will not be adversely affected by the proposed project as the project would mitigate all storm water flows to be less than existing conditions. The proposed project would not contribute any increase in flows to existing storm drain infrastructure. The proposed project would meet all current storm water and hydrology requirements, including hydromodification. An expansion of existing facilities would not be required to serve the proposed project.

Therefore, the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Impacts would be **less than significant**.

Threshold #5: 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: impede or redirect flood flows?

As identified in response to Threshold #2, the proposed project would increase the area of impervious surface on the project site which could increase runoff flow rates or volumes; however, the project has been designed to carefully handle runoff and meet regulatory requirements to ensure that post-development runoff quantities and rates are similar or less than the pre-development condition. Specifically, post-development runoff rates would be less than in the pre-development condition due to the incorporation of storage pipes, brow ditches, biofiltration basins, source control and site design BMPs (Excel 2023). Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows. Impacts would be less than significant.

Threshold #6: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is not located within a sustainable groundwater management plan area. It is located within the Carlsbad Management Area WQIP. The goal of the WQIP is to protect, preserve, enhance, and restore water quality of receiving water bodies. These improvements in water quality will be accomplished through an adaptive planning and management process that identifies the highest priority water quality conditions within the watershed and implements strategies to address them. The purpose of the City of San Marco JRMP is to implement strategies that reduce the discharge of pollutants in stormwater to the maximum extent practicable, leading to beneficial effects on the local receiving water bodies. If a project would not result in a significant alteration of receiving water through the discharge of pollutants, it would be consistent with the WQIP and JRMP.

Short Term (Project Construction)

The proposed project would incorporate construction BMPs in compliance with the General Construction Permit and SWPPP. Potential construction-related impacts to receiving water quality

could include siltation and erosion, the use of fuels for construction equipment, and the generation of trash and debris from the construction site. In accordance with NPDES regulations, the project will be required to secure a General Construction Activity Stormwater Permit, which will require the preparation of a SWPPP and implementation of BMPs. Examples of typical BMPs implemented in SWPPPs that could be applicable to the project include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; installing traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and using barriers, such as straw bales or plastic, to minimize the amount of uncontrolled runoff that could enter drains or surface water. These measures are designed to minimize the generation of pollutants, including sediment and trash/debris and would ensure that the proposed project would not result in significant alteration of receiving water quality during construction. Impacts would be **less than significant**.

Long Term (Project Operation)

Buildout of the proposed project would increase the amount of imperviousness at the project site; however, based upon the analysis in the preliminary SWQMP prepared for the proposed project, the proposed project includes a comprehensive water quality management approach that incorporates storage pipes, brow ditches, biofiltration features, and source control and site design BMPs to ensure that there would not be an increase in pollutant discharge to receiving waters. The biofiltration features and BMPs would also be subject to regular inspection and maintenance as per the preliminary SWQMP (Appendix I).

As identified above, impaired water bodies in the Carlsbad Watershed, within which the project site is located, include San Marcos Creek, Batiquitos Lagoon, and the Pacific Ocean. Potential pollutants to be generated by development projects include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

The BMP Design Manual (Page 2-8) requires Biofiltration BMPs be designed to have an appropriate hydraulic loading rate to maximize storm water retention and pollutant removal, as well as to prevent erosion, scour, and channeling within the BMP (City of San Marcos 2023). This requirement results in reductions in pollutants. Biofiltration has a high efficiency for removal of sediments, nutrients, trash, metals, oil/grease, organics, and oxygen demanding substances and has a medium efficiency for removal of bacteria. No flow-thru BMPs are proposed in lieu of retention or biofiltration BMPs. Therefore, the project's water quality management approach would effectively treat stormwater runoff prior to discharge from the site and to receiving waters. The proposed project would not result in significant alteration of receiving water quality following construction and would be consistent with the Carlsbad Management Area WQIP and the City of San Marcos JRMP. Impacts would be **less than significant**.

Threshold #7: Result in significant alteration of receiving water quality during or following construction?

As identified in response to Threshold #2, short-term, construction-related impacts resulting from siltation and erosion, the use of fuels for construction equipment, and the generation of trash and debris from the construction site would be minimized through project design features and construction-related water quality BMPs identified in the project's SWPPP. For long-term impacts, and in compliance with the BMP Design Manual, the proposed project includes a comprehensive water quality approach, including biofiltration features and source control and site design BMPs that would

pre-treat storm water discharge from impervious areas to a medium pollutant removal efficiency or better, to ensure that there would not be an increase in pollutant discharge to receiving waters. Therefore, the proposed project would not result in an increase in pollutant discharges to receiving waters during or following construction. Impacts would be **less than significant**.

Threshold #8: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

As identified above, impaired water bodies in the Carlsbad Watershed, within which the project site is located, include San Marcos Creek, Batiquitos Lagoon, and the Pacific Ocean. Potential pollutants to be generated by development projects include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

The proposed project includes a comprehensive water quality management approach to ensure that there would not be an increase in pollutant discharge to receiving waters. The comprehensive use of underground storage pipes, brow ditches, biofiltration features and source control and site design BMPs would effectively retain and treat stormwater runoff prior to discharge from the site and to receiving waters in compliance with the requirements of the BMP Design Manual. No flow-thru treatment BMPs are proposed to be implemented on site in lieu of retention or biofiltration. As identified above, biofiltration has a medium to high efficacy for pollutant removal. Therefore, the project would not result in an increase in pollutant discharges to receiving waters. Impacts would be **less than significant**.

Threshold #9: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?

As identified above, impaired water bodies in the Carlsbad Watershed, within which the project site is located, include San Marcos Creek, Batiquitos Lagoon, and the Pacific Ocean. Potential pollutants to be generated by development projects include sediment, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

The proposed project includes a comprehensive water quality management approach to ensure that there would not be an increase in pollutant discharge to receiving waters. Nutrient sensitive media will be used in the biofiltration basins to provide treatment. The comprehensive use of biofiltration and source control and site design BMPs would effectively treat stormwater runoff prior to discharge from the site and to receiving waters in compliance with the requirements of the BMP Design Manual. As identified above, biofiltration has a medium to high efficacy for pollutant removal. Therefore, while the project site is tributary to already impaired water bodies as listed on the CWA Section 303(d) list, the project would not result in an increase in any pollutant for which those water bodies are already impaired. Impacts would be **less than significant**.

Threshold #10: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?

As discussed in Section 3.3 Biological Resources, the project site is located within the Multiple Habitat Conservation Program (MHCP). However, the project site is not located within a Focused Planning area as defined in the MHCP and the draft San Marcos Subarea Plan. From a water quality and hydrology

perspective, conditions in environmentally sensitive areas could be exacerbated by increases in erosion, increases in pollutants, and impacts related to hydrology and flooding.

Erosion – As discussed above in Threshold #2, the critical coarse sediment yield analysis concluded that while the project site has limited areas with the potential to contribute coarse sediment, the local area in which the site is situated does not produce enough annual soil loss to be considered a source of Coarse Critical Sediment and warrants no protection or further action (Excel 2022). As identified above, with the proposed development and incorporation of storage pipes, brow ditches, biofiltration basins, and other BMPs, project site runoff would be reduced compared to existing conditions. The proposed biofiltration features and BMPs would also minimize the potential for erosion and siltation. Thus, through a combination of reduced runoff and adequately stabilized soils as required by provisions in the NPDES General Permit, Order R9-2013-0001 as amended and the BMP Design Manual, the proposed project would not increase erosion on or offsite and would not exacerbate already existing sensitive conditions at environmentally sensitive areas.

Pollutants/Water Quality – The proposed project includes a comprehensive water quality management approach to ensure that there would not be an increase in pollutant discharge to receiving waters. The use of storage pipes, brow ditches, biofiltration features and source control and site design BMPs would effectively treat stormwater runoff prior to discharge from the site and to receiving waters. As identified above, biofiltration has a high efficiency for removal of sediments, nutrients, trash, metals, oil/grease, organics, and oxygen demanding substances and has a medium efficiency for removal of bacteria. The biofiltration features would be subject to regular inspection and maintenance as per the preliminary SWQMP (Appendix I). Furthermore, the property owner would also enter into a stormwater management and discharge control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits.

Hydrology/Flooding - The proposed project has been designed such that the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. Per the FEMA Flood Insurance Rate Map Number 06073C0789H, the project site is not located within a 100-year flood hazard area (FEMA 2012). Additionally, as identified above, the runoff would be reduced from existing conditions under post-development conditions. Therefore, the proposed project would adequately attenuate stormwater runoff during storm events and not contribute to flooding or hydrology disruptions in sensitive environments.

In conclusion, the proposed project would control erosion, pollutants, and flooding and would not exacerbate already existing sensitive conditions at environmentally sensitive areas. Impacts would be **less than significant**.

Threshold #11: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?

To reduce potential impacts to marine, fresh, or wetland waters downstream, the proposed project includes a comprehensive water quality management approach that includes the use of retention, biofiltration and source control and site design BMPs to effectively treat stormwater runoff prior to discharge into San Marcos Creek and Batiquitos Lagoon. Biofiltration has a high efficiency for removal of sediments, nutrients, trash, metals, oil/grease, organics, and oxygen demanding substances and a medium efficiency for removal of bacteria. The biofiltration features would be subject to regular inspection and maintenance as per the preliminary SWQMP (Appendix I). Furthermore, the property

owner would also enter into a stormwater management and discharge control maintenance agreement for the installation and maintenance of permanent BMPs prior to issuance of permits. Therefore, the proposed project would not have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters. Impacts would be **less than significant**.

3.7.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to hydrology/water quality, the cumulative analysis is based upon a list approach to determine the proposed project’s contributing effect on potential cumulative impacts on hydrology/water quality. All of the cumulative projects identified in Table 2-4 are considered in this cumulative analysis.

Hydrology

Development of the proposed project, along with the related projects, could incrementally increase the cumulative total of impervious surfaces in the project area. This would potentially result in increased surface runoff, alteration of the regional drainage pattern, and flooding. However, like the proposed project, each individual project applicant would be required per state and local requirements to hydrologically engineer the respective project sites to ensure that post-development surface runoff flows can be accommodated by the regional drainage system. Similar to the related projects, runoff volume from the project site in the post-development condition is less than in the pre-development condition due to the implementation of a comprehensive drainage plan, including the use of biofiltration facilities and BMPs. Therefore, the proposed project’s contribution to a cumulative impact from a hydrology perspective is **less than significant**.

Water Quality

Development of the proposed project, in conjunction with cumulative projects that drain to the San Marcos Hydrologic Area, has the potential to increase the concentration of pollutants in surface runoff and downstream water quality. However, all related projects would be subject to the same federal water quality standards and state waste discharge requirements as the proposed project. This includes preparation of project-specific SWPPPs per the NPDES permit program and implementation of associated BMPs to prevent construction-related runoff from polluting receiving waters. Additionally, similar to related projects, the proposed project has been designed to incorporate biofiltration and BMPs to limit the potential for water quality impacts to the greatest extent feasible. By incorporating these features into the project design, the proposed project would not substantially contribute to a significant cumulative impact to water quality. Impacts would be **less than significant**.

3.7.6 Mitigation Measures

Based upon the analysis presented in Section 3.7.4 and 3.7.5, no impacts were identified, and no mitigation measures are required.

3.7.7 Conclusion

The proposed project would increase the amount of impervious surface at the project site; however, the project site would be hydrologically engineered such that post-development runoff would be less than in the pre-development condition. Therefore, hydrologic impacts resulting from the proposed project would be less than significant. Additionally, with incorporation of regulatory measures, such as biofiltration facilities and BMPs that would treat and eliminate the pollutants of concern prior to discharging to San Marcos Creek, as well as implementation of a project-specific SWPPP, construction and operation of the proposed project would not result in substantial adverse water quality impacts and potential impacts would be less than significant prior to mitigation.

3.8 Land Use and Planning

Introduction

This section analyzes the potential for the proposed project to have impacts related to land use and planning. This section considers consistency with applicable land use plans and habitat conservation plans. The transportation portion of the analysis is based on the following report, which is included as **Appendix J** of the Environmental Impact Report (EIR)⁸:

- *Local Transportation Analysis Woodward 46 Apartment Project, San Marcos, California.* prepared by Linscott, Law and Greenspan Engineers (LLG) (February 2023).

Although not required under the California Environmental Quality Act (CEQA), the Local Transportation Analysis (LTA) focuses on automobile delay/Level of Service (LOS), consistent with the City's *Transportation Impact Analysis Guidelines (TIAG)* (San Marcos 2020). The LOS analysis was conducted to identify roadway deficiencies in the project study area and to recommend project improvements to address such deficiencies. The Local Transportation Analysis is incorporated and addressed in this section as it relates to consistency with the City's Mobility Element policies in the General Plan. A vehicle miles traveled (VMT) analysis, which is required under CEQA, is included as Appendix M of the EIR and summarized in Section 3.11, Transportation.

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact related to physical division of an established community. Therefore, this issue is not discussed further in this EIR section. Section 5.9, Environmental Effects Found not to be Significant - Land Use provides additional information on this topic.

Table 3.8-1 summarizes the project- and cumulative-level land use impact analysis for the proposed project.

Table 3.8-1. Land Use Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Threshold #1: 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.8.1 Existing Conditions

This section describes the existing planning context for the project site, including the General Plan and Zoning designations that currently apply to the site.

⁸ Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Project Site

As shown in Figure 2-1 in Chapter 2, Project Description, the 8.57-acre project site is located in the City of San Marcos in northern San Diego County. Specifically, the project site is located on the east side of Woodward Street, generally between E. Mission Road to the south and Vineyard Road to the north in the Richland neighborhood. The project site is approximately 0.5 miles north of State Route 78 (SR-78) and 0.1 miles north from the Civic Center SPRINTER rail station.

The project site is currently undeveloped, vacant land. The earliest-available aerial images of the property, dating to 1928, appear to show two graded areas with a dirt road connecting the two. By 1938, at least one of the roadways appears to have been abandoned. Between 1953 and 1964, another episode of disturbance is visible on the aerial imagery, with grading over a portion of the project area and possibly the widening of Woodward Street. By 1980, a four-sided feature is visible in these graded areas. By 1987, this feature is no longer visible. Post-1987, activity in the project site appears to be sporadic and included clearing of some of the previously cut roadways. In the most-recent Google Earth images dating to 2021, a small approximately 7 by 10-feet (ft) feature is visible in the southern portion of the project area. During the cultural resources survey, it was determined that this feature was an abandoned asphalt-related machine (ASM 2024).

Existing General Plan Designation

The project site has a General Plan Designation of Specific Plan Area (SPA) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses.

The project proposes a Specific Plan Amendment of the HOCSP to remove the Richmar Sub-Plan designation from the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan which would allow for 5.7 dwelling units per acre. The General Plan Amendment of the Land Use Element would amend land use maps and text related to changing the sub-plan designation of the project site from Richmar Specific Plan to Woodward 46 Specific Plan.

Existing Zoning Designation

The zoning on the project site is SPA and is associated with the HOCSP Area. No change in zoning is proposed as part of the project.

Surrounding Land Uses

The project site is in a developed portion of the City. The project vicinity is primarily within the HOCSP and includes single-family residential neighborhoods to the north and east, multi-family residential developments to the south, and undeveloped land to the west across Woodward Street. Directly north of the project site is an area designated as Open Space in the City's General Plan and north of that is single family residential. The City of San Marcos Civic Center is located south of the project site and contains a mix of institutional, office, and medical office uses as well as adjacent commercial land uses which offer a variety of retail space, restaurants, service uses, and shopping. The Civic Center SPRINTER rail station is located approximately 0.1 miles from the project site at the intersection of E. Mission Road and San Marcos Boulevard.

Roadway Circulation System

The study area includes five intersections and three roadway segments based on guidance provided in the TIAG (San Marcos 2020). Per the City's TIAG, the study area was defined using the following criteria:

- Signalized and unsignalized intersections along and adjacent to the project site;
- Site access driveways; and
- Any classified (non-residential) roadway segments that are linked to the intersections that are being studied.

Figure 3.8-1 shows existing conditions and the project study area's roadway segments and intersections.

Study Intersections

- #1 – Woodward Street/Project Driveway
- #2 – Mission Road/Pico Avenue (Signal)
- #3 – Mission Road/Woodward Street (San Marcos Boulevard) (Signal)
- #4 – San Marcos Boulevard/Twin Oaks Valley Road (Signal)
- #5 – San Marcos Boulevard/Rancheros Drive (Signal)

Study Roadway Segments

- Mission Road, from Pico Avenue to Woodward Street
- Mission Road, from Woodward Street to Mission Villas Road
- San Marcos Boulevard, from Rancheros Drive to Mission Road

Existing Levels of Service for Intersections and Roadway Segments

Table 3.8-2 summarizes the LOS criteria for signalized intersections and **Table 3.8-3** summarizes the LOS criteria for stop-controlled unsignalized intersections. **Table 3.8-4** summarizes roadway segments daily capacity and LOS standards. Section 3.8.4 below provides additional information regarding the LOS analysis and methodology.

Table 3.8-2. Signalized Intersection LOS Operational Analysis Method

LOS	Average Stopped Delay Per Vehicle (Seconds)	Description
A	≤ 10	Operations with very low delay. This occurs when the progression is extremely favorable and most vehicles do not stop. Short cycle lengths may also contribute to low delay.
B	> 10 and ≤ 20	Operations with generally good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	> 20 and ≤ 35	Operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	> 35 and ≤ 55	Operations with high delay, resulting in some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion, and individual cycle features is noticeable.
E	> 55 and ≤ 80	The limit of acceptable delay. Individual cycle failures are frequent occurrences.
F	> 80	Excessively high delays considered unacceptable to most drivers. Poor progression and long cycle lengths may also be major contributing factors to such delays.

Table 3.8-3. LOS Criteria for Stop-Controlled Unsignalized Intersections

Average Stopped Delay Per Vehicle (Seconds)	LOS
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

Table 3.8-4. Roadway Segment Daily Capacity and LOS Standards

Street Classification	LOS/ADT Threshold				
	A	B	C	D	E
Expressway (6-lane)	< 30,000	< 42,000	< 60,000	< 70,000	< 80,000
Prime Arterial (6-lane)	< 25,000	< 35,000	< 50,000	< 55,000	< 60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	< 45,000	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	< 35,000	< 40,000
Major Arterial (3-lane, one-way)	< 12,500	< 16,500	< 22,500	< 25,000	< 27,500
Major Arterial (2-lane, one-way)	< 10,000	< 13,000	< 17,500	< 20,000	< 22,500
Secondary Arterial / Collector (4-lane w/ center lane)	< 10,000	< 14,000	< 20,000	< 15,000	< 30,000
Collector (4-lane w/o center lane)	< 5,000	< 7,000	< 10,000	< 13,000	< 15,000
Collector (2-lane w/ continuous left-turn lane)	< 5,000	< 7,000	< 10,000	< 13,000	< 15,000
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	< 9,000	< 10,000
Collector (2-lane w/ commercial fronting)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (2-lane w/ multi-family)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (3-lane, one-way)	< 11,000	< 14,000	< 19,000	< 22,500	< 26,000
Collector (2-lane, one-way)	< 7,500	< 9,500	< 12,500	< 15,000	< 17,500
Collector (1-lane, one-way)	< 2,500	< 3,500	< 5,000	< 6,500	< 7,500
Sub-Collector (2-lane single family)	-	-	< 2,200	-	-

Source: City of San Marcos Transportation Impact Guidelines (San Marcos 2020).

Traffic Counts

The study area intersections and roadway traffic counts were conducted on January 12, 2023 when area schools were in session. Traffic count worksheets are provided in Appendix A of the LTA which is included as Appendix M of this EIR.

Intersections

Table 3.8-5 and **Figure 3.8-2** display intersection LOS and average vehicle delay results for the key study area intersections under existing conditions. As shown in Table 3.8-5, all intersections currently operate at LOS D or better during both the AM and PM peak hours with the exception of:

- Mission Road/Woodward Street (San Marcos Boulevard) – LOS E (AM and PM Peak Hour)

Table 3.8-5. Peak Hour Intersection LOS – Existing Conditions

#	Intersection	Control Type	Peak Hour	Existing	
				Avg. Delay (seconds)	LOS
1	Woodward Street/Project Driveway	DNE ⁽¹⁾	AM	--	--
			PM	--	--
2	Mission Road/Pico Avenue	Signal	AM	30.5	C
			PM	26.3	C
3	Mission Road/Woodward Street (San Marcos Boulevard)	Signal	AM	70.9	E
			PM	59.7	E
4	San Marcos Boulevard/Twin Oaks Valley Road	Signal	AM	46.0	D
			PM	46.1	D
5	San Marcos Boulevard/Rancheros Drive	Signal	AM	23.9	C
			PM	27.8	C

Source: LLG 2023a.

Notes: (1) DNE – Does not exist.

Roadway Segments

Table 3.8-6 shows the classification of each project area roadway and the current operating conditions for the study area roadway segment. As shown in Table 3.8-6, the study area segments are calculated to currently operate at an acceptable LOS.

Table 3.8-6. Roadway Segment LOS Results – Existing Conditions

Roadway	Segment	Classification	Daily Volume	LOS Threshold (LOS E)	V/C ⁽¹⁾	LOS ⁽²⁾
Mission Road	Pico Avenue to Woodward Street	4-Lane Major Arterial with Class II Bike Lanes	11,590	40,000	0.290	A
	Woodward Street to Mission Villas Road	6-Lane Prime Arterial with Enhanced Class II Bike Lanes	19,810	60,000	0.330	A
San Marcos Boulevard	Rancheros Drive to Mission Road	4-Lane Major Arterial with Class II Bike Lanes	14,860	40,000	0.372	A

Source: LLG 2023a.

Notes: (1) VC = Volume/Capacity

(2) LOS = Level of Service

3.8.2 Regulatory Setting

This section provides an overview of the regulatory setting related to planning and land use that apply to the project, including state, regional, and local regulation and planning documents.

State

California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is provided in the California Planning and Zoning Law, Government Code Sections 65000 et seq. Under state planning law, each city and county is required to adopt a General Plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning” (Section 65300). The California Supreme Court has called the General Plan the “constitution for future development.” The General Plan expresses the community’s development goals and embodies public policy relative to the distribution of future land uses, both public and private. A General Plan consists of several elements, including land use, circulation, housing, conservation, open space, noise, and safety; other elements may be included at the discretion of the jurisdiction that relate to the physical development of the county or city.

Senate Bill 743

California Senate Bill (SB) 743 mandated specific types of CEQA analysis of transportation projects effective July 1, 2020. Prior to implementation of SB 743, CEQA transportation analyses of individual projects typically determined impacts on the circulation system in terms of LOS roadway delay and/or capacity usage at specific locations, such as street intersections or roadway segments. SB 743, signed into law in September 2013, required changes to the guidelines for CEQA transportation analysis. The changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. The purpose of SB 743 is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

Under SB 743, a project’s effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS and other similar vehicle delay or capacity metrics may no longer serve as transportation impact metrics for CEQA analysis. The California Office of Planning and Research (OPR) has updated the CEQA Guidelines and provided a final technical advisory in December 2018, which recommends VMT as the most appropriate measure of transportation impacts under CEQA. The California Natural Resources Agency certified and adopted the CEQA Guidelines including the Guidelines section implementing SB 743. The changes have been approved by the Office of Administrative Law and are now in effect. Section 3.11, Transportation, of this EIR analyzes potential VMT impacts related to the proposed project.

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city’s planning approval process. Cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside of CEQA.

To comply with the requirements of SB 743, the City of San Marcos has prepared its TIAG to provide guidance on conducting transportation impact analyses in the city as follows:

- CEQA Analysis Requirements: Requirements for conducting CEQA analysis, which consists of SB 743-consistent VMT analysis as well as assessing impacts to pedestrians, bicyclists, transit, hazards, emergency access, and other impacts (See Section 3.11 Transportation).
- Local Transportation Analysis Requirements: Requirements for conducting LOS analysis, site access assessments, and other local transportation analyses for non-CEQA purposes (Section 3.8 Land Use and Planning).

Regional/Local

SANDAG San Diego Forward: The Regional Plan

The Regional Comprehensive Plan (RCP), adopted in 2021 by the San Diego Association of Governments (SANDAG), provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The Regional Plan combines the Regional Comprehensive Plan and the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). By integrating land use and transportation plans, the Regional Plan is intended to achieve greenhouse gas emission reduction targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities Act.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

The Regional Plan also supports other regional transportation planning and programming efforts, including overseeing which projects are funded under the Regional Transportation Improvement Program and the TransNet program. SANDAG is applying data-driven strategies, innovative technologies, and stakeholder input to create a future system that is faster, fairer, and cleaner. Part of this data-driven approach includes the implementation of five key transportation strategies referred to as the 5 Big Moves. These strategies provide the framework for the Regional Plan and consider policies and programs, changes in land use and infrastructure, take advantage of the existing transportation highway and transit networks, and leverage trends in technology to optimize use of the transportation system. Together, these initiatives will create a fully integrated, world-class transportation system that offers efficient and equitable transportation choices, meets state climate targets, and supports local jurisdictions' achievements of Climate Action Plan goals.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. The amendment to the Regional Plan was approved by the SANDAG Board in late 2023.

Multiple Habitat Conservation Program

The Multiple Habitat Conservation Program (MHCP) is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46%) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species.

The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999 and although the Subarea Plan has not yet been approved by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), the plan is a component of the adopted MHCP and is currently being used as a guide for open space design and preservation within the city. The intent of the City's Draft Subarea Plan is to identify a citywide preserve system that meets local and regional biological goals while minimizing fiscal and economic impacts to the City and adverse impacts on private property owners. To help achieve this goal, certain areas, known as Focused Planning Areas (FPA), have been designated with parcel-level preserve goals which would contribute to achieving local and regional conservation goals while minimizing adverse effects on property rights and property values. The project site is not located within an FPA.

San Diego County Regional Airport Authority/Airport Land Use Commission

The nearest public airport is the McClellan-Palomar Airport, which is located approximately five miles southwest of the project site. The McClellan-Palomar Airport Land Use Compatibility Plan (ALUCP) contains policies to promote land use compatibility between the McClellan-Palomar Airport and adjacent and proximate land uses, to the extent these areas are not already developed with existing uses, and to protect the public health, safety, and welfare. Using airport-related forecasts and background data approved by the California Department of Transportation, Division of Aeronautics, the plan reflects anticipated growth of the airport over a 20-year horizon. The plan includes land use compatibility criteria and identifies policies applicable to the airport and surrounding land uses.

According to the McClellan-Palomar ALUCP, the project site partially lies within Review Area 2 of the airport influence area. The influence area is regulated by the Airport Land Use Commission (ALUC), which regulates land uses in the area to be compatible with airport-related noise, safety, airspace protection, and over-flight factors through review of development proposals within the airport influence area. Review Area 2 consists of limits on heights of structures in areas of high terrain. Residential development in Review Area 2 may be subject to annoyances commonly associated with proximity to airports, such as noise, vibration, and overflights.

City of San Marcos General Plan

The San Marcos General Plan consists of the following elements:

- ***Land Use and Community Design Element*** - Describes the desired future physical composition of the planning area in terms of location, type, and intensity of new development and open space to ensure balanced development that maximizes the long-term livability of the San Marcos community.

- *Mobility Element* - Describes the mobility strategy for the City, which identifies a network of options including streets, sidewalks, trails, and transit, that connects people with the City.
- *Conservation and Open Space Element* – Recognizes the habitat and scenic value of natural and cultural open spaces within the City and lists goals and policies that ensure long-term stewardship of these resources. This element also addresses climate change, water conservation, energy conservation, air quality, watersheds, and water quality.
- *Parks, Recreation and Community Health Element* – Identifies the recreational amenities and community service programs offered within the City and outlines goals for increased access to parks, trails, recreational facilities, and community service programs for all community members.
- *Safety Element* - Establishes policies and programs to protect public health, safety, and welfare of all residents and property. This element identifies and describes plans for response to natural and human-caused safety issues, including geologic, seismic, flood, and fire hazards.
- *Noise Element* - Identifies problematic noise sources within the City and outlines strategies to reduce overall ambient noise levels. This element also includes measures to strategically distribute land uses throughout the City.
- *Housing Element* - Describes the strategy for developing a variety of housing opportunities to accommodate all residents and preserve the quality of existing housing in order to promote safe, decent, and affordable housing within the 2021-2029 planning period.
- *Environmental Justice*- Addresses priorities related to a more equitable, safe, and healthy lifestyle for all City residents.

The project's consistency with applicable General Plan goals and policies is presented in **Table 3.8-12**, at the end of this section. The City's Land Use and Community Design Element identifies five goals and associated policies to guide well-balanced land use planning in the city. The following goals and policies from the City of San Marcos General Plan, Land Use Element pertain to land use planning:

- Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.
 - Policy LU-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.
 - Policy LU-1.3: Diversify land uses by providing mixed use land uses in strategic locations within the City that place housing adjacent to employment.
 - Policy LU-1.4: Maintain the natural integrity of open space preserves by ensuring development projects are sensitively integrated along the edges of preserved or protected areas.
- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
 - Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.
 - Policy LU-2.2: Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.

- Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.
- Policy LU-2.5: Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.
- Policy LU-2.7: Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.
- Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.
 - Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.
 - Policy LU-3.5: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.
 - Goal LU-5: Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.
 - Policy LU-5.4: Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.
 - Policy LU-5.6: Require a specific plan for strategic areas/properties that require high-quality design, orientation, and development due to their location or visibility within the community.
 - Policy LU-5.7: Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.
- Goal LU-7: Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.
 - Policy LU-7.2: Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the land use for the proposed project are identified below. Policies associated with Goals M-2 and M-3 are analyzed in Table 3.8-12, located at the end of this section, and discussed in Section 3.11, Transportation. The following goals and policies from the City of San Marcos General Plan, Mobility Element pertain to land use and mobility planning:

- Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.
 - Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map

- Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
- Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:
 - LOS D or better for vehicles as a prioritized mode
 - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
 - The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).
- Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.
- Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.
- Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.
 - Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods, while maintaining the City's desire to provide connectivity on the roadway network.
 - Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.
- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
 - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
 - Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.
 - Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.
 - Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.

- Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

The General Plan includes goals and policies applicable to other areas, such as mobility, safety, noise, conservation, and environmental justice. The project's consistency with applicable General Plan goals and policies is presented in Table 3.8-12, at the end of this section.

San Marcos Municipal Code and Zoning Ordinance, Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The Zoning Ordinance is based on the official Zoning Map of the City of San Marcos. The Zoning Ordinance's purpose is to protect and promote the public health, safety, comfort, convenience, and general welfare of the San Marcos community; to implement the policies of the General Plan; and to provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.

The zoning on the project site is SPA associated with the HOCSP Area. According to Section 22.250.020 of the City's Zoning Ordinance, this zone is intended to "provide the opportunity for a creative, comprehensive planning approach for the use and development of land through innovative building types and site design. This Zone affords flexibility to the developer in a context of City review that ensures comprehensive planning and the provision of necessary public services and facilities. The SPA Zone is intended to implement and is consistent with the SPA land use designation of the General Plan (San Marcos 2023).

3.8.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to land use if it would:

- Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

As identified above, impacts related to physical division of an established community are not discussed in this section. Section 5.9, Environmental Effects Found not to be Significant – Land Use, provides additional information on this topic.

3.8.4 Project Impact Analysis

The project proposes 46 duplex residential units on 8.57 gross acres for a proposed density of 5.37 dwelling units/acre. The requested approvals for the project include:

- **Specific Plan Amendment (SP22-0006)** – A Specific Plan Amendment to modify the HOCSP to remove the current Richmar Sub-Plan designation on the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan.
- **Specific Plan (SP22-0005)** – The Woodward 46 Specific Plan establishes the development rules and regulations of all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the

Specific Plan. The Specific Plan would be required to be reviewed and approved concurrently with the Multi-Family Site Development Plan application.

- **General Plan Amendment (GPA22-0004)** – A General Plan Amendment to the Land Use Element for the purpose of amending land use maps and text related to changing the sub-plan designation of the subject property from Richmar Specific Plan to Woodward 46 Specific Plan.
- **Multi-Family Site Development Plan (MFSDP22-0005)** - Site Development Plan approval would be required to construct 46 multi-family residential units and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.
- **Tentative Subdivision Map (TSM22-0004)** - Tentative Subdivision Map would be required for formation of residential condominium units, private driveways, and open space areas.
- **Conditional Use Permit (CUP22-0005)** - Conditional Use Permit would be required for potential use of a temporary rock crusher.

Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

Plans and policies considered in this analysis include the San Marcos General Plan, the City of San Marcos zoning ordinance and the MHCP.

San Marcos General Plan

The project site has a General Plan Designation of Specific Plan Area (SPA) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses.

The project proposes a Specific Plan Amendment of the HOCSP to remove the Richmar Sub-Plan designation from the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan which would allow for 5.7 dwelling units per acre. The General Plan Amendment of the Land Use Element would amend land use maps and text related to changing the sub-plan designation of the project site from Richmar Specific Plan to Woodward 46 Specific Plan.

Table 3.8-12 at the end of this section summarizes the applicable San Marcos General Plan goals and policies relating to land use. As shown in Table 3.8-12, the project would be consistent with the applicable goals and policies.

Mobility Element Consistency – Level of Service Analysis

The following analysis focuses on automobile delay/LOS, consistent with the City's TIAG. The LOS analysis was conducted to identify roadway deficiencies in the project study area and to recommend project improvements to address such deficiencies. The LTA is incorporated and addressed in this section as it relates to consistency with the City's Mobility Element policies. A VMT analysis, which is required under CEQA, is included as Appendix M of the EIR and summarized in Section 3.11, Transportation.

Analysis Methodology - Intersections

The AM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 7:00 AM and 9:00 AM. The PM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 4:00 PM and 6:00 PM. Tables 3.8-2 and 3.8-3 summarize the LOS criteria for signalized intersections and unsignalized stop-controlled intersections.

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the Highway Capacity Manual (HCM) 6th Edition signalized (Chapter 19) intersection analysis methodology. This method defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time. This technique uses 1,900 vehicles per hour per lane as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for the analysis of signalized intersections are described in Table 3.8-2, identifying the thresholds of control delays and the associated LOS. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

Unsignalized intersections were analyzed using the Highway Capacity 6th Edition side-street stop (Chapter 20) and all-way stop (Chapter 21) intersection analysis methodology. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

LOS was determined as follows:

- All-way stop intersections: Reported for the entire intersection as an average value.
- Side-street stop intersections: Reported for the worst-case movement.

The LOS criteria used for the analysis of unsignalized intersections are described in Table 3.8-3.

Analysis Methodology – Roadway Segments

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. Table 3.8-4 presents the roadway segment capacity standards found in the City's TIAG. The actual capacity of a roadway facility varies according to its physical attributes.

Level of Service Standards

The City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. If the addition of the traffic generated from a proposed project results in any one of the following, improvements should be identified to increase performance to acceptable or pre-project conditions under each scenario:

- Triggers an intersection operating at acceptable LOS to operate at unacceptable LOS (LOS E or F) and increases the delay by more than 2.0 seconds.
- Increases the delay for a study intersection that is already operating at unacceptable LOS (LOS E or F) by more than 2.0 seconds.
- Triggers a roadway segment operating at acceptable LOS (LOS A, B, C, D) to operate at unacceptable LOS and increases the volume/capacity (V/C) ratio by more than 0.02.
- Increases the V/C ratio for a study roadway segment that is already operating at unacceptable LOS (LOS E or F) by more than 0.02.

Project Trip Generation

To determine the traffic generation of the proposed project, the April 2002 SANDAG (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002) rates were applied to the proposed project. The “Condominium” trip rate was used to estimate the project residential trip generation.

Table 3.8-7 presents the trip generation rates and forecasted project-generated trips for weekday conditions. As shown in Table 3.8-7, the project would generate approximately 368 average daily trips (ADT), including 29 AM peak hour trips and 37 PM peak hour trips. The project traffic was distributed based on the site location, access to SR-78, existing traffic patterns in the area and anticipated traffic routes to and from the site. The proposed project’s regional distributions assumes 75% of trips oriented to/from the south, and local distributions assumes 10% oriented to/from the west, 10% to/from the east and 5% to/from the north.

Table 3.8-7. Project Trip Generation

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
		Rate	ADT			In	Out	Total			In	Out	Total
Condominium	46 DU	8/DU	368	8%	20:80	6	23	29	10%	70:30	26	11	37

Source: LLG2023a.

Note: Trip generation rates were obtained from the (*Not so*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002 by SANDAG
DU = Dwelling Unit, ADT = Average Daily Traffic

Construction Trip Generation

Grading of the project site would consist of approximately 41,989 cubic yards (CY) of cut material and 50,270 CY of fill material requiring an export of approximately 8,281 CY of material. If suitable, the excess material would be used as wall backfill and the site would balance. If it is not suitable, it would

be exported from the site. To be conservative, the environmental analysis assumes the materials would be exported. Assuming 15 cy truck trips, that would equate to 553 trips. These trips would be spread over approximately 23 working days for 24 trips per day associated with export. The grading phase of the project is not expected to generate trips above the trips associated with the 46-unit duplex residential development. Therefore, the grading phase would not result in any traffic related significant impacts or substantial effects above those associated with the project. No traffic related impacts are identified during construction.

Local Transportation Analysis of Near-Term (Year 2026) Conditions

The following section presents the analysis of study area intersections and street segments under Near-Term Year 2026 Base conditions and Near-Term Year 2026 Base + Project conditions.

Near-Term Year 2026 Intersection Analysis

Table 3.8-8 summarizes the intersection operations through the study area for the Near-Term Year 2026 Base Condition and Base + Project conditions.

Table 3.8-8. Near-Term Year 2026 - Intersection Operations Without and With Project

#	Intersection	Control Type	Peak Hour	Year 2026 Base Conditions		Year 2026 Base + Project Conditions		$\Delta^{(3)}$	Consistent with City LOS Standards? ⁽⁴⁾
				Avg. Delay (sec.) ⁽¹⁾	LOS ⁽²⁾	Avg. Delay (sec.) ⁽¹⁾	LOS ⁽²⁾		
1	Woodward Street/Project Driveway ⁽⁶⁾	TWSC ⁽⁵⁾	AM	--	--	11.5	B	--	Yes
			PM	--	--	12.8	B	--	Yes
2	Mission Road/Pico Avenue	Signal	AM	36.4	D	36.6	D	0.2	Yes
			PM	29.7	C	29.9	C	0.2	Yes
3	Mission Road/Woodward Street (San Marcos Boulevard)	Signal	AM	81.9	F	82.0	F	0.1	Yes
			PM	71.3	E	71.4	E	0.1	Yes
4	San Marcos Boulevard/Twin Oaks Valley Road	Signal	AM	51.9	D	53.5	D	1.6	Yes
			PM	48.2	D	48.5	D	0.3	Yes
5	San Marcos Boulevard/Rancheros Drive	Signal	AM	29.4	C	29.6	C	0.2	Yes
			PM	32.0	C	32.1	C	0.1	Yes

Source: LLG 2023a.

Notes: (1) Average Delay expressed in seconds per vehicle

(2) LOS = Level of Service

(3) Δ denotes the increase in delay due to project

(4) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.

(5) TWSC = Two-way stop controlled intersection.

(6) Intersection does not exist under Year 2026 Base condition

As shown in Table 3.8-8, in the Near-Term Year 2026 Base condition, all intersections are calculated to operate acceptably at LOS D or better during both the AM and PM peak hours with the exception of:

- Mission Road/Woodward (San Marcos Boulevard) – LOS F (AM Peak Hour) and LOS E (PM Peak Hour)

With the addition of project traffic (Base + Project condition) all intersections would continue to operate acceptably at LOS D with the exception of the Mission Road/Woodward (San Marcos Boulevard) intersection. The project's increase in delay at that intersection would be 0.1 seconds, which is less than the 2 seconds average delay. As part of the project design features (see Table 2-2) the applicant would construct an access point that provides adequate driveway sight distance and construct a minimum 50-foot southbound left-turn pocket on Woodward Street for left-turn access to the project site outside of the southbound through lane. Therefore, none of the study intersections would degrade to an unacceptable level with implementation of the proposed project and no improvements would be required.

Near-Term (Year 2026) Segment Analysis

Table 3.8-9 summarizes the segment operations throughout the study area for the Near-Term Year 2026 Base and Near-Term Year 2026 Base + Project conditions. As shown in Table 3.8-9, all of the study area segments are calculated to operate acceptably at LOS B or better with or without the project.

Table 3.8-9. Near-Term Year 2026 Roadway Segment Operations Without and With Project

Roadway	Segment	Capacity (LOS E) ⁽¹⁾	Year 2026 Base Condition			Year 2026 Base + Project Condition			Δ ⁽⁴⁾	Consistent with City LOS Standards? ⁽⁵⁾
			Daily Volume	V/C ⁽²⁾	LOS ⁽³⁾	Daily Volume	V/C ⁽²⁾	LOS ⁽³⁾		
Mission Road	Pico Avenue to Woodward Street	40,000	11,910	0.298	A	11,947	0.299	A	0.001	Yes
	Woodward Street to Mission Villas Road	60,000	20,690	0.345	A	20,727	0.345	A	0.000	Yes
San Marcos Boulevard	Rancheros Drive to Mission Road	40,000	15,980	0.400	B	16,256	0.406	B	0.006	Yes

Source: LLG 2023a.

Notes: (1) Capacities based on City of San Marcos's Roadway Classification Table

(2) Volume to Capacity

(3) LOS = Level of Service

(4) Δ denotes a project-induced increase in the Volume to Capacity (V/C) ratio.

(5) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.

Local Transportation Analysis of Horizon Year 2050 Conditions

Year 2050 Network Conditions

The Long-Term (Horizon Year 2050) street network in the SANDAG Series 14 forecast model includes the roadways built to their City Mobility Element Classification, including the planned widening of San Marcos Boulevard between Twin Oaks Valley Road and Mission Road to 6-lane Major Arterial standards. For the purposes of the LTA, the network addition is assumed in the long-term traffic volumes forecast but no changes to the study area roadway geometry or intersection control were assumed.

Horizon Year 2050 Intersection Analysis

Table 3.8-10 summarizes the Year 2050 Without and With Project peak hour intersection analysis. As shown in Table 3.8-10, without the project, all intersections are calculated to operate acceptably at LOS D or better during both the AM and PM peak hours with the exception of the following intersections:

- Mission Road/Woodward Street (San Marcos Boulevard) – LOS F (AM and PM Peak Hour)
- San Marcos Boulevard/Twin Oaks Valley Road - LOS E (AM and PM Peak Hour)

With the addition of project traffic all of the study area intersections would continue to operate at LOS D or better with the exception of Mission Road/Woodward Street (San Marcos Boulevard) which would continue to operate at LOS F in the AM and PM Peak hour and San Marcos Boulevard/Twin Oaks Valley Road, which would continue to operate at LOS E in the AM and PM Peak Hour. As shown in Table 3.8-10, the project's increase in delay at these intersection would range from 0.1 seconds to 1.1 seconds which is less than the 2 seconds average delay. Therefore, none of the study intersections analyzed in the Horizon Year 2050 scenario would degrade to an unacceptable level with implementation of the proposed project and no improvements would be required.

Table 3.8-10. Horizon Year (2050) Intersection Operations Without and With Project

#	Intersection	Control Type	Peak Hour	Year 2050 Base Conditions		Year 2050 Base + Project Conditions		$\Delta^{(3)}$	Consistent with City LOS Standards? ⁽⁴⁾
				Avg. Delay (sec.) ⁽¹⁾	LOS ⁽²⁾	Avg. Delay (sec.) ⁽¹⁾	LOS ⁽²⁾		
1	Woodward Street/Project Driveway	TWSC ⁽⁵⁾	AM	--	--	11.7	B	--	Yes
			PM	--	--	13.1	B	--	Yes
2	Mission Road/Pico Avenue	Signal	AM	49.3	D	49.4	D	0.1	Yes
			PM	35.3	D	35.5	D	0.2	Yes
3	Mission Road/Woodward Street (San Marcos Boulevard)	Signal	AM	101.3	F	101.5	F	0.2	Yes
			PM	96.3	F	96.4	F	0.1	Yes
4		Signal	AM	71.4	E	72.5	E	1.1	Yes

#	Intersection	Control Type	Peak Hour	Year 2050 Base Conditions		Year 2050 Base + Project Conditions		$\Delta^{(3)}$	Consistent with City LOS Standards? ⁽⁴⁾
				Avg. Delay (sec.) ⁽¹⁾	LOS ⁽²⁾	Avg. Delay (sec.) ⁽¹⁾	LOS ⁽²⁾		
	San Marcos Boulevard/Twin Oaks Valley Road		PM	58.2	E	58.5	E	0.6	Yes
5	San Marcos Boulevard/Rancheros Drive	Signal	AM	36.6	D	37.1	D	0.5	Yes
			PM	39.0	D	39.4	D	0.4	Yes

Source: LLG 2023a.

Notes: (1) Average Delay expressed in seconds per vehicle

(2) LOS = Level of Service

(3) Δ denotes the increase in delay due to project

(4) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.

(5) TWSC = Two-way stop controlled intersection.

Horizon Year 2050 Segment Operations

Table 3.8-11 summarizes the segment operations throughout the study area for the Year 2050 Without and With Project daily street segment operations. As shown in Table 3.8-11, all of the study area segments are calculated to operate acceptably at LOS B both with and without the project.

Table 3.8-11. Horizon Year 2050 Roadway Segment Operations Without and With Project

Roadway	Segment	Capacity (LOS E) ⁽¹⁾	Year 2026 Base Condition			Year 2065 Base + Project Condition			$\Delta^{(4)}$	Consistent with City LOS Standards? ⁽⁵⁾
			Daily Volume	V/C ⁽²⁾	LOS ⁽³⁾	Daily Volume	V/C ⁽²⁾	LOS ⁽³⁾		
Mission Road	Pico Avenue to Woodward Street	40,000	12,310	0.308	A	12,347	0.309	A	0.001	Yes
	Woodward Street to Mission Villas Road	60,000	21,790	0.363	A	21,287	0.346	A	0.000	Yes
San Marcos Boulevard	Rancheros Drive to Mission Road	40,000	17,380	0.435	B	17,656	0.441	B	0.006	Yes

Source: LLG 2023a.

Notes: (1) Capacities based on City of San Marcos's Roadway Classification Table

(2) Volume to Capacity

(3) LOS = Level of Service

(4) Δ denotes a project-induced increase in the Volume to Capacity (V/C) ratio.

(5) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.

Community Facility District (Congestion Management) Participation

As a condition of project approval, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD2011-01 (Congestion Management).

Public Facility Fees

As a condition of project approval, the applicant/developer/property owner shall pay Public Facility Fees, a portion of which go towards improvements to circulation streets and State Route 78 interchanges.

Consistency with City of San Marcos Zoning Ordinance

The Zoning on the project site is SPA and is associated with the HOCSP Area. No change in zoning is proposed as part of the project. The project would establish its own development criteria under the proposed Woodward 46 Specific Plan.

Multiple Habitat Conservation Program

The project's consistency with the MHCP is analyzed in Section 3.3, Biological Resources, of this EIR. The analysis concludes that while the project is located within the MHCP, it is not located within a Focused Planning Area as defined in the MHCP and Draft San Marcos Subarea Plan. The project would impact Diegan coastal sage scrub and disturbed Diegan coastal sage scrub. The project would mitigate these impacts consistent with the mitigation ratios identified in the MHCP and Draft San Marcos Subarea Plan, as detailed in Section 3.3.5 of the EIR. The project does not result in any inconsistencies with the MHCP and Draft San Marcos Subarea Plan.

3.8.5 Cumulative Impact Analysis

As described in Section 3.8.4 of the EIR, while the project seeks approval of a General Plan Amendment, the proposed project would be consistent with the overarching goals and policies of the City's General Plan (see Table 3.8-12). In addition to the City's General Plan, the proposed project would also be consistent with the City's Municipal Code, San Diego Association of Governments 2050 Regional Transportation Plan/Sustainable Communities Strategy, and applicable plans and policies. Furthermore, as analyzed throughout Chapter 3, implementation of the proposed project would not result in any significant unavoidable impacts that could further impact land use.

All cumulative projects would be subject to similar criteria as the proposed project, which would ensure compliance with existing applicable land use plans with jurisdiction over the project area. Any cumulative projects that propose amendments to the General Plan or Zoning Ordinance would be required to show that proposed uses would not result in significant environmental impacts due to a conflict with applicable policies in a similar way as the proposed project. Since all current and future projects would be analyzed for compatibility and compliance with land use regulations prior to approval, cumulative impacts related to land use and planning are determined to be less than significant.

Regarding the LOS analysis for compliance with the City's Mobility Element, the preceding analysis of the proposed project in Section 3.8.4 is based on methodologies that incorporate the cumulative effects of traffic from general growth and anticipated development in the area. This reflects background traffic and traffic from area-wide growth already approved by the City of San Marcos plus the development of the proposed project. As discussed in Section 3.8.4, the project would not result in any required roadway or intersection improvements due to degraded LOS in the Near Term 2026 nor Horizon Year 2050 time frames. Therefore, the project would not result in any inconsistencies with the goals and policies of the Mobility Element relating to LOS. Cumulative impacts would be **less than significant**.

3.8.6 Mitigation Measures

No land use impacts were identified; therefore, no mitigation measures are required.

3.8.7 Conclusion

The project site has a General Plan and zoning designation of SPA and is associated with the HOCSP. In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. As detailed in Table 3.8-12, the proposed project would be consistent with the applicable goals and policies of the City's General Plan. The project would also be consistent with the MHCP. Based upon the analysis presented in Sections 3.8.3 and 3.8.4, including Table 3.8-12, implementation of the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The analysis also included a detailed analysis to determine the proposed project's consistency with the Mobility Element policies that address LOS. The proposed project would not result in any decreases in LOS to the studies roadways or intersection in the Near Term 2026 and Horizon year 2050 timeframe. Impacts would be less than significant.

Figure 3.8-1. Existing Roadway Conditions

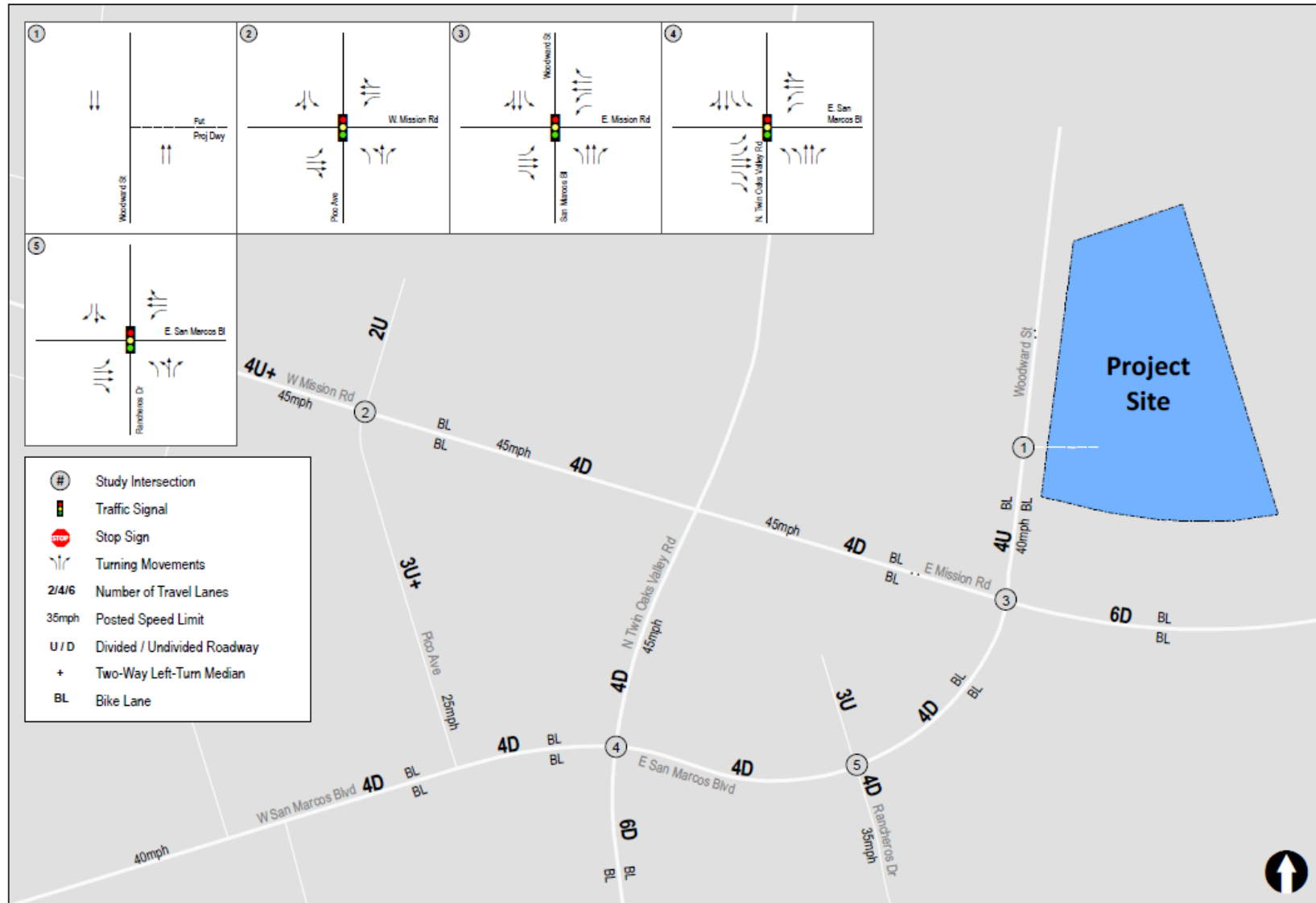


Figure 3.8-2. Existing Traffic Volumes

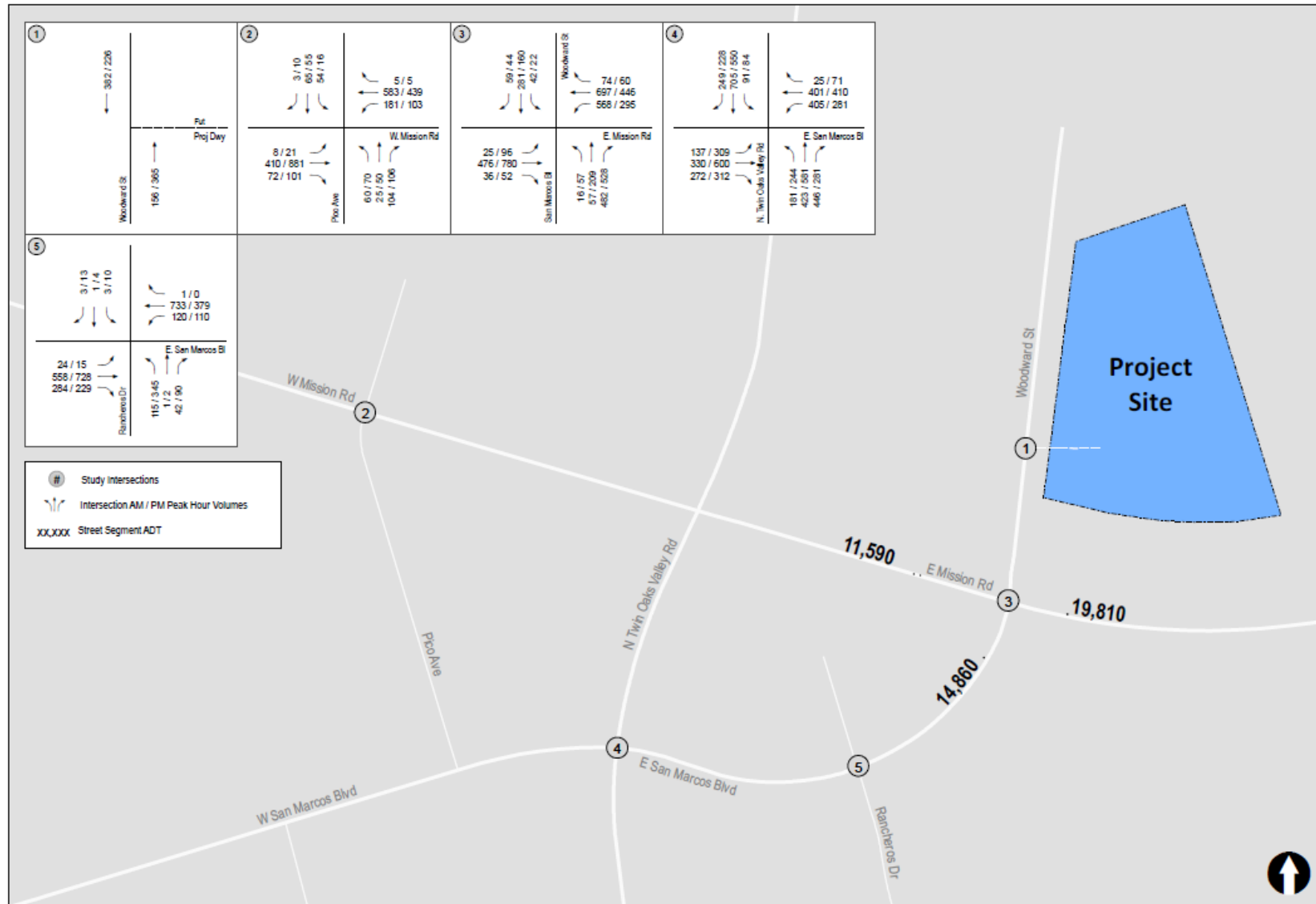


Table 3.8-12. Project Consistency with Applicable San Marcos General Plan Goals and Policies

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Land Use and Community Design Element		
Goal LU-1	Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.	The project would construct 46 duplex residential units. These units would add to the housing stock within the city and the greater North County area of San Diego and would meet the demand for future housing in the city, as contemplated by the City's General Plan. The project is consistent with this goal.
Goal LU-1, Policy LU-1.1/ Goal EJ-1, Policy EJ-1.1	Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.	The project area is developed with a mix of residential uses with commercial and civic uses in the greater project vicinity. The project site is near North County Transit District (NCTD) bus stops on E. Mission Road and the San Marcos Civic Center SPRINTER station. The Specific Plan identifies design concepts to minimize the bulk and scale of the project. This includes: using building-form elements such as place breaks, roof forms, and changes in materials to define individual units; articulating the front and rear elevations both vertically and horizontally; and avoiding long unbroken surfaces on front and rear elevations by providing a change in plane at least every 25 feet. The proposed architectural style takes inspiration from contemporary/modern style architecture. Elements and materials traditionally used for this style include angular pitched roofs using concrete roof tiles, simple forms with stucco or stone veneer walls, metal railings, and awnings. The project is consistent with this policy.
Goal LU-1, Policy LU-1.4	Maintain the natural integrity of open space preserves by ensuring development projects are sensitively integrated along the edges of preserved or protected areas.	The project site is an undeveloped lot in a developed portion of the City. The project has been designed to suit the topography of the site. Development is focused within a portion of the project site that is away from the existing open space area to the north and allows for the retention of larger areas of habitat. The project is consistent with this policy.
Goal LU-2	Promote development standards and land use patterns that encourage long-term environmental sustainability.	The project site is in a developed portion of the City and has been designed in a sustainable manner. The site has been identified for commercial, office and multi-family residential development in applicable planning documents and the project would construct multi-family residential uses. The project site is near NCTD bus stops and a SPRINTER station. The project incorporates green features and has been designed to meet current California Building Code requirements as related to green building practices. Based upon the analysis in this EIR, the project would reduce all significant impacts to below a level of significance through the incorporation of mitigation measures. The project is consistent with this goal.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-2, Policy LU-2.1/ Goal EJ-1, Policy EJ-1.3	Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.	The project would connect to existing pedestrian and bicycle infrastructure on Woodward Street. The project site is near NCTD bus stops on E. Mission Road and the San Marcos Civic Center SPRINTER station. The project is consistent with this policy.
Goal LU-2, Policy LU-2.2	Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.	The project would comply with the latest applicable Title 24 standards. The buildings have been sited to accommodate solar and the installation of rooftop solar is part of the project design. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The project is consistent with this policy.
Goal LU-2, Policy LU 2.3	Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.	The project incorporates green features and has been designed to meet current California Building Code requirements as related to green building practices. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Examples of the project's green features includes: installation of rooftop solar, compliance with the City's Water Efficiency Landscaping Ordinance (WELO,) use of low-water/native species in the landscape plan, garages will be wired for EV chargers, and providing pedestrian connections to Woodward Street. The project is consistent with this policy.
Goal LU-2, Policy LU-2.5	Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.	The proposed landscape plan focuses on native, drought tolerant species including a mix of trees, shrubs, and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: evergreen elm, Marina strawberry tree, Chitalpa pink dawn, Australian willow, Tuscarora crape myrtle, Chinese pistache, African suman, eastern redbud, bronze loquat, sweetshade, shrubby yew podocarpus, Torrey pine, coast live oak, southern live oak, Brisbane box, and little gem magnolia. The proposed project would also comply with the City's WELO and Title 20 of the Municipal Code which minimizes the use of water for irrigation. The landscape concept plan is included as Figure 2-4 and the complete landscape plan and planting palette is included in Appendix A.4.
Goal LU-2, Policy LU-2.7/ Goal EJ-1, Policy EJ-1.5	Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.	The proposed landscape plan includes a mix of trees, shrubs, and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: evergreen elm, Marina strawberry tree, Chitalpa pink dawn, Australian willow, Tuscarora crape myrtle, Chinese pistache, African suman, eastern

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		<p>redbud, bronze loquat, sweetshade, shrubby yew podocarpus, Torrey pine, coast live oak, southern live oak, Brisbane box, and little gem magnolia. The proposed project would also comply with the City's WELO and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-4. As discussed in greater detail in Section 3.7 (Hydrology/Water Quality) the project incorporates biofiltration features and source control and site design best management practices (BMPs) to reduce storm water runoff. The project is consistent with this policy.</p>
Goal LU-3	<p>Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.</p>	<p>The project's internal pedestrian circulation network would connect to the existing sidewalk and bicycle lanes along the project frontage on Woodward Street which would provide connection to the existing NCTD bus stop on E. Mission Road near the project site and the San Marcos Civic Center SPINTER stop 0.1 miles from the project. The project is consistent with this goal.</p>
Goal LU-3, Policy LU-3.1	<p>Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.</p>	<p>The project's internal pedestrian circulation network would connect to the existing sidewalk along the project frontage on Woodward Street which would provide connection to the existing NCTD bus stop on E. Mission Road near the project site and the San Marcos Civic Center SPINTER stop 0.1 miles from the project. The project is consistent with this policy.</p>
Goal LU-3, Policy LU-3.4/ Goal EJ-5, Policy EJ-5.1	<p>Provide non-motorized (pedestrian and bicycle) access/circulation within, and to, mixed-use centers to reduce reliance on the automobile.</p>	<p>The project includes internal walkways that would connect to the sidewalk on Woodward Street. The project is consistent with the policy.</p>
Goal LU-3, Policy LU-3.5/ Goal EJ-5, Policy EJ-5.2	<p>Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.</p>	<p>The project incorporates 6.01 acres of common open space. The project incorporates pedestrian walkways which would connect to the City's larger pedestrian and bicycle network. The sidewalk along the project frontage on Woodward Street is identified as an Urban Trail in the City's Trails Master Plan. The project is consistent with this policy.</p>
Goal LU-5	<p>Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.</p>	<p>The project has been designed to incorporate architectural treatments, including varied rooflines to enhance the appearance of the project. The Specific Plan identifies design concepts to minimize the bulk and scale of the project. This includes: using building-form elements such as place breaks, roof forms, and changes in materials to define individual units; articulating the front and rear elevations both vertically and horizontally; and avoiding long unbroken surfaces on front and rear elevations by providing a change in plane at least every 25 feet. The</p>

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		conceptual landscape plan provides for a mix of trees, shrubs, and groundcover to further enhance the look and feel of the project. The project is consistent with this goal.
Goal LU-5, Policy LU-5.4	Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.	The project site is sloped and the project has been designed to minimize the amount of grading that would be required. No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.25 miles northwest of the project site. The project is consistent with this policy.
Goal LU-5, Policy LU-5.7	Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.	The project has been designed to incorporate architectural treatments, including varied rooflines to enhance the appearance of the project. The Specific Plan identifies design concepts to minimize the bulk and scale of the project. This includes: using building-form elements such as place breaks, roof forms, and changes in materials to define individual units; articulating the front and rear elevations both vertically and horizontally; and avoiding long unbroken surfaces on front and rear elevations by providing a change in plane at least every 25 feet. The conceptual landscape plan provides for a mix of trees, shrubs, and groundcover to further enhance the look and feel of the project. The project is consistent with this goal.
Goal LU-7	Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.	The project site is within the City of San Marcos, surrounded by existing residential development to the north, east and south. Existing services and utilities are present in proximity to the project. The project is in proximity to transit and would provide sidewalks to encourage non-motorized transportation. The project is consistent with this goal.
Goal LU-7, Policy LU-7-2/ Goal EJ-5, Policy EJ-5.3	Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.	The project is in proximity to transit and would connect to the existing sidewalk along the project frontage with Woodward Street. The project is consistent with this goal.
Goal LU-8	Ensure that existing and future development is adequately serviced by infrastructure and public services.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire and police protection services would be offset with payment of appropriate development fees, including payment of Public Facility Fees (PFF) and annexation

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		into and participation in applicable Community Facilities Districts (CFD). Impacts to parks would be offset through provision of on-site recreational facilities and payment of PFF. Additionally, as analyzed in Section 3.13 (Utilities and Service Systems) water and sewer services are available to serve the project. The project would connect to the existing water line in Woodward Street and would also extend the existing sewer line in Woodward Street to the project entrance. The project would also pay applicable Water and Wastewater Capital Facility Fees to Vallecitos Water District (VWD) per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this goal.
Goal LU-8, Policy LU-8.1	New development shall pay its fair share of required improvements to public facilities and services.	As described further in Section 3.10 (Public Services), the project's demand for fire and police protection services would be offset with payment of appropriate CFD and PFF fees. The project is also required to pay appropriate statutory fees for schools, which would ensure impacts to schools are less than significant. Impacts to parks would also be offset through payment of the City's PFF. Additionally, as analyzed in Section 3.13 (Utilities and Service Systems) water and sewer services are available to serve the project. The project would connect to the existing water line in Woodward Street and would also extend the existing sewer line in Woodward Street to the project entrance. The project would also pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this policy.
Goal LU-8, Policy LU-8.2	Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire and police protection services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. Impacts to parks would be offset through provision of on-site recreational facilities and payment of PFF. Additionally, as analyzed in Section 3.13 (Utilities and Service Systems) water and sewer services are available to serve the project. The project would connect to the existing water line in Woodward Street and would also extend the existing sewer line in Woodward Street to the project entrance. The project would also pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-10	Fire protection, emergency services, and law enforcement: Provide effective, high-quality, and responsive services.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this goal.
Goal LU-10, Policy LU-10.1	Provide demand-based firefighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this policy.
Goal LU-10, Policy LU-10.2	Work closely with the County of San Diego Sherriff's Department to determine and meet the community needs for adequate personnel, equipment, and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for police protection services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this policy.
Goal LU-10, Policy LU-10.3	Continue to conduct Public Outreach and education regarding fire safety and crime prevention within San Marcos.	The San Marcos Fire Department public education program provides comprehensive fire education via presentations, informational demonstrations, health fairs, and station tours, among others. The San Diego County Sheriff's Department provides safety presentations to youth groups and community groups through their Community Oriented Policing and Problem Solving deputies. Deputies also attend Neighborhood Watch meetings. In addition, the Crime Prevention Unit focuses on community outreach regarding crime prevention techniques, current trends, and prevention education. The project's annexation into and contribution to the applicable CFD would aid in the continued provision of these services. The project is consistent with this policy.
Goal LU-11	Schools: Ensure all residents have access to high-quality education.	Students generated by the project would attend Richland Elementary School, Woodland Park Middle School, and Mission Hills High School. The project applicant would be required to pay all applicable development fees including payment of school mitigation fees, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050, The project is consistent with this goal.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal LU-11, Policy LU-11.1	Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior, accessible facilities that complement the surrounding land uses.	The project would generate 35 students for SMUSD. The project developer would pay school mitigation fees to offset impacts to schools. The project is consistent with this policy.
Goal LU-11, Policy LU-11.2	Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.	The project would generate 35 students for SMUSD. The project developer would pay school mitigation fees to offset impacts to schools. The project is consistent with this policy.
Goal LU-12	Libraries: Provide library resources and services that meet the needs of the community.	While development of the proposed project would increase demand for library services and resources, the project does not include construction of any library facilities. However, additional library services are available in the County through the Serra Cooperative Library System as well as through California State University San Marcos (CSUSM) and Palomar Community College. Therefore, a less than significant impact was identified for this issue (see Section 3.10, Public Services). The project is consistent with this goal.
Goal LU-12, Policy LU-12.1	Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.	While development of the proposed project would increase demand for library services and resources, the project does not include construction of any library facilities. However, additional library services are available in the County through the Serra Cooperative Library System as well as through CSUSM and Palomar Community College. Therefore, a less than significant impact was identified for this issue (see Section 3.10, Public Services). The project is consistent with this goal.
Goal LU-13	Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis,	The landscape plan for the project focuses on low-water use, native species. The Landscape Plan is presented in Figure 2-4. The proposed landscaping plan conforms to strict water conservation measures, including the City's WELO. Additionally, the

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	to ensure an adequate water supply for existing and future residents.	project is required to pay Water Capital Facility Fees to VWD. The project is consistent with this goal.
Goal LU-13, Policy LU-13.1	Work closely with local and regional water providers to ensure high quality water supplies are available for the community.	VWD treats water to meet stringent state and federal standards. Ensuring quality at the source is cheaper than treatment. As described in Section 3.7 (Hydrology/Water Quality), the project would not contribute significant polluted runoff due to the incorporation of bioretention and water quality BMPs. Therefore, the project would not impact any local or regional water supplies. The project is consistent with this policy.
Goal LU-13, Policy LU-13.2	Actively promote water conservation programs aimed at reducing demand.	VWD promotes conservation and has issued drought alerts under drought conditions. While not currently in effect, future residential users within this district would be required to comply with any drought alerts and required conservation measures that would reduce demand. The project also incorporates low-water landscaping and would be required to comply with the City's WELO. The project is consistent with this policy.
Goal LU-13, Policy LU-13.3	Encourage exploration and use of deep underground wells to reduce reliance on treatable water.	The project would irrigate proposed landscaping with potable water. Groundwater use is not proposed by the project. The project's landscape plan focuses on low-water and drought-tolerant species and meets the requirements of the City's WELO. The project is consistent with this policy.
Goal LU-14	Wastewater: Ensure an adequate wastewater system for existing and future development.	Based on the analysis in Section 3.13 (Utilities and Service Systems), there is currently adequate wastewater treatment capacity to serve the project. the project would extend the existing gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. The project applicant would also pay VWD Wastewater Capital Facility Fees for portions of the improvements. The project is consistent with this goal.
Goal LU-14, Policy LU-14.1	Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.	Based on the analysis in Section 3.13 (Utilities and Service Systems), there is currently adequate wastewater treatment capacity to serve the project. The project would extend the existing gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. The project applicant would also pay VWD Wastewater Capital Facility Fees for portions of the improvements. The project is consistent with this policy.
Goal LU-14, Policy LU-14.2	Ensure development approval is directly tied to commitments for the construction or	Based on the analysis in Section 3.13 (Utilities and Service Systems), there is currently adequate water and wastewater treatment capacity to serve the project. Expansion of existing wastewater facilities would be necessary to accommodate

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	improvement of primary water, wastewater, and circulation systems.	buildout of the VWD services area per the 2018 Master Plan. The project would construct sewer improvements as detailed in Section 3.13.4 of the EIR. The project may also pay Water Capital Facility Fees to VWD and Wastewater Capital Facility Fees to VWD. Additionally, as discussed in Section 3.8.4, above and in Section 3.11 (Transportation), the project will not impact any circulation systems. The project is consistent with this policy.
Goal LU-15	Flood control and storm water drainage facilities: ensure adequate flood control and storm water drainage is provided by the community.	As identified in Section 3.7 (Hydrology/Water Quality), off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. Therefore, implementation of the project would not impact flood control or storm water drainage facilities. The project is consistent with this goal.
Goal LU-15, Policy LU-15.1	Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and receiving waters.	As identified in Section 3.7 (Hydrology/Water Quality), implementation of the project's comprehensive water quality management plan, which incorporates biofiltration and BMPs, would ensure the project would treat runoff containing the pollutants of concern for locally impaired water bodies. Implementation of the project would reduce pollutants entering the San Marcos Storm Water Conveyance System and receiving waters. The project is consistent with this policy.
Goal LU-15, Policy LU-15.2	Improve inadequate or undersized drainage/flood control facilities to solve both small neighborhood and large regional drainage and flood control problems.	As identified in Section 3.7 (Hydrology/Water Quality), off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. No inadequate or undersized drainage/ flood control facilities were identified that serve the project area. Therefore, implementation of the project would not impact flood control or storm water drainage facilities. The project is consistent with this policy.
Goal LU-15, Policy LU-15.3	Avoid, to the extent possible, development in floodplain and flood prone areas.	The project does not propose development within a floodplain or flood prone area. The project is consistent with this policy.
Goal LU-15, Policy LU-15.4	Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.	The project is adequately designed such that it would not substantially alter the existing drainage pattern of the site or area. The project would detain and retain runoff through the site with combined water quality and hydromodification bioretention and BMPs. The project is consistent with this policy.
Goal LU-16	Solid waste: reduce the amount of waste material entering regional landfills with an	As discussed in Section 3.13 (Utilities and Service Systems), the City of San Marcos has a disposal rate target of 8.9 lbs/person/day. If the City meets this target, the City

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	efficient and innovative waste management program.	is considered in compliance with the 50% diversion requirement of AB 939. The most recent data (2022) from CalRecycle identifies the annual per capital disposal rate for the City of San Marcos is 5.3 lbs/person/day. Thus, the City is exceeding their current targets for diversion. In accordance with AB 341, the project would be required to achieve a 75 % waste diversion rate. All green waste would be diverted from landfills and recycled as mulch. The Sycamore Sanitary Landfill has sufficient permitted capacity to accommodate the project's solid waste disposal needs. The project is consistent with this goal.
Goal LU-16, Policy LU-16.1	Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.	Non-recyclable waste, including general trash and green materials, would be collected and transported for disposal by EDCO, a licensed hauler. According to Section 3.13 (Utilities and Service Systems), the Sycamore Sanitary Landfill has sufficient permitted capacity to accommodate the project's solid waste disposal needs. In accordance with AB 341, the project would be required to achieve a 75% waste diversion rate. All green waste would be diverted from landfills and recycled as mulch. The project is consistent with this policy.
Goal LU-16, Policy LU-16.2	Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.	The City of San Marcos is in compliance with AB 939, which requires 50% waste diversion through recycling. The project is consistent with this policy.
Policy LU-17.2	Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.	As discussed in Section 3.13 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Woodward Street. This work would take place within the existing right-of-way and would not disturb any vegetation. The project is consistent with this policy.
Policy LU-17.3	The City shall prohibit above ground utility equipment within any of the pedestrian pathway and street frontage areas. All above ground utilities shall be placed either within; "wet closets" within the buildings, underground	As discussed in Section 3.13 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. The project

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	vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.	would be served by SDG&E for electricity and gas service. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Woodward Street.. This work would take place within the existing right-of-way and would not disturb any vegetation. The project is consistent with this policy.
Mobility Element		
Goal M-1	Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.	The project would connect to the existing sidewalk and bicycle lane along the project frontage on Woodward Street. The project is consistent with this goal.
Goal M-1, Policy M-1.1	Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.	Based upon the traffic analyses prepared for the project by LLG (2023), the project does not result in any transportation impacts, nor does it result in any safety concerns. The project is consistent with this policy.
Goal M-1, Policy M-1.2	Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.	The project has been designed to include an access driveway and internal drive aisle with cul-de-sacs. No private streets are proposed. The project does not result in any significant transportation related impacts and no improvements beyond what is already proposed as part of the project design are required (construct an access point that provides adequate driveway sight distance and construct a minimum 50-foot southbound left-turn pocket on Woodward Street for left-turn access to the project site outside of the southbound through lane). The project is consistent with this policy.
Goal M-1, Policy M-1.4	Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element: LOS D or better for Vehicles as a prioritized mode or the City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).	The local transportation analysis prepared for the project (Appendix J) relied on this LOS technique to determine project-related impacts to the circulation network. As summarized in Section 3.8.4 (Land Use and Planning), study area intersections and roadway segments would continue to operate at an acceptable LOS with implementation of the project. The project would be consistent with this policy.

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Goal M-1, Policy M-1.6/ Goal EJ-2, Policy EJ-2.10	Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network on Woodward Street. The project is consistent with this policy.
Goal M-1, Policy M-1.7/ Goal EJ-2, Policy EJ-2.11	Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.	Complete streets balance the needs of all users, both motorized and non-motorized, in design and construction. The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network on Woodward Street. The project is consistent with this policy.
Goal M-2	Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.	Travel modes within and surrounding the project area include vehicular, pedestrian, and bicycle. The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network on Woodward Street. The project is consistent with this goal.
Goal M-2, Policy M-2.1	Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network on Woodward Street. The project is consistent with this policy.
Goal M-3	Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.	There are NCTD bus stops near the project on E. Mission Road and the project is 0.1 miles from SPRINTER station at the San Marcos Civic Center. As a design feature each residential garage would be wired to accommodate an EV charger. Therefore, the project is consistent with this goal.
Goal M-3, Policy M-3.1/ Goal EJ-1, Policy EJ-1.8	Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the	The project site is located near public transit and the project's pedestrian pathways connect to existing sidewalks along Woodward Street. The placement of residential uses near transit options would provide for convenient nearby transit access to future residents of the project. Therefore, the project is consistent with this policy.

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	role of the street as a public space that unites the City.	
Goal M-3, Policy M-3.2	Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.	The project would not impact any existing bicycle or pedestrian infrastructure. The project's pedestrian pathways would connect to existing pedestrian and bicycle infrastructure on Woodward Street. Therefore, the project is consistent with this policy.
Goal M-3, Policy M-3.3	Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.	The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network on Woodward Street. The project is consistent with this policy.
Goal M-3, Policy M-3.5/ Goal EJ-5, Policy EJ-5.5	Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.	There is an existing sidewalk along the project frontage on Woodward Street. For any temporary disruptions to the sidewalk due to project construction, signage would be placed to alert pedestrians. The project would not result in any long-term impacts to the existing pedestrian network in the project vicinity. The project is consistent with this policy.
Goal M-3, Policy M-3.9/ Goal EJ-5, Policy EJ-5.6	Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.	Pedestrian areas are incorporated into the project design and include landscaping, shade trees and a common open space area with play equipment and seating. The project would connect to the existing sidewalk on Woodward Street. The project is consistent with this policy.
Conservation and Open Space Element		
Goal COS-1	Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.	A biological technical report (Appendix D.1) , rare plant survey memorandum (Appendix D.2), Coastal California Gnatcatcher protocol survey (Appendix D.3) and Crotch's bumble bee protocol survey (Appendix D.4) were prepared for the project and summarized in Section 3.3. (Biological Resources). The project would impact sensitive habitat and has the potential to impact sensitive species. Implementation of

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		mitigation measures MM-BIO-1 through MM-BIO-6 would reduce these impacts to below a level of significance. The project is consistent with this goal.
Goal COS-1, Policy COS-1.1	Support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.	A biological technical report (Appendix D.1) and rare plant survey memorandum (Appendix D.2) were prepared for the project and summarized in Section 3.3 (Biological Resources). The project site supports sensitive habitat and mitigation measures would be implemented to reduce impact to below a level of significance MM-BIO-1 through MM-BIO-6. The project design includes common open space, a portion of which may be placed in a biological conservation easement, which would contribute to the blocks of preserved habitat in the project vicinity. The project is consistent with this policy.
Goal COS-1, Policy COS-1.2	Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.	No oak woodlands, jurisdictional wetlands, or habitat linkages occur on the project site. The project would impact sensitive habitat (Diegan coastal sage scrub and disturbed Diegan coastal sage scrub) and has the potential to impact sensitive species. Implementation of mitigation measures MM-BIO-1 through MM-BIO-6 would reduce these impacts to below a level of significance. The project is consistent with this goal.
Goal COS-2	The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.	The project site is an undeveloped parcel in a developed portion of the city and has been identified for development in the City's General Plan. The project would impact sensitive habitat and has the potential to impact sensitive species. Implementation of mitigation measures MM-BIO-1 through MM-BIO-6 would reduce these impacts to below a level of significance. The project is consistent with this policy.
Goal COS-2, Policy COS-2.1	Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.	The project proposes 6.01 acres of common open space. Portions of the common open space area within Lot A may be preserved as biological habitat and subject to an open space easement. The project is consistent with this policy.
Goal COS-2, Policy COS-2.2	Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.	The project site is an undeveloped parcel in a developed portion of the city and has been identified for development in the City's General Plan. The project site supports sensitive habitat including Diegan coastal sage scrub and disturbed Diegan coastal sage scrub. The project has been designed to cluster development to leave larger blocks of habitat intact. Mitigation measures are incorporated to offset impacts to sensitive habitat and potential impacts to sensitive species. There are no flood hazard management issues with the project. Water supply and resources were

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		addressed in Section 3.13 (Utilities and Service Systems) and it was concluded that there is adequate potable water service to serve the project. The project also incorporates low-water landscaping and would be required to comply with the City's WELO. The project is consistent with this policy.
Goal COS-2, Policy COS-2.5	Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.	The proposed project's potential impacts to cultural resources are detailed in Section 3.4 (Cultural Resources). An archaeological survey report was also prepared for the project (ASM 2024). The City reached out to tribes consistent with the requirements of Senate Bill 18 and Assembly Bill (AB) 52 and met with tribes that requested consultation. Mitigation measures are incorporated into the EIR (MM-CR-1 and MM-CR-2) to reduce impacts to cultural resources to below a level of significance. The project is consistent with this policy.
Goal COS-2, Policy COS-2.6	Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.	The project site has scattered trees including eucalyptus, queen palm and Mexican fan palm. The proposed landscape plan includes 246 trees which greatly exceeds the requirements of a 1:1 replacement ratio. Proposed tree species include: evergreen elm, Marina strawberry tree, Chitalpa pink dawn, Australian willow, Tuscarora crape myrtle, Chinese pistache, African sumac, eastern redbud, bronze loquat, sweetshade, shrubby yew podocarpus, Torrey pine, coast live oak, southern live oak, Brisbane box, and little gem magnolia. The project is consistent with this policy.
Goal COS-3	Protect natural topography to preserve and enhance the natural beauty of San Marcos.	The project has been designed to complement the existing topography on the site. Views of the surrounding hillsides would remain unobstructed from SR-78; however the project would be visible from area roadways, particularly the Twin Oaks Valley Road bridge. The project site is not a protected scenic vista. The project also incorporates extensive design features that ensure that the visual character changes blend with the existing topography and surrounding development including the use of retaining walls to minimize grading, the use of neutral colors on building and retaining walls, and implementation of a comprehensive landscape plan. The project is consistent with this goal.
Goal COS-3, Policy COS-3.1	Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.	None of the prominent landforms as identified in the General Plan are on-site. While implementation of the proposed project would result in changes in the viewshed, development would not alter or impede views of prominent landforms. Views to prominent landforms would remain unobstructed. In addition, the project site is not a protected scenic vista. The project is consistent with this policy.

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Goal COS-3, Policy COS-3.2	Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.	The proposed architectural design includes elevation treatments, varied rooflines, and a mix of materials and neutral colors. The project has been designed to respect the existing topography on the site and incorporates retaining walls to minimize the amount of grading on the project site. Landscape materials would be used to enhance architectural elements and the provided street trees would enhance the pedestrian experience along the project frontages. The landscape planting palette for manufactured slopes would blend in with the existing natural vegetation. The project is consistent with this policy.
Goal COS-3, Policy COS-3.3	Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.	The project has been designed to respect the existing topography by clustering the development within a portion of the project site. The project site is not located in a view corridor or wildlife corridor. Development has been focused away from the preserved open space area to the north of the project site. The project is consistent with this policy.
Goal COS-3, Policy COS-3.4	Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.	Development of the proposed project would create new sources of light at a site that is currently undeveloped. Lighting would be guided by the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards to aid in the preservation of dark sky conditions. Additional lighting specification are included in Section 4.2.6 of the Woodward 46 Specific Plan. Lighting impacts were determined to be less than significant (Section 3.1 Aesthetics). The project is consistent with this policy.
Goal COS-4	Improve regional air quality and reduce greenhouse gas (GHG) emissions that contribute to climate change.	The project's impact to air quality would be less than significant as described in Section 3.2 (Air Quality) of this EIR. The project would not conflict with or obstruct implementation of any air quality plan or violate any air quality standard. Based upon the analysis in Section 5.6 (Greenhouse Gas), the project screens out of a detailed GHG analysis since it proposes fewer than 55 multi-family units. GHG impacts are presumed to be less than significant. The project is consistent with this goal.
Goal COS-4, Policy COS-4.1/ Goal EJ-1, Policy EJ-1.9	Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.	Implementation of the proposed project would not exceed any air quality standard during construction or operation (see Section 3.2, Air Quality). Impacts are less than significant. The project is consistent with this policy.
Goal COS-4, Policy COS-	Participate in regional efforts to reduce GHG emissions.	The project is not anticipated to impair implementation of AB 32. Development of the project would not affect regional efforts to reduce GHG emissions. The City's updated 2020 Climate Action Plan (CAP) quantifies community emissions, identifies emission

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4.3/ Goal EJ-1, Policy EJ-1.11		reduction targets, and specifies climate action measures to reduce GHG emissions. Based upon the analysis in Section 5.6 (Greenhouse Gas), the proposed project screens out of a detailed GHG analysis since it proposes fewer than 55 multi-family units. GHG impacts are presumed to be less than significant. The project is consistent with this policy.
Goal COS-4, Policy COS-4.4/ Goal EJ-1, Policy EJ-1.12	Quantify community wide and municipal GHG emissions, set a reduction goal, identify, and implement measures to reduce GHG emissions as required by governing legislation.	The City's updated 2020 CAP quantifies community emissions, identifies emission reduction targets, and specifies climate action measures to reduce GHG emissions. Based upon the analysis in Section 5.6 (Greenhouse Gas), the proposed project screens out of a detailed GHG analysis since it proposes fewer than 55 multi-family units. GHG impacts are presumed to be less than significant. The project is consistent with this policy.
Goal COS-4, Policy COS-4.5/ Goal EJ-1, Policy EJ-1.13	Encourage energy conservation and the use of alternative energy sources within the community.	As discussed in Section 3.13 (Utilities and Service Systems), the proposed project includes various on-site features and measures to reduce the proposed project's energy consumption. The project would be built-in compliance with Title 24 requirements applicable at that time. Additionally, as a design feature, each garage would be wired to accommodate an EV charger. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-4, Policy COS-4.6 Goal EJ-1, Policy EJ-1.14	Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.	As discussed in Section 3.13 (Utilities and Service Systems), the proposed project includes various on-site features and measures to reduce the proposed project's energy consumption. The project would be built-in compliance with Title 24 requirements applicable at that time. Additionally, as a design feature, each garage would be wired to accommodate an EV charger. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-4, Policy COS-4.8/ Goal EJ-1, Policy EJ-1.15	Encourage and support the generation, transmission, and use of renewable energy.	Development on the project site would meet the requirements of California's Building Energy Efficiency Standards, which focus on several key areas to improve the energy efficiency of newly constructed buildings. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-5	Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.	VWD promotes conservation and has issued drought alerts under drought conditions. Future residential users within this district would be required to comply with any issued alerts and required conservation measures that would reduce demand. The

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		project proposes a landscape plan that emphasizes low water use species in adherence to the City of San Marcos Water Efficient Landscape Ordinance. The project is consistent with this goal.
Goal COS-6	Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos subwatersheds.	The project is located within a watershed with numerous impaired water bodies. The BMP Design Manual requires that pollutants of concern for each impaired water body in the watershed be treated by engineered treatment controls to a medium pollutant removal efficiency or better prior to leaving the project site. The project proposes treatment of storm water runoff via biofiltration facilities prior to discharge, which would result in a medium or high efficiency for removal of the pollutants of concern. Any groundwater infiltration would likely reach surface flows before reaching groundwater due to the approximate depth to groundwater. Therefore, the project would not have a potentially significant adverse impact on groundwater quality or result in significant impacts to impaired water bodies. The project is consistent with this goal.
Goal COS-6, Policy COS-6.2	Promote watershed stewardship as the community norm.	The project includes a comprehensive water quality management approach, which incorporates biofiltration and the use of BMPs, to ensure the project would not contribute any pollutants to area watersheds. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a Stormwater Pollution Prevention Plan (SWPPP), and implement BMPs in compliance with the National Pollution Discharge Elimination System (NPDES) permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would contribute to watershed stewardship. The project is consistent with this policy.
Goal COS-7	Achieve sustainable watershed protection for surface and ground water quality that balances social, economical, and environmental needs.	The project includes a comprehensive water quality management approach, which incorporates biofiltration and the use of BMPs, to ensure the project would not contribute any pollutants to area watersheds. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would contribute to watershed stewardship. The project is consistent with this policy.
Goal COS-8	Focus watershed protection, surface and groundwater quality management on sources	Implementation of the project's comprehensive water quality management plan, which incorporates biofiltration and the use of BMPs, would ensure that the project

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	and practices that the City has the ability to affect.	would treat runoff containing the pollutants of concern for locally impaired water bodies. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would reduce construction effects on receiving water quality and protect stormwater runoff. The project is consistent with this policy.
Goal COS-8, Policy COS-8.4	Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, BMPs, LID, hydromodification strategies consistent with the Current San Diego RWQCB Municipal Stormwater NPDES Permit, and all future municipal stormwater permits.	Implementation of the project's comprehensive water quality management plan, which incorporates biofiltration and the use of BMPs, would ensure that the project would treat runoff containing the pollutants of concern for locally impaired water bodies. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would reduce construction effects on receiving water quality and protect stormwater runoff. The project is consistent with this policy.
Goal COS-10	Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.	As discussed in Section 3.13 (Utilities and Service Systems), according to CalRecycle, the City of San Marcos has a disposal rate target of 8.9 lbs/person/day. If the City meets this target, the City is considered in compliance with the 50% diversion requirement of AB 939. The most recent data (2022) from CalRecycle identifies the annual per capita disposal rate as 5.3 pounds per person per day (CalRecycle 2022). Thus, the City is exceeding their target for diversion. In accordance with AB 34, the project would be required to achieve a 75% waste diversion rate. All green waste would be diverted from landfills and recycled as mulch. The Sycamore Sanitary Landfill has sufficient permitted capacity to accommodate the project's solid waste disposal needs. The project is consistent with this goal.
Goal COS-10, Policy COS-10.1	Promote the curbside recycling program to divert residential refuse from the landfills.	The City of San Marcos is in compliance with AB 939, which requires 50% waste diversion through recycling. The project would participate in the City's recycling efforts. The project is consistent with this policy.
Goal COS-11	Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.	An archaeological survey report was prepared for the project site and summarized in Section 3.4 (Cultural Resources) Mitigation measures are incorporated (MM-CR-1 and MM-CR-2) to reduce potential impacts to archaeological resources to below a level of significance. There are no historical resources on the project site. As discussed in

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		Section 3.6 (Geology and Soils), the project site supports plutonic bedrock granite and colluvium and would be very unlikely to contain paleontological resources. . The project is consistent with this goal.
Goal COS-11, Policy COS-11.1	Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.	An archaeological survey report was prepared for the project site and summarized in Section 3.4 (Cultural Resources). Mitigation measures (MM-CR-1 and MM-CR-2) are incorporated to reduce potential impacts to archaeological resources to below a level of significance. There are no historical resources on the project site. The project is consistent with this policy.
Goal COS-11, Policy COS-11.2	Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.	There are no historical resources on the project site, therefore the project would not have the potential to impact such resources (ASM 2024). The project is consistent with this policy.
Parks, Recreation and Community Health Element		
Goal PR-1	Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high quality recreational facilities.	Section 5.13 (Environmental Effects Found Not to Be Significant - Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 143 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes common open space areas, including a tot lot, turf play areas and a sensory garden. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this goal.
Goal PR-1, Policy PR-1.1/ Goal EJ-2, Policy EJ-2.6/ Goal EJ-5, Policy EJ-5.7	Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be	Section 5.13 (Environmental Effects Found Not to Be Significant - Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 143 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes common open space areas, including a tot lot, turf play areas and a sensory garden.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.	With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.3/ Goal EJ-2, Policy EJ-2.7	Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.	Section 5.13 (Environmental Effects Found Not to Be Significant - Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 143 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes common open space areas, including a tot lot, turf play areas and a sensory garden. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.4/ Goal EJ-5, Policy EJ-5.8	Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.	Section 5.13 (Environmental Effects Found Not to Be Significant - Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 143 residents. The project would connect to Woodward Street which is developed with sidewalks and bicycle lanes which can help future residents access other local parks and recreation spaces. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes common open space areas, including a tot lot, turf play areas and a sensory garden. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.5/ Goal EJ-5, Policy EJ-5.8	Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.	Section 5.13 (Environmental Effects Found Not to Be Significant - Recreation) analyzed the project's impact on recreational facilities. The proposed project would result in an increase in the City of San Marcos population by approximately 143 residents which equates to 0.72 acres of parks space applying the 5 acres per 1,000 resident ratio. The project includes 6.01 acres of common open space which includes 0.2 acre of recreation areas. The project will exceed the requirement. Additionally, the proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City, in addition to what is provided on-site. The project includes common open space

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		areas, including a tot lot, turf play areas and a sensory garden. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.7	Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.	Safety considerations of the proposed project are discussed in Section 3.10 (Public Services). As proposed, the project, including development of common open space areas does not present any unique public safety challenges. The proposed project is consistent with this policy.
Goal PR-2, Policy PR-2.2/ Goal EJ-5, Policy EJ-5.10	Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars.	The City's Master Trail Plan identifies an existing Urban Trail along the project frontage. The project's driveway would provide access to this pedestrian facility. The project is consistent with this policy.
Safety Element		
Goal S-1	Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.	The project would implement all recommendations from the geotechnical investigation (Appendix G of the EIR). Additionally, development on the project site would be subject to the requirements of the latest California Building Code (CBC) for resistance to seismic shaking and would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of the State of California Occupational Safety and Health Administration (Cal/OSHA) to minimize risks from earthquakes. The project is consistent with this goal.
Goal S-1, Policy S-1.1	Reduce the risk of impacts from geologic and seismic hazards by applying current and proper land use planning, development engineering, building construction, and retrofitting requirements.	The project would implement all recommendations from the geotechnical investigation (Appendix G of the EIR). Additionally, development on the project site would be subject to the requirements of the latest CBC for resistance to seismic shaking, and would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of Cal/OSHA to minimize risks from earthquakes. The project is consistent with this policy.
Goal S-1, Policy S-1.2	Investigate specific groundwater levels and geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture,	There is no known faulting at the project site so the potential for surface fault rupture is low. The project site is not located in a State liquefaction susceptibility zone and is mapped in an area with generally zero to low liquefaction. The project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	liquefaction, or other geologic hazards are suspected.	
Goal S-2	Minimize the risk to people, property, and the environment due to flooding hazards.	The project site is not located within a 100-year flood hazard area nor within the City's Flood Damage Prevention Overlay Zone. Additionally, off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. The project is consistent with this goal.
Goal S-2, Policy S-2	Require existing private development to take responsibility for maintenance and repair of structures to resist flood damage.	The project site is not located within a 100-year flood hazard area nor within the City's Flood Damage Prevention Overlay Zone. Additionally, off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. The project is consistent with this policy.
Goal S-3	Minimize injury, loss of life, and damage to property results from structure or wildland fire hazards.	Implementation of the proposed project would result in a developed area with roads, structures, and landscape vegetation. The project site is located in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this goal.
Goal S-3, Policy S-3.1	Require development to be located, designed, and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility, and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.	The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.2	Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination	According to Section 3.10 (Public Services), the project would have a less than significant impact on fire protection services. Additional staff and resources would be provided via Community Facilities District No. 2001-01, into which the project would

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	among fire protection and emergency service providers.	annex and pay required mitigation fees. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.3	Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.	Access to the project site would be via one unsignalized driveway on Woodward Street. The access driveway and internal drive aisle have been designed to allow for access by emergency response equipment including fire trucks. The fire Marshal has reviewed and approved the project plans. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.4	Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.	The Fire Marshal has reviewed the project plans. The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.6	<p>Protect communities from unreasonable risk of wildfire within very high fire hazard severity zones.</p> <ul style="list-style-type: none"> a. Assess site constraints when considering land use designations near wildlands to avoid or minimize wildfire hazards as part of a community plan update or amendment. b. Identify building and site design methods or other methods to minimize damage if new structures are located in very high fire hazard severity zones on undeveloped land and when rebuilding after fire. c. Require ongoing brush management to minimize the risk of structural damage or loss due to wildfires. d. Provide and maintain water supply systems to supplies for structural fire suppression. e. Provide adequate fire protection. 	The Fire Marshal has reviewed the project plans. The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal S-4	Protect life, structures, and the environment from the harmful effects of hazardous materials and waste.	During construction, there is a potential for accidental upset of fuels, lubricants, and other materials; however, there are existing federal and state standards in place for the handling, storage, and transport of these materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. Additionally, the project site and surrounding properties are not considered hazardous materials sites. See Section 5.7 (Environmental Effects Found Not to be Significant - Hazards and Hazardous Materials) for additional information. The proposed project is consistent with this goal.
Goal S-4, Policy S-4.1	Promote and support the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials in accordance with applicable federal, State, and local regulations.	During construction, there is a potential for accidental upset of fuels, lubricants, and other materials; however, there are existing federal and state standards in place for the handling, storage, and transport of these materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. Additionally, the project site and surrounding properties are not considered hazardous materials sites. See Section 5.7 (Environmental Effects Found Not to be Significant - Hazards and Hazardous Materials) for additional information. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.2/ Goal EJ-1, Policy EJ-1.21	Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.	As discussed in Section 5.7 (Environmental Effects Found Not to be Significant – Hazards and Hazardous Materials), based on a search of the Department of Toxic Substance Control (DTSC) EnviroStor site conducted on May 16, 2023, there are no current or past permitted facilities or cleanup activities on the project site. The project would not develop an area of known or suspected contamination. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.3/ Goal EJ-1, Policy EJ-1.22	Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected.	The proposed project is not anticipated to generate, release, or use large amounts of hazardous materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. The proposed project is not anticipated to impact any sensitive uses in the project vicinity. The proposed project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal S-4, Policy S-4.4/ Goal EJ-1, Policy EJ-1.23	Avoid locating sensitive uses near established hazardous materials users or industrial areas where incompatibilities would result, except in cases where appropriate safeguards have been developed and implemented.	<p>As discussed in Section 5.7 (Environmental Effects Found Not to be Significant – Hazards and Hazardous Materials), based on a search of the DTSC EnviroStor site conducted on May 16, 2023, there are no current or past permitted facilities or cleanup activities on or adjacent to the project site. The closest listed sites per EnviroStor are: 1) TRI-M-CO, 528 E. Mission Road - A leaking underground storage tank (LUST) cleanup site located approximately 0.4 miles east of the project site. The cleanup was completed in 1993 and the case is closed; and 2) United States Post Office, 420 N. Twin Oaks Valley Road - A LUST cleanup site located approximately 0.2 miles west of the project site. The cleanup was completed in 2006 and the case is closed.</p> <p>Due to the distance of these listings from the project site as well as the fact that they have been cleaned up, there would be no impact associated with the project. The proposed project is consistent with this policy.</p>
Goal S-5	Establish and maintain an effective emergency response program to respond to disasters and maintain continuity-of-life support functions during an emergency.	The Safety Element of the General Plan does not identify Woodward Street as an evacuation corridor. The site plan has been reviewed by the Fire Marshal. According to Section 5.7 (Environmental Effects Found Not to be Significant – Hazards and Hazardous Materials), the project would not impact any roadway or staging areas identified in any emergency planning documents. The project is consistent with this goal.
Goal S-5, Policy S-5.3	Develop, implement, and maintain an effective evacuation program for areas of risk in the event of a disaster.	The San Marcos Emergency Operations Plan identifies several main thoroughfares as primary evacuation corridors in an emergency. The project provides one access driveway on Woodward Street. According to Section 5.7 (Environmental Effects Found Not to be Significant – Hazards and Hazardous Materials), the project would not impact any roadway or staging areas identified in any emergency planning documents. The project is consistent with this policy.
Goal S-6, Policy S-6.3/ Goal EJ-4, Policy EJ-4.12	Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.	The San Diego County Sheriff's Department provides CPTED reviews through their crime prevention unit. The project's required contribution to a CFD would aid in the continued provision of this service. The Sheriff's Department has reviewed all project plans. The project is consistent with this policy.
Goal S-7	Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.	The project site is located within Review Area 2 of the McClellan-Palomar airport influence area and may be subject to annoyances associated with noise, vibration, and overflights. Consistent with the Airport Land Use Compatibility Plan (ALUCP), recordation of overflight notification documents would be required as a condition of

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		project approval. Review Area 2 also limits heights of structures in areas of high terrain. The project site is not characterized as high terrain and proposed development would remain below surrounding prominent topographic features. The project is consistent with this goal.
Goal S-7, Policy S-7.1	Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.	The project site is located within Review Area 2 of the McClellan-Palomar airport influence area and may be subject to annoyances associated with noise, vibration, and overflights. Consistent with the ALUCP, recordation of overflight notification documents would be required as a condition of project approval. Review Area 2 also limits heights of structures in areas of high terrain. The project site is not characterized as high terrain and proposed development would remain below surrounding prominent topographic features. The project is consistent with this goal.
Noise Element		
Goal N-1	Promote a pattern of land uses compatible with current and future noise levels.	The noise study prepared for the project (Appendix K) modeled ambient and future noise levels at the project site and compared with exterior and interior noise thresholds contained in the City's General Plan. The project has the potential to result in short-term construction noise impacts related to proposed rock drilling for blasting operations and rock crushing. Implementation of mitigation measures MM-N-1 and MM-N-2 would reduce these impacts to below a level of significance. The project is not of a type that would generate excessive noise to neighboring uses during daily operation. Noise associated with increased traffic as a result of the project would not increase levels above the significance threshold of 3 dBA CNEL. Therefore, the project is consistent with this goal.
Goal N-1, Policy N-1.1	Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.	The noise study prepared for the project (Appendix K) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.9 (Noise), there is a potential for construction related impacts from rock drilling and rock crushing. Implementation of mitigation measures MM-N-1 and MM-N-2 would reduce this impact to below a level of significance. No noise-related operational impacts were identified. The project is consistent with this policy.
Goal N-1, Policy N-1.2	Ensure that acceptable noise levels are maintained near noise-sensitive uses.	The noise study prepared for the project (Appendix K) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.9 (Noise), there is a potential for construction related impacts from rock drilling and rock crushing. Implementation of mitigation measures MM-N-1 and MM-N-2 would

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		reduce this impact to below a level of significance. No noise-related operational impacts were identified. The project is consistent with this policy.
Goal N-1, Policy N-1.3/ Goal EJ-4, Policy EJ-4.11	Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.	No noise-related operational impacts were identified for the project. The project is consistent with this policy.
Goal N-1, Policy N-1.4	Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.	No noise-related operational impacts were identified for the project. The project is consistent with this policy.
Goal N-1, Policy N-1.5	Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.	The noise study prepared for the project (Appendix K) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.9 (Noise), there is a potential for construction related impacts and implementation of mitigation measures MM-N-1 and MM-N-2 would reduce these impacts to below a level of significance. No noise-related operational impacts were identified. The project would not exceed the Normally Acceptable levels in General Plan Table 7-3. The project is consistent with this policy.
Goal N-2	Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.	A noise study was prepared for the project (Appendix K) and summarized in Section 3.9, (Noise), of the EIR. Noise impacts related to off-site transportation noise, including vehicular traffic and the SPRINTER were determined to be less than significant. The project is consistent with this policy. The project is consistent with this goal.
Goal N-2, Policy N-2.1	Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.	A noise study was prepared for the project (Appendix K) and summarized in Section 3.9, (Noise), of the EIR. Noise impacts related to off-site transportation noise, including vehicular traffic and the SPRINTER were determined to be less than significant. The project is consistent with this policy.
Goal N-2, Policy N-2.2	Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.	A noise study was prepared for the project (Appendix K) and summarized in Section 3.9, (Noise), of the EIR. There is a potential for offsite noise impacts related to rock drilling and rock crushing. Implementation of mitigation measures MM-N-1 and MM-N-2 would reduce this potential impact to below a level of significance. All other

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		construction-related noise impacts were determined to be less than significant. Operational noise impacts were determined to be less than significant. The analysis considered the influence of adjacent roadway noise and the SPRINTER rail line. The project is consistent with this policy.
Goal N-2, Policy N-2.3	Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-combustible engine vehicles to reduce traffic noise.	The project's internal pedestrian circulation network would connect to the existing sidewalk on Woodward Street. The project is near NCTD bus stops on E. Mission Road and is 0.1 miles from the SPRINTER rail station at San Marcos Civic Center. The project is consistent with this policy.
Goal N-3	Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.	The nearest noise-sensitive land uses are the residences to the south, east and north. As analyzed in Section 3.9, (Noise), there is a potential for significant noise impacts related to rock drilling for blasting activities and rock crushing during project construction. Implementation of mitigation measures MM-N-1 and MM-N-2 would reduce these potential impacts to below a level of significance. The project is consistent with this goal.
Goal N-3, Policy N-3.1	When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.	The nearest noise-sensitive land uses are the residences to the south, east and north. As analyzed in Section 3.9, (Noise), there is a potential for significant noise impacts related to rock drilling for blasting activities and rock crushing during project construction. Implementation of mitigation measures MM-N-1 and MM-N-2 would reduce these potential impacts to below a level of significance.. No other construction-related noise impacts were identified for the project. The project is consistent with this policy.
Goal N-3, Policy N-3.2	Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.	Construction activities would comply with the City's Municipal Code requirement and all construction activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. No construction activities would occur on weekends or holidays. No construction-related noise impacts were identified for the project. The project is consistent with this policy.
Housing Element		
Goal H-1	Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.	The project would construct 46 residential duplex units. While no affordable units are proposed as part of the project, the project applicant would pay in-lieu fees for affordable housing which would be made available to affordable housing developers for projects in the City. The project is consistent with this goal.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal H-1, Policy 1.1/ Goal EJ-4, Policy EJ-4.5	Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities.	The project would construct 46 residential duplex units. The project site is within 0.1 miles of the Civic Center SPRINTER station and there are bus stops nearby on Mission Road. The project is consistent with this policy.
Goal H-4, Policy 4.4	Balance the need to protect and preserve the natural environment with the need to provide additional housing and employment opportunities.	The project has been designed to consolidate development within the project area, this allows for less habitat impact and the ability to preserve portions of the project site within an open space easement. The project site has been identified as an area proposed for development in the MHCP and the San Marcos Subarea Plan. Additionally, Section 4.0, (Alternatives), provides a range of alternative development scenarios, including a no development alternative, considered for the project site. The project is consistent with the policy.

3.9 Noise

Introduction

This section addresses the potential noise effects resulting from the construction of the project and analyzes the noise compatibility of the project site with surrounding land uses. The analysis is based on the following report, which is included as **Appendix K** of the Environmental Impact Report (EIR):⁹

- *Noise Assessment, Woodward 46 Specific Plan, SP22-0005, SP22-0006, GPA22-0004, MFSD22-0005, TSM22-0004, City of San Marcos*, prepared by LDN Consulting, January 7, 2025 (LDN 2025)

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact resulting from excessive noise levels from being located within the vicinity of a private airstrip or within two miles of a public airport. Therefore, this issue is not discussed further in this section. Section 5.11, Environmental Effects Found Not to Be Significant – Noise of the EIR provides additional information on this topic.

Table 3.9-1 summarizes the project- and cumulative-level noise impacts, by threshold.

Table 3.9-1. Noise Summary of Impacts

Threshold of Significance	Project Direct Impact	Project Cumulative Impact	Impact After Mitigation
#1 – 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 location general plan or noise ordinance, or applicable standards of other agencies.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant
#2 - Generation of excessive groundborne vibration or groundborne noise levels.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.9.1 Existing Conditions

This section provides background on noise analysis and a description of the existing noise environment on the project site and surrounding area. This section also details the results of the ambient noise monitoring conducted by LDN Consulting on July 14, 2023 between 12:00 PM and 1:00 PM.

⁹ Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Background

Noise

Noise is generally defined as “unwanted sound” that interferes with normal activities. Excessive levels of noise can cause hearing loss, although the principal human response to environmental noise is annoyance. Noise is measured on a logarithmic scale of sound pressure level known as decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only frequencies audible to the human ear. Equivalent sound level (Leq) is the noise metric used to collect short-term noise level measurement samples. It represents a steady state sound level containing the same total energy as a time varying signal over a given sample period, with Lmax and Lmin as the maximum and minimum, respectively. Community receptors are more sensitive to unwanted noise intrusion during the evening and at night. State law requires that, for some planning purposes, an artificial dBA increment be added to quiet time noise levels in a 24-hour A-weighted average noise descriptor called the Community Noise Equivalent Level (CNEL). In general, a change of 10 dBA is perceived as twice as loud (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear), a 5 dBA change in community noise levels is clearly noticeable, and a 3 dBA change is the smallest increment that is perceivable by most people. Changes of 1 to 2 dBA are not usually detectable by the human ear.

The decibel level of a sound decreases (or attenuates) exponentially as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level normally decreases by about 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or “line” source, such as a heavily traveled traffic corridor, attenuates by approximately 3 dBA per doubling of distance, provided that the surrounding site conditions lack ground effects or obstacles that either scatter or reflect noise.

Surrounding site conditions, meteorological conditions, and the presence of manmade obstacles such as buildings and barriers may also reduce noise at the location of a receiver. For example, vegetation and loose soils may either absorb or scatter the sound from roadways, yielding sound attenuation rates in environments with these major ground effects that are as high as 4.5 dBA for each doubling of distance (compared to 3 dBA without major ground effects). In addition, barriers between a noise source and a receiver can substantially reduce noise levels at the receiver. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction. Taller barriers will provide increased noise reduction.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Human response to vibration is best approximated by the vibration velocity level.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration known as “structureborne/groundborne” vibration. Vibration in buildings is typically perceived as rattling of windows or items on shelves or the motion of building surfaces. The vibration of building surfaces can also be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient

magnitude to cause even minor cosmetic damage to buildings unless the receptors are in proximity to heavy equipment.

Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to rapidly decrease with distance away from the source. Soil properties also affect the propagation of vibration. Man-made vibration issues are, therefore, usually confined to short distances from the source (i.e., 50 feet or less).

Vibration amplitudes are usually described in terms of peak levels, as in peak particle velocity (PPV) in inches/second that correlates best with human perception. The particle velocity is the velocity of the soil particles resulting from a disturbance. Agencies such as the California Department of Transportation (Caltrans) use the PPV descriptor because it correlates well with damage or complaints. Caltrans estimates that the threshold of perception is approximately 0.006 inches/second PPV and the level at which continuous vibration begins to annoy people is approximately 0.010 inches/second PPV (Caltrans 2020).

Existing Noise Environment

The project site is currently vacant and does not contain any sources of noise or vibration generation. The project site is located on Woodward Street between E. Mission Road and Vineyard Road. The project vicinity is developed primarily with residential uses, with a mix of commercial, office and residential uses. Sources of noise in the surrounding area are primarily from traffic on Woodward Street, E. Mission Road, and the SPRINTER rail.

Existing ambient noise measurements were collected by LDN Consulting on July 14, 2023, at the southwestern corner of the project site adjacent to Woodward Street. The sound level meter and microphone were mounted on a tripod at approximately five feet above the ground and equipped with a windscreen during all measurements. The sound level meter was calibrated before and after the monitoring using a Larson-Davis calibrator, Model CAL 200. The monitoring location is shown in **Figure 3.9-1**.

The results of the noise level measurements are presented in **Table 3.9-2**. The measurements were taken on site to establish a baseline of the vehicle noise from Woodward Street, E. Mission Road and the SPRINTER rail line. The measurements were free of obstruction and had a direct line of sight to the roadways. As shown in Table 3.9-2, the overall sound level was found to be 55.3 dBA Leq.

Table 3.9-2. Measured Ambient Noise Levels

Measurement Identification	Description	Date/Time	Noise Levels (dBA Leq)					
			Leq	Lmax	Lmin	L10	L50	L90
ML 1	Woodward Street	July 23, 2023 12:00 PM to 1:00 PM	55.3	66.7	48.4	58.9	54.8	50.5

Source: LDN 2025.

3.9.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to noise, including federal, state, and local guidelines.

Federal

Federal Bodies

Title 49 Chapter 65 of the United States Code of Federal Regulations provides for the regulation of noise to protect the public health, safety, and welfare. The Federal Highway Administration (FHWA); Federal Rail Administration and Federal Transit Administration (FTA); and the Federal Aviation Administration, respectively, regulate roadway, rail, and aircraft.

Vibration and Groundborne Noise Impact Regulations

Publications of the FTA and Caltrans are two of the seminal works for the analysis of groundborne noise and vibration relating to transportation and construction-induced vibration. While the project is not subject to FTA or Caltrans regulations, these guidelines serve as a useful tool to evaluate vibration impacts. Caltrans guidelines recommend that a standard of 0.2 in/sec peak particle velocity (PPV) not be exceeded for the protection of normal residential buildings, and that 0.08 in/sec PPV not be exceeded for the protection of old or historically significant structures. With respect to human response within residential uses (i.e., annoyance, sleep disruption), FTA recommends a maximum acceptable vibration standard of 80 vibration velocity (VdB).

State

State noise standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulatory guidelines governing noise levels generated by individual motor vehicles and guidelines governing occupational noise control are not applicable to planning efforts nor are these areas typically subject to California Environmental Quality Act (CEQA) analysis.

Office of Planning and Research General Plan Guidelines

The State of California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. General Plan guidelines are advisory in nature. Local jurisdictions, including San Marcos, have the responsibility to set specific noise standards based on local conditions.

State of California Code of Regulations Title 24

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or LDN) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or LDN) of at least 45 dBA [California's Title 24 Noise Standards, Chap. 2-35].

Local

City of San Marcos General Plan

The following are applicable goals and policies from the City of San Marcos General Plan, Noise Element (GPNE):

- Goal N-1: Promote a pattern of land uses compatible with current and future noise levels.
 - Policy N-1.1: Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.
 - Policy N-1.2: Ensure that acceptable noise levels are maintained near noise-sensitive uses.
 - Policy N-1.3: Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.
 - Policy N-1.4: Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.
 - Policy N-1.5: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.
- Goal N-2: Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.
 - Policy N-2.1: Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.
 - Policy N-2.2: Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.
 - Policy N-2.3: Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-combustible engine vehicles to reduce traffic noise.
- Goal N-3: Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.
 - Policy N-3.1: When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.
 - Policy N-3.2: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

The following is an applicable goal and policy from the City of San Marcos General Plan, Safety Element:

- Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.
 - Policy S-7.1: Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.

The following is an applicable goal and policy from the City of San Marcos General Plan, Environmental Justice Element:

- Goal EJ-4: Foster healthy living conditions for people of all backgrounds and incomes
 - Policy EJ-4.11: Incorporate design features into residential use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls and sound attenuating architectural design and construction methods.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12 in Section 3.8 (Land Use and Planning), the project is consistent with the applicable goals and policies.

City of San Marcos Municipal Code

Chapter 10.24 (Noise)

Chapter 10.24 of the San Marcos Municipal Code prohibits loud, annoying, or unnecessary noises. However, the Noise Ordinance does not specifically provide quantified property line noise level limits. Section 10.24.020 provides definitions for and examples of prohibited noise sources. Included in the list of prohibited noise sources is demolition and building construction activities that occur Monday through Friday before 7:00 AM and after 6:00 PM or on Saturdays before 8:00 AM or after 5:00 PM. No grading, extraction or construction is allowed on Sundays or City holidays. The noise ordinance does not include a quantified noise level limit for construction noise. Section 10.24.030 describes the standards for how sound is assessed. Commonly, the City has utilized Section 36.409 of the County of San Diego's Noise Ordinance noise limit of 75 dBA Leq (8-hour) for construction activities.

Section 17.32.180 (Grading Operation Restrictions)

City of San Marcos Municipal Code Section 17.32.180 addresses the time limits that apply to grading, extraction, and blasting between 7:00 AM and 4:30 PM Monday through Friday. Grading, extraction, or related earth moving is not allowed in the City on the weekends or holidays. The Municipal Code does not set noise limits on construction activities. Commonly, the City has utilized the County of San Diego's Noise Ordinance noise limit of 75 dBA for construction activities.

The Noise Element of the County of San Diego General Plan establishes limitations on sound levels to be received by various land uses. New development may cause an existing noise sensitive land use (NSLU) to be affected by noise caused by the new development, or it may create or locate a NSLU in such a place that it is affected by noise. The Noise Element identifies airports and traffic on public roadways as the major sources of noise. The County Noise Element establishes the exterior noise level standards and provides interior standards and definitions. If the exterior noise level would exceed 75 dBA CNEL, new development would not be approved.

Section 17.60.06 (Blasting Operations Procedures)

The City of San Marcos Section 17.60.06 of the City's Municipal Code states that all blasting operations within the City of San Marcos are prohibited unless a Certificate of Authorization is first obtained from the San Marcos Building Director and an Operations Permit issued by the Fire Chief. Additional relevant sections of the City's Code for Blasting are provided below:

- The general contractor or property owner/developer shall give reasonable notice in writing at the time of issuance of a building permit, grading permit or encroachment license to all

residences or businesses within 600 feet of any potential blast location. The notice shall be in a form approved by the Building Director. Any resident or business receiving such notice may request of the Building Director that a notice of impending blasting be given by the blaster at the time of the 12-hour advance notice given to the Building Director. The general contractor or property owner/developer shall make all reasonable efforts to contact any and all parties requesting the second notice.

- The blaster shall file a written certification with the Building Director certifying that the general notice required by Section 17.60.060(b) has been given. The certificate shall include addresses and date(s) of notification. A copy shall be retained on file at the Building Division.
- Inspections of all structures within 300 feet of the blast site shall be made before blasting operations. The persons inspecting shall obtain the permission of the building owner to conduct an inspection. The inspections shall be done by a registered structural engineer employed by the blaster or project contractor. The inspection shall be only for the purpose of determining the existence of any visible or reasonably recognizable pre-existing defects or damage in any structure. Inspection refusal shall be at the discretion of the property owner.
- Blasting shall only be permitted between the hours of 9:00 a.m. and 4:00 p.m. during any weekday, Monday through Friday, exclusive of City recognized holidays unless special circumstances warrant another time or day and special approval is granted by the Building Director and Fire Chief.

Chapter 20.300 (Zoning Ordinance)

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. Section 20.300, Performance Standards, within the Zoning Ordinance identifies noise regulations to prohibit unnecessary, excessive, and annoying noises. Table 20.300-4, included below as **Table 3.9-3** identifies allowable noise levels (dBA) by zone type. For multifamily residential, the allowable noise level, as measured at the property line is 65 dBA from 7:00 AM to 10:00 PM. and 55 dBA from 10:00 PM to 7:00 AM. Increases in allowable noise levels listed in **Table 3.9-3** may be permitted in accordance with the standards outlined in **Table 3.9-4**.

- 1 Noise shall be measured with a sound-level meter that meets the standards of the American National Standards Institute (ANSI) (Section S1.4-1979, Type 1 or Type 2). Noise levels shall be measured in decibels at the property line of the receptor property, and at least five (5) feet above the ground and ten (10) feet from the nearest structure or wall. The unit of measure shall be designated as an A-weighted decibel (dBA) Leq standard. A calibration check shall be made of the instrument at the time any noise measurement is made.
- 2 No person shall create or allow the creation of exterior noise that causes the noise level to exceed the noise standards established by Table 20.300-4 (shown as Table 3.9-3). Increases in allowable noise levels listed in Table 20.300-4 (shown as Table 3.9-3) may be permitted in accordance with the standards outlined in Table 20.300- 5 (shown as Table 3.9-4).
- 3 No person shall create nor allow the creation of noise that causes the interior noise level when measured within a dwelling unit to exceed forty-five (45) dBA at any time, except as permitted by Table 20.300-6 (shown as **Table 3.9-5**).
- 4 Use of compressors or other equipment, including vents, ducts, and conduits, but excluding window or wall-mounted air conditioners, that are located outside of the exterior walls of any building, shall be enclosed within a permanent, noncombustible, view-obscuring enclosure to ensure that the equipment does not emit noise in excess of the ANSI standards.

Table 3.9-3. Exterior Noise Standards by Zone

Zone	Allowable Noise Level (dBA Leq) Measured from the Property Line
Single-Family Residential (A, R-1, R-2)^{1,2}	
7:00 AM and 10:00 PM (daytime)	60
10:00 PM and 7:00 AM (overnight)	50
Multifamily Residential (R-3) ⁽¹⁾⁽²⁾	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	55
Commercial (C, O-P, SR)⁽³⁾	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	55
Industrial	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	60

Source: City of San Marcos 2023 (Table 20.300-4)

Notes: (1) For single-family detached dwelling units, the "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet; (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10 percent of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.

(2) For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.

(3) For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.

Table 3.9-4. Permitted Increase in Noise Levels

Permitted Increase (dBA)	Duration (cumulative minutes per hour)
5	15
10	5
15	1
20	Less than 1 minute

Source: City of San Marcos 2023 (Table 20.300-5).

Table 3.9-5. Permitted Increase in Interior Noise Levels

Permitted Increase (dBA)	Duration (cumulative minutes per hour)
5	1
10	Less than 1 minute

Source: City of San Marcos 2023 (Table 20.300-6).

3.9.3 Thresholds of Significance

According to *Appendix G of the California Environmental Quality Act (CEQA) Guidelines*, noise impacts are considered potentially significant if they cause:

- Threshold #1: 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 location general plan or noise ordinance, or applicable standards of other agencies.
- Threshold #2: Generation of excessive groundborne vibration or groundborne noise levels.

The term “substantial increase” is not defined by any responsible agency. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dBA difference. Therefore, a threshold of 3 dBA is commonly used to define “substantial increase,” as it is noticeable to humans under typical ambient conditions.

As identified above, impacts related to being in the vicinity of a private airstrip or airport land use plan are not discussed in this section. Section 5.11, Environmental Effects Found Not to Be Significant – Noise, provides additional information on this topic.

San Marcos Noise Impact Thresholds

Construction Noise Standards

The City of San Marcos Municipal Code does not set noise limits on construction activities. Commonly, the City utilizes the County of San Diego’s Noise Ordinance Section 36.410 noise limit of 75 dBA at any existing sensitive receptor for construction activities. The Municipal Code Section 17.32.180 does address and limit grading and extraction activities between the hours of 7:00 AM and 4:30 PM, Monday through Friday, and no grading or earth moving activities are allowed on the weekends or holidays.

As mentioned, typically, the threshold for determining whether construction noise is significant is 75 dBA. However, in the past, the City of San Marcos has applied the operational noise standards to rock crushing activities when operating on a longer-term basis. The City’s 60 dBA Leq operational noise-standard at the nearest single-family residences has been applied.

Ground Vibration Standards

The City of San Marcos does not have adopted vibration criteria for construction. The FTA provides criteria for acceptable levels of groundborne vibration for various types of buildings that are sensitive to vibration. For the purpose of identifying potential project-related vibration impacts resulting from

the proposed project, the FTA criteria was used. **Table 3.9-6** shows the FTA groundborne vibration and noise impact criteria for human annoyance.

Table 3.9-6. Groundborne Vibration and Noise Impact Criteria (Human Annoyance)

	Groundborne Vibration Impact Levels (VdB re 1 microinch/second)			Groundborne Noise Impact Levels (dB re 20 micropascals)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³	Frequent Events ¹	Occasional Events ²	Infrequent Events ³
Category 1: Buildings where low ambient vibration is essential for 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

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

1. "Frequent Events" are defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.
2. "Occasional Events" are 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" are 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 would 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 not sensitive to groundborne noise.

In addition to the vibration annoyance standards presented in Table 3.9-6, the FTA also applies the following standards for construction vibration damage. As shown in **Table 3.9-7**, structural damage is possible for typical residential construction when the PPV exceeds 0.2 inch per second (in/sec). This criterion is the threshold at which there is a risk of damage to normal dwellings.

Table 3.9-7. Groundborne Vibration Impact Criteria (Structural Damage)

Building Category	PPV (in/sec)	VdB
I. Reinforced-concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

Note: RMS = Root Mean Square (RMS) velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Transportation Noise Standards

To control transportation-related noise sources such as arterial roads, freeways, airports, and railroads, the City of San Marcos has established guidelines for acceptable community noise levels in the Noise Element of the General Plan (Table 7-3 of the General Plan Noise Element). For noise sensitive rural and single-family residential uses, schools, libraries, parks, and recreational areas, the City Noise Element requires an exterior noise level of less than 60 dBA CNEL for outdoor usable areas, such as yard and patio areas. For multi-family developments, the standard is 65 dBA CNEL and a standard of 70 dBA CNEL is typically applied to commercial uses. The City has also established an interior noise limit of 45 dBA CNEL for all residential uses. Noise sensitive indoor spaces are subject to compliance with CCR Title 24 noise insulation standards demonstrating a 45 dBA CNEL interior noise level with all windows of the structure closed.

For this analysis, a direct roadway noise impact would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment.

Operational Noise Standards

The City noise regulations that apply to the proposed project are found in Chapter 20.300 Site Planning and General Development Standards of the City Municipal Code. These regulations aim to prohibit unnecessary, excessive, and annoying noises from all sources, as certain noise levels are detrimental to the health and welfare of individuals. The standards of this section and of Chapter 10.24 Noise of the Municipal Code apply to all land uses unless otherwise specified. No person shall create or allow the creation of exterior noise that causes the noise level to exceed the noise standards established by Table 20.300-4 of the Municipal Code. See Table 3.9-3 earlier in this section.

The City Ordinance limits noise generation in multi-family zones to 65 dB Leq (one-hour average) between the hours of 7 am and 10 pm and 55 dB Leq between the hours of 10:00 PM and 7:00 AM as measured at the project property line as shown above in Table 3.9-3. Per the GPNE, noise standards for multi-family residential areas are higher than single-family residential areas because they typically reflect a more urban environment (GPNE, pg. 7-10). The project vicinity includes single-family residential neighborhoods to the north and east, multi-family residential developments to the south, and undeveloped land to the west across Woodward Street. Therefore, the City Ordinance's 60 dBA hourly noise standard during the daytime hours between 7:00 AM and 10:00 PM and 50 dBA standard during the nighttime hours between 10 p.m. and 7 a.m. would apply at the single family residential neighborhoods to the north and east and the 65 dBA hourly noise standard for daytime hours and 55 dBA hourly noise standard for nighttime hours would apply to the multi-family residential developments to the south.

3.9.4 Project Impact Analysis

Construction and operation of the project would have the potential to result in short term and long term increases in noise on the project site and in the project vicinity. As part of the project design features, to ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit. The final noise assessment would identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed-window-condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Threshold #1: 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 location general plan or noise ordinance, or applicable standards of other agencies.

Construction Noise

This section addresses the construction noise impacts associated with the project to determine if they would result in the exposure of persons to or generation of noise level in excess of applicable noise standards. Construction noise represents a short-term impact on the ambient noise levels, primarily from construction equipment. Grading activities typically represent one of the highest potential sources for noise impacts. The most effective method of controlling construction noise is through local control of construction hours and by limiting the hours of construction to normal weekday working hours. As stated above, the City of San Marcos Municipal Code does not set noise limits on construction activities. Commonly, the City utilizes the County of San Diego's Noise Ordinance Section 36.410 noise limit of 75 dBA at any existing sensitive receptor for construction activities.

The U.S. Environmental Protection Agency (USEPA) has compiled data regarding the noise generating characteristics of specific types of construction equipment. Noise levels generated by heavy construction equipment can range from 60 dBA to in excess of 100 dBA when measured at 50 feet. However, these noise levels diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 75 dBA measured at 50 feet from the noise source to the receptor would be reduced to 69 dBA at 100 feet from the source to the receptor and reduced to 63 dBA at 200 feet from the source.

LDN used a point-source noise prediction model to calculate the expected construction noise impacts. The essential model input data for these performance equations include the source levels of each type of equipment, relative source to receiver horizontal and vertical separations, the amount of time the equipment is operating in a given day, also referred to as the duty-cycle and any transmission loss from topography or barriers (LDN 2025).

The equipment needed for the most intensive grading activities would consist of a tractor/backhoe, a large bulldozer, loader/grader, excavator, water truck, paver/blade, drill rig and a hoe ram. Based on the USEPA noise emissions, empirical data and the amount of equipment needed, worst case noise levels from the construction equipment for site preparation would occur during grading operations.

The project vicinity includes single-family residential neighborhoods to the north and east, multi-family residential developments to the south, and undeveloped land to the west across Woodward Street. Existing ambient noise levels were determined to be 55.3 dBA Leq.

Grading

The grading activities would consist of the preparation of site access, internal roadways, parking, and the finished pads. The equipment would be spread out over the project site from distances near the occupied property lines to distances of 400 feet or more away. Based upon the site plan, the majority of the grading operations, on average, would occur more than 280 feet from the property lines. This means that most of the time the average distance from all the equipment to the nearest property line would be 280 feet. It should be noted that construction activities would be on average approximately 140 feet from the residences to the east. However, the homes are elevated over 50-feet above the proposed pads. Therefore, noise levels would be reduced by a minimum of 5 dBA due to the topography blocking line of sight to the existing homes.

As shown in **Table 3.9-8**, at an average distance of 280 feet from the construction activities to the nearest property line would result in a noise attenuation of 15 dBA without shielding. This results in a property line noise level of 74.7dBA. Given this, the noise levels would comply with the 75 dBA Leq (8-hour) standard at the property lines. Additionally, all equipment would be properly fitted with mufflers and all staging and maintenance would be conducted as far away from the existing residence as possible.

Table 3.9-8. Construction Noise Levels

Equipment Type	Quantity Used	Source @ 50 Feet (dBA)	Cumulative Noise Level @ 50 Feet (dBA)
Tractor/Backhoe	1	72	72.0
Dozer D9 Cat	1	74	74.0
Loader/Grader	1	73	73.0
Excavator	1	72	72.0
Water Truck	1	70	70.0
Paver/Blade	1	75	75.0
Rock Drill Rig	1	85	85.0
Hoe Ram	1	87	87.0
Rock Crusher	1	78	78.0
Cumulative Level			89.7
Distance to Sensitive Uses (feet)			280
Noise Reduction due to Distance			-15.0
Property Line Noise Level			74.7

Source: LDN 2025.

Grading Materials Export

Earthwork activities include 41,989 cubic yards (CY) of cut volume. With over-excavation and bulking, the total fill volume would be 50,270 CY, for a difference of 8,281 CY. If suitable, the excess material would be used as wall backfill and the site would balance. If it is not suitable, it would be exported from the site. To be conservative, the environmental analysis assumes the materials would be exported. Assuming 15 cy truck trips, that would equate to 553 trips. These trips would be spread over approximately 23 working days for 24 trips per day associated with export.

Noise level changes greater than 3 dBA are often identified as audible and considered potentially significant, while changes less than 1 dBA would not be discernible to local residents. In the range of 1 to 3 dBA, residents who are very sensitive to noise may perceive a slight change. Community noise exposures are typically over a long time period rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely greater than 1 dBA, and 3 dBA appears to be appropriate for most people. For the purposes for this analysis, direct and cumulative roadway noise impacts would be considered

significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment. Typically, it requires a project to double (or add 100%) to the traffic volumes to result in a 3 dBA CNEL increase, which is considered a potential impact. Based on a current traffic volume of approximately 5,388 average daily traffic (ADT) or more on the roadways along the site and along the anticipated haul route, the additional 24 trucks per day would add less than 0.5 dBA to the overall noise level. This is well below a 3 dBA increase that is considered a potential impact. Negligible noise impacts are anticipated at the residential uses that are located along the roadways due to the low volume of trucks. Impacts would be **less than significant**.

Rock Drilling and Blasting

Due to bedrock conditions on the project site, rock drilling and blasting may be required during the project grading and site preparation activities. The project would comply with all provisions identified in the City's Municipal Code Section 17.60.06 as it relates to blasting and blasting shall only be permitted between the hours of 9:00 AM and 4:00 PM during any weekday.

During project grading and site preparation activities, areas of the project site that require deeper cuts and where the native material is not easily rippable (graded) may require blasting and the use of a rock drill. The rock drill would be moved around the site on an as needed basis dependent upon the site characteristics. The use of a rock drill would occur independently of all other proposed equipment. The drilling and blasting activities would occur in one area and then the grading equipment would relocate or remove the debris. To determine the worst-case noise levels from the drilling operations, it was assumed that the noise level from the rock drill would be 85 dBA at 50 feet. Utilizing a 6 dBA reduction per doubling of distance, the rock drill would need to be located at an average distance of 160 feet from any property line to comply with the 75 dBA standard as shown in **Table 3.9-9**.

Rock drilling and blasting would occur on an as-needed basis on site. In the event that the rock drill is staged within 160 feet of any occupied noise sensitive land use, a potentially significant impact (**N-1**) would occur.

- **Impact N-1** Due to temporary rock drilling and blasting activities during construction, the proposed project has the potential to create noise levels in excess of the 75 dBA standard if rock drilling equipment is staged closer than 160 feet to the nearest property line.

Table 3.9-9. Construction Noise Levels from Rock Drill

Construction Equipment	Quantity	Source Level @ 50 Feet (dBA)	Duty Cycle (Hours/Day)	Noise Level @ 50 Feet (dBA)
Rock Drill	1	85	8	85.0
Noise Reduction Needed to Comply				-10.0
Distance Required to Reduce Noise Levels				160
Nearest Property Line Noise Level				74.9

Source: LDN 2025.

Rock Crushing

The project's requested approvals include a Conditional Use Permit, which would allow for the use of a temporary rock crusher. Rock crushing would occur between the hours of 7:00 AM and 4:00 PM. As shown in **Figure 3.9-2**, the rock crushing equipment is proposed to be located in the central portion of the site at the proposed building pads, over 300 feet from the nearest residences to the east, over 530 feet from the residences to the south, and over 660 feet from the residences to the north. Based on empirical data collected at the existing Mission 316 residential development to the south from a similar rock crusher, noise levels ranged between 70-72 dBA at 100 feet (LDN 2021). Therefore, a worst-case noise level of 72 dBA at 100 feet was used to analyze noise levels from rock crushing equipment (LDN 2025). The analysis assumed the project would use a Thunderbird Hazemag #CP300 or equivalent rock crusher. Typically, the threshold for determining whether construction noise is significant is 75 dBA. However, in the case of rock crushing, the City has applied the operational noise standard to rock crushing activities when operating on a longer-term basis. The exterior noise standards by zone as shown in Table 3.9-3 have been applied in the analysis. Because the closest sensitive receptor to the rock crusher would be the single-family residences located 300 feet to the east, the daytime threshold of 60 dBA Leq has been applied to determine significance.

It was determined that the noise levels of the rock crusher would be reduced by a minimum of 5 dBA due to the topography blocking line of sight to the existing single-family homes to the east. As can be seen in **Table 3.9-10**, based on the proposed location of the rock crusher shown in Figure 3.9-2, the anticipated noise levels (57.5 dBA) at the eastern residential property line would be below the City's 75dBA Leq construction noise standard and below the applied 60 dBA Leq operational noise standard for single family residential.

The rock crushing equipment would be located over 530 feet from residences to the south and over 660 feet from the residences to the north. No reductions were taken due to topography. As can be seen in **Table 3.9-11**, at 530-feet, the noise levels would be reduced to 57.5 dBA and would be below the City's 75 dBA Leq construction noise standard and below the applied 60 dBA Leq operational noise standard for single family residential.

However, if the rock crusher is located within 75 feet of a single-family residential use without shielding, noise levels may exceed the construction noise threshold of 75 dBA Leq. Additionally, in the event that the rock crusher is staged within 400 feet of a residential use without shielding, noise levels may exceed the applied operational threshold of 60 dBA at any existing single family residential use, 65 dBA for any multifamily use or 70 dBA at a commercial use. This represents a potentially **significant impact (Impact N-2)** and mitigation is required.

- **Impact N-2** Due to temporary rock crushing activities, the proposed project has the potential to create noise levels in excess of the exterior daytime standards for single family residential use (60 dBA Leq) and multi-family residential use (65 dBA Leq) if the rock crusher is staged within 400 feet of a single-family residential use.

Table 3.9-10. Rock Crushing Noise Levels (East)

Equipment Type	Quantity Used	Source @ 100 Feet (dBA)	Duty Cycle (hrs/day)	Cumulative Noise Level @ 50 Feet (dBA)
Thunderbird Hazemag #CP300	1	72	8	72.0
Distance to Sensitive Use				300
Noise Reduction due to Distance				-9.5
Noise Reduction due to Topography				-5.0
Property Line Noise Level				57.5

Source: LDN 2025.

Table 3.9-11. Rock Crushing Noise Levels (South)

Equipment Type	Quantity Used	Source @ 100 Feet (dBA)	Duty Cycle (hrs/day)	Cumulative Noise Level @ 50 Feet (dBA)
Thunderbird Hazemag #CP300	1	72	8	72.0
Distance to Sensitive Use				530
Noise Reduction due to Distance				-14.5
Property Line Noise Level				57.5

Source: LDN 2025.

Operational Noise

This section addresses the operational noise associated with the project to determine if it would result in the exposure of persons to or generation of noise level in excess of applicable noise standards. Operational noise associated with the project would include traffic generated by the project that travels on area roadways as well as noise that is generated on the project site. Aside from vehicular trips associated with future residents, residential uses are not typically considered a substantial noise source. Operationally, noise is typically associated with unit-specific heating/cooling equipment or the sounds of human activity. Such equipment and activity is not typically characterized as a substantial noise source. Additionally, the future residences are over 200 feet from the nearest existing residences, with the distance providing additional attenuation.

Future Onsite Roadway and Railway Noise

Onsite Roadway Noise

To determine the future noise environment and impact potential resulting from increased traffic associated with the proposed project, the Sound32 model was utilized. The critical model input parameters, which determine the projected vehicular traffic noise levels, include vehicle travel speeds, the percentages of automobiles, medium trucks, and heavy trucks in the roadway volume, the site

conditions, and the peak hour traffic volume. The peak hour traffic volumes range between six to 12 percent of the ADT and ten percent is generally acceptable for noise modeling.

Table 3.9-12 presents the roadway parameters used in the analysis including the peak traffic volumes, vehicle speeds, and the hourly traffic flow distribution (vehicle mix). The vehicle mix provides the hourly distribution percentages of automobile, medium trucks, and heavy trucks for input into the FHWA model. The Buildout conditions for E. Mission Road and Woodward Street include the future year 2050 traffic volume forecasts provided by the project traffic study (LLG 2023).

Table 3.9-12. Future Traffic Parameters

Roadway	Average Daily Traffic (ADT) ¹	Peak Hour Volumes ¹	Modeled Speeds (MPH)	Vehicle Mix % ²		
				Auto	Medium Trucks	Heavy Trucks
E. Mission Road	21,827	2,183	45	96	2	2
Woodward Street	5,920	592	40	96	2	2

Source: LDN 2025.

Notes: (1) Peak hour volumes are Year 2050 volumes identified in the Local Transportation Analysis prepared by LLG, 2023.

(2) Typical City vehicle mix.

The required coordinate information necessary for the Sound32 model input was taken from the precise grading plans provided by Excel Engineering.. The grading plans were used to identify the pad elevations, roadway elevations, and the relationship between the noise source(s) and the outdoor receptor areas. To evaluate the potential noise impacts on the proposed development, outdoor observers were located throughout the site and placed five feet above the finished pad elevation. The modeled observer locations for the potential outdoor use areas are shown in **Figure 3.9-3**. Private outdoor use areas would be provided by ground floor rear yards, second floor balconies, and rooftop decks which were modeled to determine if shielding/mitigation is required to reduce the noise levels below the City's 65 dBA CNEL threshold (LDN 2025).

Onsite Rail Line Noise

The proposed project is located a minimum of 400 feet from the San Diego Northern Railroad (SDNR) consisting of SPRINTER service operated by the North County Transit District (NCTD). According to the City of San Marcos General Plan Noise Element, Figure 7-2, the future 65 dBA CNEL noise contour from the anticipated increased rail activity, with no shielding, is located 130 feet from the centerline of the railroad. No reduction factor was taken for the building facades (LDN 2025).

Combined Future Onsite Noise Levels

Ground floor rear yards, upper floor balconies, and roof decks were modeled to determine if shielding/mitigation is required to reduce future exterior noise levels below the City's 65 dBA CNEL threshold for multi-family developments. The noise levels determined for the roadway and train activities were combined to determine the overall combined noise levels at the proposed outdoor use areas, balconies, and rooftop decks. The resultant cumulative noise levels from the traffic and train activities are provided below in **Table 3.9-13** for each of the ground floor patios and upper floor areas. As shown, the outdoor use areas would be in compliance with the City of San Marcos Noise standards of 65 dBA CNEL. Impacts would be **less than significant**.

Table 3.9-13. Combined Future Exterior Noise Levels (Roadway and Railway)

Receptor Number ¹	Unmitigated Noise Levels from Roadways (dBA CNEL)	Unmitigated Noise Levels from Train (dBA CNEL)	Cumulative Noise Levels at Ground Floor (dBA CNEL)	Cumulative Noise Levels at Upper Floor (dBA CNEL) ²
1	62	60	64	64
2	62	59	63	63
3	61	58	63	63
4	61	57	62	62
5	60	57	62	62
6	60	56	61	61
7	63	60	65	--
8	62	59	64	--

Source: LDN 2025.

Notes: (1) Modeled Receptor Locations 1- 6 are residences. Modeled Receptor Locations 7 and 8 are outdoor space so do not have upper floor noise levels.

(2) Interior Noise Study required per City Guidelines if building façade is above 60 dBA CNEL.

Additionally, as part of the project design features described in Table 2-2, to ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Project Related Offsite Transportation Noise

For the purposes for this analysis, direct and cumulative roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment. To determine if direct or cumulative off-site noise level increases associated with the development of the proposed project would create noise impacts, the noise levels for the existing conditions were compared with the noise level increase of existing plus the proposed project. To be conservative, hard site conditions (concrete, asphalt, and hard pack dirt) were used to develop the noise contours and analyze noise impacts along all roadway segments.

Table 3.9-14 presents the comparison of the existing year with and without project related noise levels. The overall roadway segment noise levels would not increase with the development of the project. The project would not create a direct noise increase of more than 3 dBA CNEL on any roadway segment. Therefore, the project's direct contributions to off-site roadway noise increases would not cause a significant impact to any existing or future noise sensitive land uses. Impacts would be **less than significant**.

Table 3.9-14.Existing vs. Existing Plus Project Noise Levels

Roadway	Roadway Segment	Existing Noise Level @ 50-feet (dBA CNEL)	Existing Plus Project Noise Level @ 50-feet (dBA CNEL)	Project Related Noise Level Increase @ 50-feet (dBA CNEL)
Mission Road	Pico Avenue to Woodward Street	69.9	69.9	0
	Woodward Street to Mission Villas Road	72.2	72.2	0
San Marcos Boulevard	Rancheros Drive to Mission Road	69.8	69.9	0.1
Woodward Street	E. Mission Road to Project	65.3	65.6	0.3
	Project to Vineyard Road	65.3	65.3	0

Source: LDN 2025.

In summary, the proposed project has the potential to result in a substantial temporary increase in ambient noise during construction depending on the final location for the rock drilling and rock crushing equipment that is potentially significant (**Impacts N-1 and N-2**). Mitigation is required and is provided in Section 3.9.6. The project would not result in a permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the general plan or noise ordinance, or applicable standards of other agencies.

Threshold #2: Generation of excessive groundborne vibration or groundborne noise levels.

This section analyzes the potential for the project to expose a person to or generation of excessive vibration or groundborne noise. Proposed residential uses would not be characterized as creating excessive vibration during project operation. The noise modeling is based upon project construction details and schedule provided by the project applicant.

Grading

The nearest vibration-sensitive uses are the existing residences to the east, located 280 feet or more from the center of the proposed construction. **Table 3.9-15** lists the average vibration levels that would be experienced at the nearest vibration sensitive land uses from temporary grading and site preparation activities.

The FTA has determined vibration levels that would cause annoyance to a substantial number of people and potential damage to building structures. The FTA criterion for vibration induced structural damage is 0.20 in/sec for the PPV. Project construction activities would result in PPV levels below the FTA's criteria for vibration induced structural damage. Therefore, project construction activities would not result in vibration induced structural damage to residential buildings near the construction areas during regular construction activities. The FTA criterion for infrequent vibration induced annoyance is 80 VdB for residential uses. Grading activities would generate levels of vibration that would not exceed

the FTA criteria for nuisance for nearby residential uses during regular construction activities. Short term grading impacts would be **less than significant**.

Table 3.9-15. Vibration Levels from General Construction Activities at Residential Receptors

Equipment	Approximate Velocity Level at 25 Feet (VdB)	Approximate PPV Level at 25 Feet (in/sec)	Approximate Velocity Level at 280 Feet (VdB)	Approximate PPV Level at 280 Feet (in/sec)
Small Bulldozer	58	0.003	26.5	0.0001
Jackhammer	79	0.035	47.5	0.0009
Loaded Trucks	86	0.076	54.5	0.0020
Large Bulldozer	87	0.089	55.5	0.0024
FTA Criteria			80 ¹	0.2 ²
Significant Impact?			No	No

Source: LDN 2025.

¹FTA criterion for infrequent vibration induced annoyance.

² FTA criterion for vibration induced structural damage.

³PPV at Distance D = PPVref x (25/D)^{1.5}

Blasting Vibration

Blasting for construction projects typically results in an RMS vibration velocity of about 100 VdB at 50 feet from the blast, based on FTA findings. This is equivalent to a PPV of about 0.4 inch per second. Given attenuation of vibration velocities with distance, if the blasting activity was located 160 feet from the nearest residence, the vibration and peak particle velocities at the nearest existing residence would be about 85 VdB and 0.07 inch per second, respectively. Based on the construction vibration damage criteria published by the FTA (Table 3.9-7), the threshold vibration levels for damage to "non-engineered timber and masonry buildings" are 94 VdB and 0.20 inch per second. Therefore, the effect of the blasting activity on nearby residential structures would be less than significant. However, the FTA human annoyance criterion of 80 VdB (for infrequent transit noise) would be exceeded when blasting occurred within about 250 feet of existing residences. If blasting is required within 250 feet of existing residences, the potential annoyance may not be completely avoided, but it can be minimized by following the City's blasting procedures as stated above in Section 3.9.2, including proper notice to residences. Short term blasting vibration impacts would be **less than significant**.

Train Vibration

Train vibration depends on the weight of the train, travel speed, the condition of the track and soil characteristics. The proposed project buildings would be more than 400 feet from the centerline of the tracks. The FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2018) predicts that freight train vibration levels are as high as 73 VdB at 175 feet from the track centerline for a locomotive-powered freight train traveling at speeds of 50 miles per hour (MPH) and up to 62 VdB for commuter rail train events at that speed. Therefore, the frequent commuter train activities will be below the 72 VdB frequent event annoyance thresholds as identified in Category 2 (residences and buildings where people normally sleep) of Table 3.9-6. Additionally, due to the proximity of the San Marcos Civic Center SPRINTER station, the commuter trains will be traveling at a slower speed of

approximately 15 MPH as they enter and exit the station, which would reduce the vibration levels by 8 VdB. Therefore, the train activities would have a **less than significant impact** on the proposed project.

3.9.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to noise, the cumulative analysis is based upon a list approach to determine the proposed project’s contributing effect on potential cumulative noise impacts.

Cumulative construction noise could occur if there are other projects under construction in the vicinity of the proposed project. Based upon the location of the project and the timing for development and location of the cumulative projects included in Table 2-4, a cumulative noise impact is not anticipated, and impacts would be less than significant.

To determine if cumulative off-site noise level increases associated with the development of the project and cumulative projects in the vicinity would create noise impacts, a cumulative noise analysis was conducted. No noise barriers or topography that may affect noise levels were incorporated in the calculations. **Table 3.9-16** presents the comparison of existing noise levels with existing plus project plus cumulative projects noise levels. As shown, the overall roadway segment noise levels would increase 0.1 to 0.4 dBA CNEL with the development of the project and proposed cumulative projects. The cumulative noise increase would be less than 3 dBA CNEL on any roadway segment so cumulative roadway noise impacts would be **less than significant**.

Table 3.9-16. Existing vs. Existing Plus Project Plus Cumulative Noise Levels

Roadway	Roadway Segment	Existing Noise Level @ 50-feet (dBA CNEL)	Existing +Project+ Cumulative Noise Level @ 50-feet (dBA CNEL)	Project Related Noise Level Increase @ 50-feet (dBA CNEL)
Mission Road	Pico Avenue to Woodward Street	69.9	70.0	0.1
	Woodward Street to Mission Villas Road	72.2	72.4	0.2
San Marcos Boulevard	Rancheros Drive to Mission Road	69.8	70.2	0.
Woodward Street	E. Mission Road to Project	65.3	65.7	0.4
	Project to Vineyard Road	65.3	65.4	0.1

Source: LDN 2025.

3.9.6 Mitigation Measures

Noise Levels During Rock Drilling and Blasting (Impact N-1)

MM-N-1 Prior to issuance of a blasting permit, the project applicant or contractor shall provide the final location of the construction equipment, topography and construction schedule to the Planning Division. If the rock drill is shown to be located within 160 feet from a sensitive land use's property line, an acoustical engineer shall prepare a noise assessment to determine whether noise levels in excess of the 75 dBA standard would occur during construction.

If the rock drilling and blasting noise assessment determines noise levels at the affected property lines would exceed 75 dBA, the acoustical engineer shall develop a mitigation plan to ensure during rock drilling and blasting would be below 75 dBA at the property line. Potential measures to reduce drilling and blasting noise levels could include: 1) construction of a temporary noise barrier of solid non-gaping material ranging from 8 to 12 feet in height along any property line where the impacts could occur; 2) limits on usage of the equipment (amount of time used and/or the location in respect to the property line) or other measures to ensure the levels would be below 75 dBA. The mitigation plan shall be submitted to the Planning Division and implemented by the contractor.

Noise Levels During Rock Crushing (Impact N-2)

MM-N-2 Prior to issuance of a Grading Permit for a rock crusher, the project applicant or contractor shall provide the final location and rock crusher type to the Planning Division. If the rock crusher is shown to be located within 400 feet of a single-family residential use without shielding, an acoustical engineer shall prepare a noise assessment to determine whether noise levels would be above the applied thresholds of 60 dBA at any existing single family residential use and 65 dBA for multi-family.

If the rock crushing noise assessment determines noise levels at the affected property lines would exceed the standards, the acoustical engineer shall develop a mitigation plan to reduce noise levels to 60 dBA at any existing single-family use and 65 dBA at any existing multi-family use. Mitigation may include sound barriers, sound absorbing materials, and/or operational limits on the crusher equipment's usage. The mitigation plan shall be submitted to the Planning Division and implemented by the contractor.

3.9.7 Conclusion

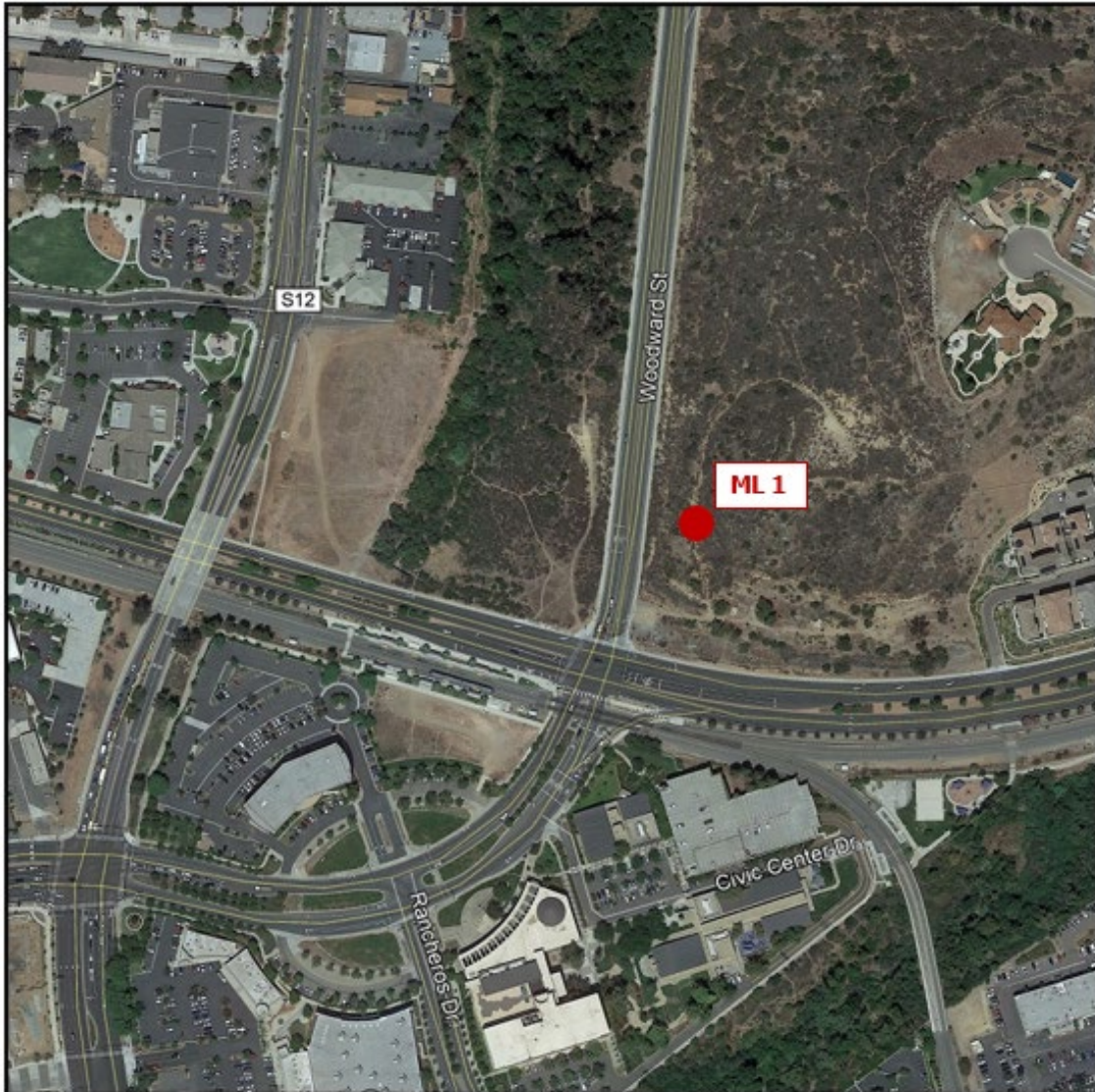
Based on the proposed location of construction equipment relative to surrounding land uses, the noise analysis prepared for the project (LDN 2025) concluded that noise impacts during construction would be below City standards and less than significant. However, the potential exists that construction equipment, specifically the rock drill and rock crusher, could be staged closer to sensitive uses than anticipated potentially resulting in noise levels exceeding the 75 dBA (8-hour) threshold for rock drilling and the applied operational threshold of 60 dBA at any existing single family residential use. during operation of a rock crusher. These potentially significant impacts would be mitigated to below a level of significance through implementation of mitigation measures MM-N-1 through MM-N-2.

Specifically, implementation of mitigation measures MM-N-1 and MM-N-2 provide for preparation of a noise assessment to be prepared prior to issuance of a blasting permit for the rock drill and conditional use permit for the rock crusher to confirm that noise levels would not exceed applicable City standards. If noise levels would exceed standards, then noise mitigation plans would be prepared and implemented to ensure noise levels are in compliance.

Operational noise impacts at the project site would not exceed the City's General Plan Noise Element 65 dBA exterior noise threshold nor increase roadway noise levels by more than 3 dBA. Therefore, impacts related to operational noise would be less than significant.

Construction activities would generate levels of vibration that would not exceed the FTA criteria for nuisance and structural damage for nearby residential uses. If blasting is required within 250 feet of existing residences, the potential annoyance may not be completely avoided but it can be minimized by following the City's blasting procedures as stated in Section 3.9.2, including proper notice to residences. Short term vibration impacts would be less than significant.

Figure 3.9-1. Ambient Monitoring Locations

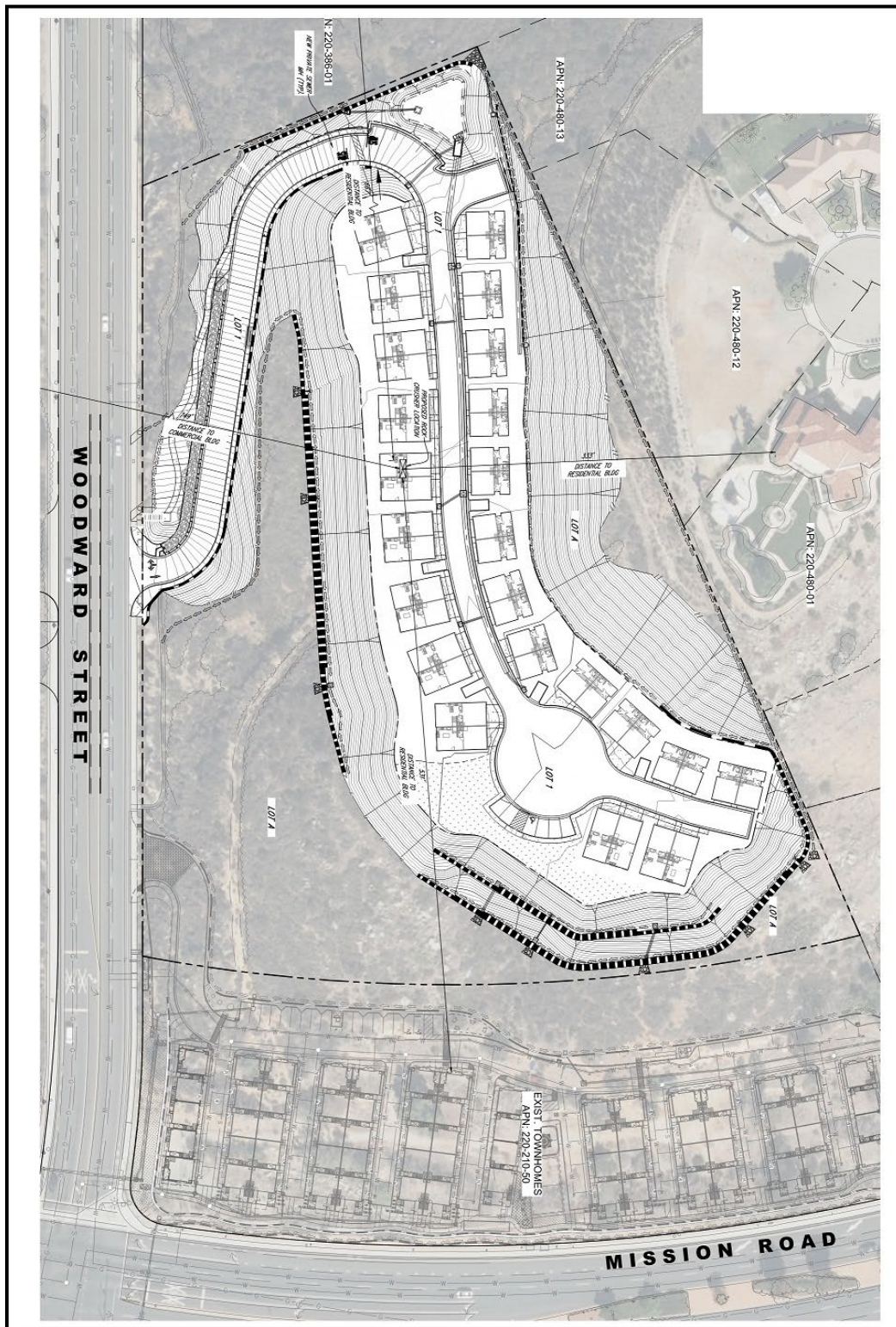


Source: LDN 2025.

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Figure 3.9-3. Temporary Rock Crusher Proposed Location



Source: LDN 2025.

3.10 Public Services

This section analyzes the potential impact of the proposed project on public services including fire protection services, police protection services, schools, parks, and libraries. Please see Section 3.13, Utilities and Service Systems, for an analysis of water, wastewater, energy, telecommunications, stormwater, and solid waste services. The analysis also considers the *California Environmental Quality Act (CEQA) Guidelines Appendix G* and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.¹⁰ Service provider letters are included in **Appendix L** of this document.

Table 3.10-1 summarizes the project- and cumulative-level public services analysis impact, by threshold of significance.

Table 3.10-1 Public Services Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Police protection services	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Schools	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Parks	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Other public facilities	Less than Significant	Less than Significant	Less than Significant Without Mitigation

¹⁰ <http://www.san-marcos.net/work/economic-development/general-plan>

3.10.1 Existing Conditions

This section details the existing service providers and resources related to fire protection, police protection, schools, parks, and libraries.

Fire Protection

The San Marcos Fire Department (SMFD) would provide fire protection and emergency medical services to the project site. The SMFD has existing automatic mutual aid fire agreements in place with the Cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District. The SMFD has an Insurance Service Office Rating 1, on a scale of one to ten with one being superior service.

The SMFD currently operates four fire stations, four paramedic assessment engine companies, one paramedic assessment truck company, five paramedic transport ambulances (24-hour units), one shift battalion chief, and one on-call duty chief. SMFD also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services wildland fire engine (City of San Marcos 2024).

The SMFD Station 1, located at 180 W. Mission Road in San Marcos is the closest station to the project site and would serve the project site should fire response or emergency services be needed (City of San Marcos 2024). SMFD Station 1 is located approximately 0.25 miles west of the project site. SMFD Station 1 houses an engine, truck, brush engine, ambulance, and battalion chief.

There are two easements on the project site associated with vegetation management for fire fuel reduction. One is located along a portion of the site's eastern boundary and the other is located along a portion of the site's southern boundary. These are associated with fire buffer maintenance requirements of adjacent development.

Police Protection

The San Diego County Sheriff's San Marcos Station provides law enforcement services to the City and unincorporated communities of Harmony Grove, Elfin Forest, Lake San Marcos, Hidden Meadows, Ivy Del, Del Dios, Lake Hodges, and the San Pasqual Valley (SDCSD 2024). The San Marcos Station is located at 182 Santar Place in San Marcos, approximately 0.75 mile southeast of the project site.

Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services (City of San Marcos 2012a). Services are available 24 hours a day, 7 days a week.

The San Marcos Station serves more than 111,000 residents and staffs more than 100 deputies, volunteers, and professional staff members. Additionally, Community Oriented Police and Problem Solving teams are assigned to investigate community quality-of-life issues. Lastly, the Sheriff's San Marcos Station has the only ASTREA (Sheriff's Aviation) helicopter landing pad in the County, which assists ground units and extends the range deputies can patrol (SDCSD 2024).

The County Sheriff's Department does not set response time goals. The Sheriff's Department does, however, prioritize different types of calls to better facilitate deputy dispatches. The Sheriff Department's priority categories are as follows: priority level 1 (lifesaving response calls), priority level 2 (expeditious response calls within confines of vehicle codes), priority level 3 (calls responded to as soon as possible), and priority level 4 (calls responded to when clear, still being alerted to violations that require immediate law enforcement action) (City of San Marcos 2012a).

Schools

The project site is located within the San Marcos Unified School District (SMUSD). SMUSD is 49 square miles in size and encompasses most of the City of San Marcos and portions of the cities of Vista, Escondido, and Carlsbad, as well as unincorporated areas of the County of San Diego between these cities. As of 2023, there are ten elementary schools, two K-8 schools, three middle schools, three high schools, and one independent high school program that are a part of the SMUSD. In the 2021-22 school year, SMUSD served 19,341 students. (SMUSD 2023a).

Based upon information from SMUSD, Richland Elementary School, Woodland Park Middle School and Mission Hills High School would serve the project site (SMUSD 2023b). Currently, Richland Elementary and Woodland Park have capacity and Mission Hills High School is over capacity (SMUSD 2023b). Richland Elementary was recently reconstructed and there are plans for expansions at Woodland Park Middle School and Mission Hills High School (SMUSD 2023b).

Parks

The purpose of the City's Parks, Recreation, and Community Health Element of the General Plan is to provide recreational opportunities, which contribute to the health and well-being of the residents of San Marcos and to provide goals and policies that outline the role recreational amenities play in achieving the City's vision for the future (City of San Marcos 2012a).

There are 24 community parks, 13 neighborhood parks and three recreation centers in the City.

The parks closest to the project site are Richmar Park and Hollandia Park. Richmar Park is located 0.25 mile west of the project site at 110 Richmar Avenue. Richmar Park is developed with adapted play equipment, a performance plaza, permanent restrooms, a picnic shelter, picnic tables, play equipment and turf play areas. Hollandia Park is located 0.8 miles east of the project site at 12 Mission Hills Court. Hollandia Park is developed with an amphitheater, lighted ballfield, barbeque area, dog park, horseshoe court, lighted multi-purpose fields, park space, permanent restrooms, a picnic shelter, play equipment, skate plaza and turf play areas.

Other Public Facilities (Libraries)

The City is served by the San Diego County Library, San Marcos Branch located at 2 Civic Center Drive, approximately 1.4 miles northwest of the project site. The San Marcos Branch is 15,394 square feet (s.f.) (City of San Marcos 2012b). The library is open seven days a week. The San Diego County Library system has 33 branches, an E-library, two bookmobiles, and five digital kiosks (San Diego County Library 2024a).

3.10.2 Regulatory Setting

Local

San Marcos General Plan

The following are applicable goals and policies from the City of San Marcos General, Land Use and Community Design Element related to public services:

Land Use and Community Design Element

- Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.
 - Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.
 - Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
- Goal LU-10: Fire protection, emergency services, and law enforcement: Provide effective, high-quality, and responsive services.
 - Policy LU-10.1: Provide demand-based fire-fighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.
 - Policy LU-10.2: Work closely with the County of San Diego Sheriff's Department to determine and meet the community needs for adequate personnel, equipment, and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands.
 - Policy LU-10.3: Continue to conduct public outreach and education regarding fire safety and crime prevention within San Marcos.
- Goal LU-11: Schools: Ensure all residents have access to high-quality education.
 - Policy LU-11.1: Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior, accessible facilities that complement the surrounding land uses.
 - Policy LU-11.2: Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.
- Goal LU-12: Libraries: Provide library resources and services that meet the needs of the community.
 - Policy LU-12.1: Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.
 - Policy LU-12.2: Accommodate technology needs of the community and locate accessible technology in the library.

Safety Element

The following are applicable goals and policies from the City of San Marcos General Plan, Safety Element related to public services:

- Goal S-3: Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.

- Policy S-3.1: Require development to be located, designed and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.
- Policy S-3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.
- Policy S-3.3: Require development to provide additional access roads when necessary, to provide for safe access of emergency equipment and civilian evacuation concurrently.
- Policy S-3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.
- Goal S-6: Provide neighborhood safety through effective law enforcement.
 - Policy S-6.1: Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity.
 - Policy S-6.2: Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention.
 - Policy S-6.3: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.

Parks, Recreation, and Community Health Element

The following are applicable goals and policies from the City of San Marcos General Plan, Parks, Recreation and Community Health Element related to parks:

- Goal PR-1: Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high-quality recreational facilities.
 - Policy PR-1.1: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.
 - Policy PR-1.2: Update and maintain a Master Parks Plan and a Master Trails Plan that implement the City's long-term vision for a complete system of parks, trails, and recreation facilities.
 - Policy PR-1.3: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.
 - Policy PR-1.4: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.

- Policy PR-1.5: Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.
- Policy PR-1.6: Require new infill development to provide plazas, mini parks, or other civic spaces as part of their parkland requirement.
- Policy PR-1.7: Promote park and facility design that discourages vandalism, deters crime, provides natural surveillance, and creates a safe and comfortable environment.
- Policy PR-2.2: Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars.

Environmental Justice Element

The following are applicable goals and policies from the City of San Marcos General Plan, Environmental Justice Element related to parks:

- Goal EJ-2: Locate public facilities and services equitably throughout the community.
 - Policy EJ-2.7: Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City (See Policy PR-1.3).
 - Policy EJ-4.12: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings (See Policy S-6.3).
 - Policy EJ 2.6 and EJ-5.7: Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors (See Policy PR-1.1).
 - Policy EJ-5.8: Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space (See Policy PR-1.4)
 - Policy EJ-5.10: Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars (See Policy PR-2.2).

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12 in Section 3.8, the project is consistent with all applicable goals and policies.

San Marcos Municipal Code

Section 17.36 – Park and Recreational Development Construction Unit Fee

This code requires that builders of residential units pay fees which shall be used for the improvement, development and operation of park or recreational facilities. The fee shall be paid prior to the issuance of building permits for any dwelling units.

Section 17.44 – Development Services and Public Facilities Exactions, Fees, and/or Costs

This code requires that each applicant for a grading, construction, building and/or development permit or entitlement shall, prior to the issuance of such permit or entitlement, pay the fees including Development Services Fees and Public Facilities Fees (PFF). Per Section 17.44.060, one component of the PFF is parks.

3.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services are based on *Appendix G of the CEQA Guidelines*. According to *Appendix G of the CEQA Guidelines*, a significant impact related to public services would occur if the project would:

Threshold #1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 protection.
- Police protection.
- Schools.
- Parks.
- Other public facilities.

3.10.4 Project Impact Analysis

Threshold #1: 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 any of the public services:

Fire Protection

As discussed in Section 3.10.1, above, the SMFD provides fire protection services to the City and would serve the project site. The proposed project would increase the demand on SMFD resources as a result of the development of residential uses and the associated population increase. The project would introduce approximately 143 residents on-site resulting in the increased demand for fire protection services through routine fire and emergency medical calls.

As part of the project design, the project would implement a zoned brush management plan which would provide a minimum of 150 feet of clearance. The brush management plan will follow CAL FIRE's guidance for defensible space (CAL FIRE 2023) which includes three zones of defensible space. The brush management concept is presented in Figure 2-12 in Chapter 2. The brush management plan and implementation would be the responsibility of the Home Owners Association. The brush management zones include:

- **Zone 1 (Structures)** – This zone covers 50 feet around structures and is measured from the structure outward to 50 feet or to the property line. Zone 1 landscaping shall be permanently irrigated and landscaped with fire resistive, low fuel plant material lower than 18 inches high. At maturity, trees shall be located so crowns are a minimum 10 feet from structures at maturity and spaced with a minimum of 10 feet between crowns at maturity. No combustible fencing shall be allowed. No bark mulch shall be allowed within 5 feet of structure walls.
- **Zone 1 (Roadway Adjacent)** – This zone measures 30 feet outwards from the roadway curb to 30 feet each side of the roadway. Landscaping shall be permanently irrigated and landscaped with fire-resistive, low-fuel plant material.
- **Zone 2** – This zone is measured from the outside edge of Zone 1 outward to 100 feet from the structure. This zone has a reduced fuel, non-irrigated area and shall be maintained, thinned, and trimmed. A maximum of 50 percent of native vegetation shall be retained with single specimen shrubs 20 feet off center maximum. Groundcover shall be maintained at 6 inches height. Trees shall be maintained with a minimum 20 feet between canopies.
- **Zone 3** – This zone measures from the outside of edge of Zone 2 outward to 150 feet from the structure. This zone is a reduced fuel, non-irrigated area and shall be maintained, thinned and trimmed. A maximum of 30 percent of native vegetation shall be retained with single specimen shrubs 20 feet off center maximum. Groundcover shall be maintained at 6 inches height. Trees shall be maintained with a minimum 20 feet between canopies

As a condition of project approval, prior to the issuance of a grading permit, the applicant/developer/property owner would submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic). This would offset the project's increase in demand for fire protection services. The project would not result in substantial adverse physical impacts associated with the provision of new fire protection facilities and impacts would be **less than significant**.

Police Protection

As discussed in Section 3.10.1, above, the San Diego County Sheriff's Department provides law enforcement services to the City. More specifically, the project would be served by the San Marcos Station, located approximately 0.5 miles from the project site. The project would introduce approximately 143 residents on-site, resulting in an increased demand on existing police protection resources. The development and associated population increase on the project site would be expected to increase the frequency of emergency and non-emergency calls to the Sherriff's Department. However, as discussed in Section 3.10.1 above, over 100 deputies, volunteers, and professional staff serve the residents of the City. Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services. Unlike fire services, which respond solely to emergencies, law enforcement services consist of patrolling large areas 24 hours a day, 365 days a year. Police units are continuously mobile, and service calls are responded to by the nearest available mobile unit. At the San Marcos Station, patrol deputies are assigned to a geographical "beat" area, allowing deputies to become familiar with citizens and problems within their "beats". As such, the location of the proposed project relative to the nearest station would not affect police protection. Further, to minimize the increased demand for police protection services, the project has been designed to improve the safety for future residents and visiting guests. Safety features proposed for the proposed project include walls, fencing, and lighting as described in Section 2.2.2.3 (Chapter 2, Project Description).

Additionally, as a condition of project approval, prior to the issuance of a grading permit, the applicant/developer/property owner would submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 98-01 (Police). Thus, while new development places increased demand on police protection services, it is not anticipated that the proposed project would result in the need for construction or expansion of existing police facilities. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities. Impacts resulting from the proposed project would be **less than significant**.

Schools

The project site is located within the service boundary of the SMUSD. Per SMUSD the following schools would serve the project:

- Richland Park Elementary School, (grades TK-5), 910 Richland Road, San Marcos
- Woodland Park Middle School (grades 6-8), 1270 Rock Spring Road, San Marcos
- Mission Hills High School (grades 9-12), 1 Mission Hills Court, San Marcos

Table 3.10-2 presents the number of students anticipated to be generated by the 46 residential units. As shown in Table 3.10-2, the project will generate 3 TK students, 18 elementary school students, 6 middle school students and 8 high school students a total of 35 students.

Table 3.10-2. Student Generation

Grade	Generation Rate ⁽¹⁾	Number of Units Proposed	Students Generated
TK	0.05498	46	3
K-6	0.38486	46	18
7-8	0.10996	46	6
9-12	0.15865	46	8
Total Students			35

Source: SMUSD 2023b.

Note: (1) The district has rates for single family, multi family and apartments. The multifamily rate was used for the project.

There is currently capacity at Richland Elementary and Woodland Park Middle School (2023b), however, SMUSD is experiencing district-wide capacity issues. The addition of students generated by the project would contribute to the District-wide capacity issues. The project applicant shall pay school mitigation fees pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) in effect at the time of building permit issuance. Current Level II school fees are \$4.79/s.f. for residential development (SMUSD 2023c). Further, consistent with General Plan Policy LU-11.2, the applicant shall provide a letter from the school district to the City prior to the issuance of building permits confirming these fees have been paid.

Payment of these fees would assist in funding SMUSD's long-range plans. State Bill (SB) 50 states that the fees imposed by school districts shall constitute the exclusive method of considering and mitigating impacts on school facilities caused by a development project. Such payment shall provide "full and complete mitigation of the impacts of any legislative or adjudicative act...on the provision of

adequate school facilities” (Government Code Section 65995(h)). As such, with contribution of required development fees, impacts to schools would be **less than significant**.

Parks

Buildout of the proposed project is estimated to add an additional 143 residents to the City. Assuming five acres of park space per 1,000 residents, this equates to a demand of approximately 0.72 acres of park space generated by project residents.

The project applicant would be required to pay the City’s PFF, which is required by all projects that increase the demand for park and recreation needs in the City. The PFF money would go towards the acquisition and development of local and community park facilities throughout the City, to offset the demand on public park space generated by the project, as described in Municipal Code Chapter 17.36 and 17.44. Payment of the PFF shall be made prior to City issuance of the first building permit for the proposed project. The PFF payment would ultimately contribute to development of new parks and recreational facilities and would offset the increase in demand of parks and recreational facilities generated by the proposed project, such that existing facilities would not be substantially deteriorated.

In addition, the project proposes 6.01 acres of open space. The proposed open space includes 5.18 acres of common open space with grades of 10% or greater and 0.86 acres of common open space with grades less than 10%. The project also includes private open space, which totals 38,375 s.f. and includes decks and ground-floor patios for all the units. The 7,480 s.f. (0.2 acres) community recreation area would be located in the southcentral portion of the site and would include a tot lot with fall safe surfacing, turf play areas, shaded picnic table, looped trike track, and a sensory play area. The homeowners association would be responsible for the maintenance of the common open space areas, including the recreation area/park. As such, with payment of the required PFF in combination with provision of on-site common and private open space, the project would meet and exceed the anticipated demand for neighborhood and regional parks or other recreational facilities. Project residents would have access to adequate on-site recreational facilities, which would offset increased use of existing parks and recreational facilities. Park impacts would be **less than significant**.

Other Public Facilities (Libraries)

Development of the project would add an additional 143 residents to the City. This would increase the demands on library services and resources. However, additional library services are available in the County through the Serra Cooperative Library System. The Serra Cooperative Library System is a network of public, academic, and special libraries in the southern California counties of Imperial and San Diego. Serra helps member libraries provide expanded resources and services at reduced costs. Community members can also borrow materials at Palomar Community College with a valid picture ID and proof of current mailing address. Therefore, a **less than significant impact** is identified for this issue area.

3.10.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative

impact with respect to public services, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to public services (see Table 2-4, Cumulative Projects).

Fire Protection Services

The geographic area for the cumulative analysis of fire protection and emergency services includes those areas that are serviced by the SMFD. The cumulative projects that fall within this geographic area would add to the increase in demand for fire protection and emergency services. The SMFPD provides service to the City of San Marcos and has existing automatic mutual aid fire agreements in place with the Cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District. As discussed in Section 3.10.4 above, although the proposed project would introduce approximately 143 residents on-site, the project is not expected to cause a decline in SMFD response times. Nonetheless, the cumulative projects listed in Table 2-4 would result in additional demand of fire protection services, and the potential need for additional fire protection resources. However, all cumulative projects would be required to participate in existing Community Facilities Districts as determined necessary. Future projects would be required to offset the increase in demand caused by their respective project. Development fee payments would go towards providing the additional staff and equipment that would be needed by SMFD in the future to provide fire protection services, including potential new fire stations. Similarly, to offset any potential cumulative impacts to fire protection services, the project would pay all required development impact fees. Thus, cumulative impacts to fire protection services would be **less than significant**.

Police Protection Services

The geographic area for the cumulative analysis of police protection includes those areas that are serviced by the San Marcos Sheriff's Department. All cumulative projects listed in Table 2-4 would result in an increase in demand for police protection services from the San Marcos Sheriff's Department. The project site would be served by the San Marcos Station, located approximately 0.5 miles from the project site. As discussed in Section 3.10.4, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities. However, the cumulative projects listed in Table 2-4 would result in additional demand of police protection services, and the potential need for additional police protection resources. Nonetheless, all cumulative projects would be required to offset increased demand to police protection services through the payment of fees. These fees would provide for additional staff and equipment to assist in the provision of law enforcement services. In order to offset any potential cumulative impacts to fire protection services, the proposed project would also be required to contribute toward future police protection resources through the payment of fees. As such, with payment of fees, cumulative impacts to police protection services would be **less than significant**.

Schools

SMUSD is experiencing district-wide capacity issues. The addition of students generated by the project would contribute to the district-wide capacity issues.

As discussed in Section 3.10.4, the project applicant would be required to contribute development fees to SMUSD, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050. The applicant shall pay the school mitigation fees that are in effect at the time of building permit issuance.

Current Level II school fees are \$4.79/s.f. for residential development and \$0.78/s.f. for commercial development, however, this fee amount could change between the drafting of this EIR and the time of building permit issuance (SMUSD 2023c). Further, consistent with General Plan Policy LU-11.2, the applicant shall provide a letter from the school district to the City prior to the issuance of building permits confirming these fees have been paid. All the cumulative projects included in Table 2-4 that include residential development would result in increased demand for school services and would be required to pay school fees to offset the increase demand, similar to the proposed project. Additionally, non-residential projects are also required to pay school fees consistent with SMUSD's developer fee schedule. As such, with contribution of required development fees by the proposed project and related projects, cumulative impacts to schools would be **less than significant**.

Parks

The proposed project as well as the cumulative projects that are in the City of San Marcos (as identified in Table 2-4) would add to the cumulative demand for park and recreation facilities in the City. All residential projects that increase the demand for park and recreation needs in the City are required to provide park space and/or pay park in lieu-fees. The environmental documentation prepared for each project would analyze impacts associated with the construction of any parks within each overall development footprint. As discussed in Section 3.10.4, the proposed project would be required to pay the City's PFF, which is required for all projects that increase the demand for park and recreation needs in the City. The PFF would be used for developing neighborhood and regional parks. It is expected that all cumulative projects that increase demand for parks and recreation needs would also be required to pay these fees. As such, cumulative impacts on recreational facilities in the City would be **less than significant**.

Other Public Facilities (Libraries)

Cumulative projects within the service area of the San Marcos Branch Library would result in an increase in demand for library services. Aside from the San Marcos Branch, community members can get borrowing privileges at the CSUSM campus and the Palomar Community College (CSUSM 2024). These additional library resources are in the San Marcos community and provide over 200,000 square feet of additional library space. Cumulative impacts to library services would be **less than significant**.

3.10.6 Mitigation Measures

No significant impacts to public services were identified; thus, no mitigation measures are required.

3.10.7 Conclusion

Development of the proposed project would result in an increase in demand for fire protection, emergency medical services, police protection, school services, parks, and library facilities. However, the project applicant would be required to pay all applicable development fees including payment of school mitigation fees, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050, and payment of the City's PFF, required by all projects that increase the demand for park and recreation needs in the City, in order to avoid direct and cumulative impacts to schools and parks.

Although the project, on its own, is not expected to result in impacts to fire and police protection services, with the additional demand on fire and police services to be added by the cumulative projects listed in Table 2-4, potential need for additional fire and police protection resources could occur. As

such, the project applicant would be required to pay all required development fees to fire and police services to offset any potential cumulative impacts. The project applicant would also annex into CFD 2001-01 (Fire and Paramedic) and CFD 98-01, Improvement Area 1 (Police), which would offset and minimize potential impacts. As such, with payment of fees towards schools, parks, fire, and police, impacts to public services would be **less than significant**.

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3.11 Transportation

This section provides a transportation impact analysis for the proposed project related to transit, roadway, bicycle and pedestrian facilities, vehicle miles traveled, design feature hazards and emergency access. The section is based on the following reports, which are included as **Appendices J and M** of the Environmental Impact Report(EIR):

- *Local Transportation Analysis, Woodward 46 Apartment Project* Prepared by Linscott Law & Greenspan (LLG). March 27, 2024 (LLG 2023a)
- *Vehicle Miles Traveled (VMT) Study. Woodward 46 Apartment Project* Prepared by Linscott Law & Greenspan (LLG). March 27, 2024 (LLG 2023b)

Section 3.8 (Land Use and Planning) includes a description of existing traffic conditions, methodology, baseline conditions and trip generation for the local transportation analysis/level of service (LOS) analysis. Table 3.8-12 in Section 3.8 analyzes the project's consistency with the Mobility Element of the General Plan. **Table 3.11-1** summarizes the project- and cumulative-level traffic impact analysis, by threshold.

Table 3.11-1. Transportation/Traffic Summary of Impacts

Thresholds of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities	No Impact	Less than Significant	Less than Significant Without Mitigation
#2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4: Result in inadequate emergency access	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.11.1 Existing Conditions

The City strives to create a robust, city-wide system of roadways, bicycle and pedestrian paths and routes, as well as public transit options, which provide residents with alternative modes of travel as well as recreational opportunities.

Existing Roadways

The following is a description of the existing street network in the study area (LLG 2023a):

- Woodward Street is currently constructed as a 4-lane undivided roadway between Vineyard Road and Mission Road. The posted speed limit is 40 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided.
- Mission Road is currently constructed as a 4-lane undivided roadway with a two-way left-turn lane west of Firebird Lane. Between Firebird Lane and San Marcos Boulevard, Mission Road is built as a 4-lane divided roadway. East of San Marcos Boulevard, it is built as a 6-lane divided roadway. The posted speed limit is 45 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided east of Pico Avenue.
- Pico Avenue is currently constructed as a 4-lane undivided roadway south of Mission Road and as a 2-lane undivided roadway north of Mission Road. The posted speed limit is 25 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway. There are no existing bicycle facilities along Pico Avenue.
- San Marcos Boulevard is currently constructed as a 4-lane divided roadway. The posted speed limit is 40 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided.
- Twin Oaks Valley Road is currently constructed as a 4-lane divided roadway, north of San Marcos Boulevard. South of San Marcos Boulevard, Twin Oaks Valley Road is built as a 6-lane divided roadway. The posted speed limit is 45 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided.
- Rancheros Drive is currently constructed as a 4-lane divided roadway between San Marcos Boulevard and Civic Center Drive. South of Civic Center Drive, Rancheros Drive is built as a 2-lane divided roadway. The posted speed limit is 35 mph. On-street parking is prohibited. Sidewalks are provided on both sides of the roadway except for the west side portion of the roadway, approximately 550-feet south from the Rancheros Drive and Civic Center Drive intersection. Class II bike lanes are provided, south of Civic Center Drive.

Existing Transit Service

Transit service is provided to the area via North County Transit District (NCTD). The nearest bus stop is located 1,000 feet south of the project site, just west of the Mission Road / Woodward Street intersection. The San Marcos Civic Center Station, which serves the SPRINTER, is located approximately 0.25 miles south of the project site on the southwest corner of the Mission Road / Woodward Street intersection.

- **Bus Route 305** provides bus service to the area via Mission Road and South Santa Fe Avenue, connecting Escondido to Vista. During weekdays, headways are 30 minutes for the duration of the day. During weekends, headways are 30 minutes for the duration of the day. Route 305 has one bus stop near the project site located at the intersection of Mission Road and Woodward Street.
- The **SPRINTER** runs between Escondido and Oceanside. There are fifteen (15) stops along this route. SPRINTER service provides thirty-four (34) daily trips on the weekdays with an additional six (6) trips on Friday nights. It also provides twenty-five (25) daily weekend trips with an

additional three (3) trips on Saturday nights (LLG 2023a). The closest SPRINTER Station is 0.2 miles southwest of the project site at the San Marcos Civic Center.

Existing Bicycle Conditions

Currently, the City of San Marcos provides Class II Bike Lanes on Mission Road, Twin Oaks Valley Road, Woodward Street and San Marcos Boulevard. Per the City of San Marcos Bicycle and Pedestrian Master Plan, there are no plans to add or alter bicycle facilities within the project vicinity (LLG 2023a).

Existing Pedestrian Connections

Sidewalk connection is provided between the project site and the San Marcos Civic Center Station and bus stops. Sidewalks are provided on both sides of the roadways except for the west side of Rancheros Drive, approximately 550-feet south from the Rancheros Drive and Civic Center Drive intersection. Per the City of San Marcos Bicycle and Pedestrian Master Plan, there are no plans to add or alter sidewalks within the project vicinity (LLG 2023a).

3.11.2 Regulatory Setting

The following provides a general description of the applicable regulatory requirements and guidelines for the project area.

State Regulations

California Department of Transportation

The California Department of Transportation (Caltrans) is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans has established standards for roadway traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects.

AB 1358 – California Complete Streets Act of 2008

The California Complete Streets Act of 2008 (Assembly Bill [AB] 1358) requires circulation elements as of January 1, 2011, to consider the transportation system from a multi-modal perspective, including public transit, walking, and biking, which have traditionally been marginalized in comparison to autos in contemporary American urban planning.

SB 743, CEQA Guidelines Update

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, which included the California Natural Resources Agency Guidelines for the Implementation of CEQA. As a result, the California Governor's Office of Planning and Research (OPR) updated and released the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) in December 2018. According to the updated guidelines, lead agencies had until July 1, 2020, to comply with the updated CEQA revision. The City of San Marcos has adopted Vehicle Miles Traveled (VMT) thresholds as part of their Transportation Impact Analysis Guidelines (City of San Marcos 2020).

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process; cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside CEQA. Section 3.8, Land Use and Planning, includes results of the LOS analysis prepared for the project.

Local Plans and Policies

SANDAG San Diego Forward: The 2021 Regional Plan

The Regional Plan, adopted in 2021 by the San Diego Association of Governments (SANDAG), provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative transportation demand and management strategies.

The Regional Plan combines the Regional Comprehensive Plan and the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). By integrating land use and transportation plans, the Regional Plan is intended to achieve greenhouse gas emission reduction targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities Act.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the city and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

The Regional Plan also supports other regional transportation planning and programming efforts, including overseeing which projects are funded under the Regional Transportation Improvement Program and the TransNet program. SANDAG is applying data-driven strategies, innovative technologies, and stakeholder input to create a future system that is faster, fairer, and cleaner. Part of this data-driven approach includes the implementation of five key transportation strategies referred to as the 5 Big Moves. These strategies provide the framework for the Regional Plan and consider policies and programs, changes in land use and infrastructure, the existing transportation highway and transit networks, and trends in technology to optimize use of the transportation system. Together, these initiatives will create a fully integrated, world-class transportation system that offers efficient and equitable transportation choices, meets state climate targets, and supports local jurisdictions' achievements of Climate Action Plan goals.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's greenhouse gas emissions target set by CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. An Amendment to the 2021 Regional Plan removing the regional road user charge was adopted by SANDAG in October 2023. The 2025 Regional Plan is currently in development and also will not include a regional road user charge.

SANDAG Smart Growth Opportunity Area

The project site is partially located within the SM-3 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County. The Smart Growth Concept Map identifies locations in the region that can support smart growth, transit, walking, and biking. The map serves as the foundation for prioritizing transportation investments and determining eligibility for local smart growth incentive funds.

Congestion Management Program

The 2008 Congestion Management Program (CMP) for San Diego County was developed to meet the requirements of Section 65089 of the California Government Code. Since that time, the local agencies within San Diego County approved to opt out of the CMP requirements, as allowed within the Government Code. As such, there are no CMP-specific requirements associated with this project. However, to ensure the region's continued compliance with the federal congestion management process, SANDAG has prepared San Diego Forward: The 2021 Regional Plan in compliance with 23 Code of Federal Regulations 450.320. The Regional Plan incorporates performance monitoring and measurement of the regional transportation system, multimodal alternatives to single-occupancy vehicles, land use impact analysis, congestion management tools, and integration with the Regional Transportation Improvement Program process.

City of San Marcos Transportation Impact Analysis Guidelines

The City of San Marcos approved *Transportation Impact Analysis Guidelines* (TIAG) on November 16, 2020 (City of San Marcos 2020). TIAG provide screening criteria for determining whether a land development project should conduct a VMT analysis. These thresholds are based on the project's consistency with the General Plan, estimated daily trips, project location, and other project characteristics. A VMT analysis applies to all land development projects except for those that meet at least one of the screening criteria provided.

City of San Marcos Active Transportation Plan

The City of San Marcos adopted an Active Transportation Plan (ATP) in July 2024 that replaces the previous City of San Marcos Bikeway Master Plan and Pedestrian Master Plan; this plan supplements the General Plan Update by recommending specific pedestrian and bicycle-related projects, programs, and policies for the City. The ATP evaluates the current state of walking and biking opportunities; analyzes user demographics, safety data and more; engages community members; and provides recommendations to support mobility in the city. The ATP also incorporates a Safe Routes to School (SRTS) Study to identify challenges associated with the schools located within the San Marcos Unified School District. The ATP will be used to create active transportation-oriented projects for the City's Capital Improvement Program (CIP) and for construction as required by the city for private development projects.

In the City's ATP, recommendations for future bicycle classifications for each roadway were broken down into interim and ultimate conditions. The interim bicycle network is composed of recommendations that can be accomplished in the near term without requiring redevelopment, right-of-way, or easements, or major environmental documentation/ permitting. The ultimate network contains long-term recommendations that can be completed over time as the City redevelops and right-of-way is acquired. In some cases, and ultimate improvement may be constructed first, rendering the interim improvement unnecessary.

Developers will be required to implement the ultimate bicycle network recommendations when considering setbacks, frontage improvements, and design, and may be required to construct the ultimate facilities based upon roadway characteristics, adjacent facilities, and the ability to design and construct safe transitions into the ultimate improvements. For two-way bicycle facilities—such as a Class I multi-use path or a Class IV two-way bikeway—the City may require a developer to construct or provide setbacks for these types of facilities that may be identified on the side of the roadway opposite the project's frontage. Locations of desired facilities may, in some cases, be placed on either side of the roadway, at the discretion of the City. Parallel facilities may be required by the City as opportunities arise to create similar connectivity on other routes. The City may require other connectors between the high-level infrastructure shown in this plan in order to ensure a seamless network. The proposed project is consistent with the ATP.

San Marcos Transportation Demand Management (TDM) Ordinance and Policy

To implement the City's Climate Action Plan measures and to reduce traffic impacts from development projects, the City of San Marcos adopted a TDM Ordinance and Policy in December 2023. The TDM Ordinance and Policy will be applicable to any development project that is not exempt from CEQA requirements and would result in emission of more than 500 metric tons of carbon dioxide (MT of CO₂) per year. Projects that are subject to this Ordinance shall submit a project specific TDM Plan for the City's review and approval with the entitlement application to show compliance with the TDM Policy and Ordinance.

Its intent is to encourage a shift away from single-occupancy vehicles to alternative travel options such as walking, biking, carpooling, or taking transit. Reducing reliance on roadways will likewise result in reduced congestion, vehicle miles traveled, and greenhouse gases. The TDM policy lists six mandatory strategies that are required for all projects to implement and 29 optional strategies, each assigned a specific point value. Applicable projects would have to establish a project specific TDM Plan that should include all mandatory and a selection of optional strategies to achieve a minimum of a ten-point score.

San Marcos General Plan

The Land Use and Community Design Element of the General Plan identifies specific policies related to congestion management. Those that are applicable to the proposed project are identified below.

- Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.
 - Policy LU-1:1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.
- Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.

- Policy LU-3.4: Provide non-motorized (pedestrian and bicycle) access/circulation within, and to, mixed-use centers to reduce reliance on the automobile.
- Policy LU-3.5: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.
- Policy LU-3.7: Require new development to prepare traffic demand management programs.
- Policy LU-3.8: Require new development and discretionary actions to annex into a Congestion Management Community Facilities District.

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the transportation analysis for the proposed project are identified below. Policy M-1.4, which addresses LOS is analyzed in Section 3.8-4, Land Use and Planning.

- Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.
 - Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.
 - Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
 - Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the city.
 - Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:
 - LOS D or better for Vehicles as a prioritized mode
 - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
 - The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).
 - Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.
 - Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.
- Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.

- Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate, within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network.
- Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.
- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
 - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
 - Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.
 - Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.
 - Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.
 - Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

The Environmental Justice Element of the General Plan identifies specific goals and policies related to access to and facilitation of walking, bicycling, and transit use. Those that are applicable to the proposed project are identified below.

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
 - Policy EJ-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices (See Policy LU-1.1).
 - Policy EJ-1.3: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use (See Policy LU-2.1).
 - Policy EJ-1.6: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the city (See Policy M-1.3).
 - Policy EJ-1.8: Develop an integrated multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution

and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City (See Policy M-3.1).

- Goal EJ-2: Locate public facilities and services equitably throughout the community.
 - Policy: EJ-2.10: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network (See Policy M-1.6).
 - Policy: EJ-2.11: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor (See Policy M-1.7).
- Goal EJ-5: Encourage physical activity and improved physical fitness.
 - Policy: EJ-5.1: Provide non-motorized (pedestrian and bicycle) access/ circulation within, and to, mixed-use centers to reduce reliance on the automobile (See Policy LU-3.4).
 - Policy EJ- 5.2: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways (See Policy LU-3.5).
 - Policy EJ-5.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians (See Policy M-3.5).
 - Policy EJ-5.6: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities (See Policy M-3.9).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As presented in Table 3.8-12 in Section 3.8, the project is consistent with the applicable transportation-related goals and policies.

3.11.3 Thresholds of Significance

Appendix G of the California Environmental Quality Act (CEQA) Guidelines provides thresholds for determining significant environmental impacts. A project may be deemed to have a significant impact on transportation if it would:

- **Threshold #1:** Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; or
- **Threshold #2:** Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b); or
- **Threshold #3:** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- **Threshold #4:** Result in inadequate emergency access.

3.11.4 Project Impact Analysis

Threshold #1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Site access is proposed via one full-access driveway to Woodward Street. The project site is currently fronting a four-lane undivided roadway that primarily serves residents. Per the Local Transportation Analysis, the project driveway is calculated to operate at LOS B during the AM and PM peak hours. The following design features are included in the project design per LLG's recommendation:

- Access point shall provide adequate driveway sight distance.
- A 50-foot southbound left-turn pocket shall be provided on Woodward Street to allow for left-turn access to the project site outside of the southbound through lane.

The project would not result in any conflicts related to plans or policies addressing transit, bicycle, and pedestrian facilities. The project is located within 1,000 feet of NCTD transit lines, including bus routes and 0.2 mile from closest SPRINTER station at the San Marcos Civic Center. Construction of the project may result in a temporary disruption of the bicycle lane and sidewalk along the project frontage with Woodward Street. This specifically relates to the extension of the water and sewer lines to serve the project. The contractor would install signage in advance of the work to notify cyclists and pedestrians.

Sidewalk connection currently exists between the project site and the San Marcos Civic Center Station and bus stops. Sidewalks are provided on both sides of the roadways except for the west side of Rancheros Drive, approximately 550-feet south from the Rancheros Drive and Civic Center Drive intersection. Per the City of San Marcos Bicycle and Pedestrian Master Plan, there are no plans to add or alter sidewalks within the project vicinity (LLG 2023a). The project proposes sidewalks throughout the Specific Plan area to accommodate safe pedestrian travel through each area.

Additionally, based upon the analysis presented in Section 3.8.4, the project would not result in an inconsistency with the Mobility Element of the City's General Plan. The Local Transportation Analysis determined that the project would result in 368 total average daily trips (ADT). All study intersections and street segments are calculated to operate acceptably at LOS D or better with the addition of project and cumulative project traffic under Near Term (Interim Year) 2026 and Long-Term (Horizon Year) 2050 conditions with the exception of two intersections:

- Mission Road/ Woodward Street (San Marcos Boulevard) - LOS F during the AM and PM peak hours
- San Marcos Boulevard/ Twin Oaks Valley Road – LOS E during the AM and PM peak hours.

The Local Transportation Analysis concluded that the trips associated with the proposed project would not be enough to increase average vehicle delay by two seconds, which is the threshold for intersections operating at LOS E or F, as identified in the Mobility Element of the General Plan (LLG 2023a).

Therefore, **no impact** related to a conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities is identified for the project.

Threshold #2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3(b).

The *City's Transportation Impact Analysis (TIA) Guidelines* (San Marcos 2020) provide several screening approaches to identify when a project should be expected to cause a less-than-significant impact related to VMT. The City of San Marcos TIA Guidelines suggest that a detailed transportation VMT analysis applies to all land development projects, except those that meet at least one of the screening criteria. Relevant screening criteria for the proposed project is described below:

- Adjacency to High Quality Transit. high-quality transit area is defined as the one-half mile walkshed around either of the following:
 - An existing major transit stop, defined as a site containing an existing rail transit station or the intersection of two or more bus routes with a combined frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. In addition, a rail transit station must be within 0.25 miles of bus stops serving at least one bus route with individual service intervals no longer than 30 minutes during peak commute periods per route in order to qualify as a high-quality transit area.
 - An existing stop along a high-quality transit corridor, defined as a corridor with fixed route bus service with combined service intervals (gaps between buses serving the corridor) no longer than 15 minutes during peak commute hours.

However, this presumption does not apply if the project:

- 1 Has a floor area ratio (FAR) of less than 0.75;
- 2 Includes more parking for use by residents, customers, or employees of the project than required by the City;
- 3 Is inconsistent with the City's current General Plan, as determined by the City; or, replaces affordable residential units with a smaller number of moderate- or high-income residential units.

VMT Analysis

Based upon the criteria provided above, the proposed project would be screened out from conducting a detailed VMT Analysis because the project is located within a high-quality transit area. Appendix A of the VMT analysis (Appendix M of the EIR) contains the TIA Guidelines' High-Quality Transit Areas map. The following is a discussion of the three items that are potential caveats (LLG 2023b).

Floor Area Ratio

The Specific Plan's development standards require a minimum 0.75 FAR.

Parking

The project proposes a total of 46 condominium units. Per the City of San Marcos Municipal Code, Chapter 20.340, 108 parking spaces would be required. A summary of the parking code requirements and calculations are shown in **Table 3.11-2**. The project proposes to provide 108 parking spaces. Therefore, the project would meet the parking requirements but would not exceed them.

Table 3.11-2. City of San Marcos Municipal Code Parking Requirements and Calculations

Parking Code Land Use	Required Off-Street Parking Rate ⁽¹⁾	Project Quantity (dwelling units)	Required Number of Parking Spaces
Residential Uses			
Duplex	2 spaces/ du	46 3-bedroom units	92
Guest	1 space/ du	46 3-bedroom units	16
Total Spaces			108

Source: LLG 2023b.

Notes: (1) Rates from the City of San Marcos Municipal Code, Chapter 20.340
du= dwelling unit

General Plan Consistency

The project site has a General Plan Designation of SPA (Specific Plan Area) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses.

The project proposes a Specific Plan Amendment of the HOCSP to remove the Richmar Sub-Plan designation from the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan which would allow for 5.7 dwelling units per acre. The General Plan Amendment of the Land Use Element would amend land use maps and text related to changing the sub-plan designation of the subject property from Richmar Specific Plan to Woodward 46 Specific Plan.

Table 3.8-12 in Section 3.8 Land Use summarizes the applicable San Marcos General Plan goals and policies relating to land use. As shown in Table 3.8-12, the project is consistent with the applicable goals and policies. Therefore, the proposed project is considered to be screened out of a detailed VMT analysis and may be presumed to cause a **less-than-significant** VMT impact.

Threshold #3: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

The project area would have one internal circulation system. The conceptual circulation plan is included as **Figure 2-11**. The proposed access driveway would provide a minimum of 24 feet of paved driving surface measured curb to curb. Where provided, a minimum 4-foot concrete sidewalk would accommodate safe pedestrian travel through each area. Units requiring American Disability Act (ADA)

accessibility would be located on the western side of the driveway where a 4.5-foot sidewalk would run the length of the development and would connect units to the common recreation area. A 6-inch curb and gutter would be constructed to either side of the driveway and each travel lane shall be a minimum of 12 feet from the center line.

The internal circulation network proposed for the project site does not include any hazardous design features and the project does not propose any incompatible uses. The project's internal roadways are designed to provide safe movement of bicycle, pedestrian, and vehicle traffic, including passenger vehicles and heavy vehicles, through the project site (LLG 2023a). The project has been designed to provide a safe, separated walkway from pedestrians from the project site to Woodward Street.

As described above in Threshold #1, site access is proposed via one full-access driveway to Woodward Street. The project site is currently fronting a four-lane undivided roadway that primarily serves residents. Per the Local Transportation Analysis, the project driveway is calculated to operate at LOS B during the AM and PM peak hours. The following design features are included in the project design per LLG's recommendation:

- Access point shall provide adequate driveway sight distance.
- A southbound left-turn pocket shall be provided on Woodward Street to allow for left-turn access to the project site outside of the southbound through lane.

There is existing netting along the Woodward Street frontage to minimize the potential for rock and debris fall onto the roadway. As noted on the proposed grading plans for the project, a portion of this netting would be removed to accommodate the project grading. The netting would be re-anchored to the new top of slope or as recommended by the soils engineer during project construction.

Driveway Sight Distance Analysis

LLG performed a field survey to determine whether or not the minimum required intersection sight distances can be achieved for drivers turning left from Woodward Street. Per the *AASHTO Geometric Design of Highways and Street Manual*, the point of observation for the review is offset 14.5 feet from the edge of the traveled way. The driver's eyes are measured at 3.5 feet from the ground surface, and the object to be observed is also 3.5 feet from the ground. The location of the object to be observed is located in the middle of the travel lane.

Based on the proposed traffic control at the project driveway, the appropriate sight distance formula would reflect the left-turn from the minor road with stop control and represent the appropriate constraint on drivers leaving the project site. The formula used to calculate sight distance has variables which are dependent on the design speed of the major road and expected maneuver time pertaining to each specific turning movement. Per the guidelines, the intersection distance for both left and right approaches of the minor leg needs to be determined for vehicles turning left out of the project driveway. According to the sight distance analysis, looking left from the driveway towards the northbound approach, the minimum required intersection sight distance is 383 feet, and looking right from the driveway towards the southbound approach the sight distance is 441 feet. Based on LLG field observations, sight distance requirements would be met for both northbound (383 feet) and southbound (441 feet) approaches (LLG 2023a).

In summary, the project does not include any hazardous design features or any incompatible uses, provides adequate sight distance, and has been designed to provide safe movement throughout and around the project site. Impacts would be **less than significant**.

Threshold #4: Result in inadequate emergency access.

Access to the project site would be via one unsignalized driveway on Woodward Street. The entrance driveway would be ungated and would be 24-feet wide. Internal vehicular movement would be via a 24-foot-wide drive aisle. The Specific Plan Area would accommodate the Pierce Pumper truck, which is the emergency vehicle in operation with the City of San Marcos Fire Department. A 24-foot minimum curb to curb driveway would be constructed to maintain a minimum road width and any portion of the driveway with grades 12% and steeper would require concrete pavement surface with a broom finish suitable for emergency vehicles per City of San Marcos Fire Department requirements. The project design would include a 30-foot-wide emergency vehicle turnaround area at the northeast corner of the proposed development. The cul-de-sac at the southern end of the site would also serve as an emergency vehicle turnaround area. Both turnaround areas would accommodate the Pierce Pumper truck.

The project would not include any hazardous design features or any incompatible uses, provides adequate sight distance, and has been designed to provide safe movement throughout and around the project site. The project design has also been reviewed by the Fire Marshal and no issues related to inadequate emergency access were identified. Impacts would be **less than significant**.

3.11.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to transportation, the cumulative analysis is based upon a list approach to determine the proposed project’s contributing effect on potential cumulative impacts related to hazards. All of the cumulative projects identified in Table 2-4 are considered in this cumulative analysis.

Cumulative Policy Impact

The related projects and other cumulative development in San Marcos would be subject to the same circulation-related programs, plans, ordinances, and policies as the proposed project. Cumulative projects would be required to demonstrate consistency with the SANDAG Regional Plan, San Marcos General Plan, San Marcos Bikeway Master Plan, and San Marcos TIA Guidelines, which guide development of transportation systems and circulation in the city. The cumulative projects primarily propose medium- to high-density residential and mixed-use development in areas with good transit connectivity and active transportation options, reducing dependence on automobiles and encouraging more active travel modes. As a result, cumulative impacts related to a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be **less than significant**.

Cumulative VMT Analysis

According to the City’s TIA Guidelines (San Marcos 2020) if a land use project (or a component of a mixed-use project) is screened out of requiring a detailed existing VMT analysis or if it falls below the

existing VMT thresholds outlined in Table 2 of the TIA Guidelines, it will also result in a less than significant cumulative impact. Therefore, the proposed project's cumulative VMT impact would be **less than significant**.

Hazards Due to Design and Emergency Access

Site design hazards and emergency access are analyzed and addressed on a project-by-project basis. Each of the projects in Table 2-4 would be reviewed to ensure that the site design does not include any traffic-related hazards and that there would be adequate emergency access or required mitigation measures to reduce impacts. Therefore, impacts related to hazardous design and emergency access would be **less than significant**.

3.11.6 Mitigation Measures

Based upon the analysis presented in Sections 3.11.4 and 3.11.5, impacts were determined to be less than significant. No mitigation measures are required.

3.11.7 Conclusion

Based upon the analysis presented in Section 3.11.4, the project would not have an impact related to a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The project would also have a less than significant impact related to VMT based on the City's screening criteria.

Project impacts related to hazards due to a design feature, incompatible use or inadequate emergency access were determined to be less than significant.

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3.12 Tribal Cultural Resources

Introduction

This section analyzes the potential impacts of the proposed project on tribal cultural resources. As defined by Public Resources Code Section 21074, a tribal cultural resource is a site, feature, place, and or 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) either on or eligible for the California Register of Historic Resources (CRHR) or a local historic register, or 2) determined by the City, at its discretion to treat the resources as a tribal cultural resource (Public Resources Code Section 5024.1).

Cultural resources (historical resources, archaeological resources and human remains) are analyzed separately in Section 3.4, Cultural Resources, of the Environmental Impact Report (EIR).

The analysis in this section is based upon the following information:

- Government-to-government tribal consultation between the City and California Native American Tribes pursuant to the procedures in Assembly Bill 52 and Senate Bill 18.
- *Archaeological Survey and Evaluation Report for the Woodward 46 Project, City of San Marcos, California* (ASM 2024)

Due to the confidential nature of the archaeological report, it is not included as a technical appendix to the EIR. The archaeological resources inventory report included a record search, literature review, correspondence with Native American contacts, and field survey. The analysis also considers the *California Environmental Quality Act (CEQA) Guidelines Appendix G* and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.¹¹

Table 3.12-1 summarizes the tribal cultural resources project- and cumulative- level impacts, by threshold.

3.12.1 Existing Conditions

A detailed description of the project site's natural setting, archeological context, ethnographic context, records search information, and ASM's informal tribal coordination and information gathering is presented in Section 3.4 (Cultural Resources). The following section provides information about tribal cultural resources and a summary of government-to-government tribal consultation efforts pursuant to AB 52 and SB 18. Although SB 18 is not a CEQA issue, the tribal consultation was simultaneous under both laws.

¹¹ <http://www.san-marcos.net/work/economic-development/general-plan>

Table 3.12-1. Tribal Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – 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).	Potentially Significant	Less Than Significant	Mitigated to Less Than Significant
#2 – 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 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.	Potentially Significant	Less Than Significant	Mitigated to Less Than Significant

Records Search

A detailed records search including previous cultural resources reports, previously recorded cultural resources and archival research was conducted for the project. Please see Section 3.4, Cultural Resources, for a summary.

Tribal Consultation

In addition to ASM reaching out to Tribes as part of the archeological report preparation (see Section 3.4), the City provided notice to Tribes pursuant to AB 52 and SB 18 and consulted with Tribes.

Under AB 52, the City sent project notification letters on May 23, 2023 to the following California Native American tribes, which had previously submitted general notification requests in writing pursuant to 21080.3.1(d) of the Public Resources Code. Each recipient was provided a brief description of the project and its location, the lead agency contact information, and a notification that the tribe has 30 days to request consultation, pursuant to PRC Section 21080.3.1(d). The 30-day response period concluded on June 22, 2023.

- Mesa Grande Band of Mission Indians
- Pechanga Band of Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians

Under SB 18, on December 13, 2022, the City sent project notification letters to the following California Native American tribes named on the NAHC list. Each recipient was provided a brief description of the project and its location, the lead agency contact information, and a notification that the tribe has 90 days to request consultation, pursuant to Government Code Section 65352.3(a)(2). The 90-day response period concluded on March 13, 2023.

- Barona Group of the Capitan Grande
- Campo Band of Diegueno Mission Indians
- Ewiiapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Band of Indians
- Jamul Indian Village
- Juaneno Band of Mission Indians Acjachemen Nation 84A
- Kwaaymii Laguna Band of Mission Indians
- La Jolla Band of Luiseño Indians
- La Posta Band of Diegueño Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseño Indians
- Pechanga Band of Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- San Pasqual Band of Diegueño Mission Indians
- Soboba Band of Luiseño Indians
- Sycuan Band of the Kumeyaay Nation

- Viejas Band of Kumeyaay Indians

As a result of the initial notification letters, the City received the following responses, and engaged in consultation with these tribes as summarized below.

San Luis Rey Band of Mission Indians

The tribe responded on March 16, 2023 to request consultation. The City initiated consultation and began discussing the project with the tribe during monthly consultation meetings. The City transmitted the cultural resources technical report to the tribe on April 18, 2023. Subsequent consultation focused on the request to place the features in open space or within landscaping. The City and project proponent carried out an alternatives analysis and held a site visit with Tribal representative Cami Mojado. On October 17, 2024, the City transmitted suggested revised mitigation measures to the tribe and on the same date, the Tribe responded with a letter stating that the mitigation measures are acceptable to the tribe and requested to conclude consultation. These mitigation measures have been incorporated into this EIR. As a result, the City considers consultation with the San Luis Rey Band of Mission Indians concluded with agreement in accordance with Sections 21080.3.2(b)(1) and 21082.3(d)(1) of the Public Resources Code.

Rincon Band of Luiseño Indians

The tribe responded on June 20, 2023 to request consultation under AB 52, and responded on January 26, 2023 to request consultation under SB 18. The City initiated consultation immediately by discussing the project with tribal representatives during monthly consultation meetings. The City transmitted the cultural resources report to the tribe as requested on April 18, 2023. During the July 14, 2023 meeting, tribal representative Cheryl Madrigal discussed concerns related to coordination with the archaeological consultant. The tribe sent a confidential comment letter to the City dated November 9, 2023, which outlined the tribe's comments and concerns. The City transmitted the confidential report appendix for the project to the tribe on November 27, 2023, and sent the archaeological site records and GIS data to the tribe on January 10, 2024. Tribal and City representatives conducted a field visit on March 22, 2024, which led to the need for an alternatives analysis to contemplate feasibility for complete avoidance. The alternatives analysis was sent to the tribe on April 22, 2024, and the tribe responded on June 21, 2024. Subsequent monthly meetings with the tribe focused on appropriate mitigation measures, which led to multiple revisions. The final mitigation measures were provided to the tribe on August 30, 2024.

Throughout 2024, the City continued to seek agreement with Rincon over the impacts and mitigation measures required to reduce the impact to less than significant. Ultimately, although Rincon did not provide written concurrence with the mitigation measures, the City determined that, after a good faith and reasonable effort, further consultation on the project would not be fruitful and that meaningful consultation on the project has been exhausted. As a result, the City considers consultation with the Rincon Band of Luiseño Indians complete without agreement in accordance with Section 21080.3.2(b)(2) of the Public Resources Code. The City has exercised its agency discretion and will require mitigation measures developed in consultation with tribes. The information provided to the City to date, including confidential information that cannot be disseminated publicly, was taken into account in the project impact analysis further below.

Pechanga Band of Indians

The tribe responded on January 5, 2023 to request consultation under SB 18 and on June 23, 2023 under AB 52. The City began discussing this project with tribal representatives during periodic

coordination meetings. During the May 14, 2024 meeting, the City and tribal representatives discussed options for avoidance and preservation in place, and discussed the general sensitivity of the area. The city sent the alternatives analysis and proposed mitigation measures to the tribe immediately following the meeting. The City received no response.

The City provided all information requested by the tribe and although no written comments were provided, enough consultation occurred that the City considers consultation with the Pechanga Band of Indians complete and in substantial agreement in accordance with Sections 21080.3.2(b)(1) and 21082.3(d)(1) of the Public Resources Code. The information provided to the City to date, including confidential information that cannot be disseminated publicly, was taken into account in the project impact analysis further below.

San Pasqual Band of Mission Indians

The tribe responded on May 1, 2023 to request consultation under SB 18 and forwarded an unsent consultation request letter dated January 10, 2023. The City initiated consultation immediately by scheduling a consultation meeting that was held on May 11, 2023. The City shared information about the project and answered questions from the Tribe. No further consultation was deemed necessary, and the City considers consultation with the San Pasqual Band of Mission Indians concluded.

Other Tribes

The balance of the tribes did not request consultation under either AB 52 or SB 18.

Because the City initiated consultation with all tribes that requested it, the threshold for release of the CEQA document for public review in PRC Section 21080.3.1(b) has been met. The City considers consultation with all consulting tribes concluded in good faith, as required by PRC Section 21082.3(d).

Tribal Cultural Resources

As detailed in Section 3.4, Cultural Resources, of the EIR, ASM identified one prehistoric Native American archaeological site, which is also considered a tribal cultural resource under CEQA. Site P-37-040572/CA-SDI-23456 is comprised of two bedrock milling outcrops on granitic outcrops. No associated artifacts or cultural materials were identified at the site (ASM 2024).

3.12.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to tribal cultural resources. The analysis of tribal cultural resources is a State requirement under CEQA, as required by AB 52, described below. The City also has goals and policies in the General Plan Conservation and Open Space Element related to cultural resources, as described below.

State

Senate Bill 18

SB 18, approved in 2004, amends the California Civil Code and the California Government Code, requiring cities and counties to contact and consult with California Native American tribes prior to adopting or amending any general plan or specific plan, or designating land as open space in order to preserve or mitigate impacts to specified Native American places, features and objects that are located within the city's or county's jurisdiction. SB 18 also requires cities and counties to hold in strict confidence any information about the specific identity, location, character, or use of these resources.

In 2005, the Office of Planning and Research published Tribal Consultation Guidelines to guide cities and counties on the process of engaging in consultation in accordance with SB 18. The Native American Heritage Commission maintains a list of California Native American Tribes with whom cities and counties must consult pursuant to SB 18.

Assembly Bill 52

AB 52 was approved in 2014 and adds new requirements regarding consultation with California Native American Tribes and consideration of tribal cultural resources. The law went into effect on July 1, 2015, and after that date, if requested by a California Native American Tribe, lead agencies must consult prior to the release of a Negative Declaration, Mitigated Negative Declaration or Draft EIR.

Health and Safety Code 8010-8011

This code is intended to provide consistent state policy to ensure that all California Native American human remains and cultural material are treated with dignity and respect. The code extends policy coverage to non-federally recognized tribes and federally recognized groups.

Assembly Bill 2461

The section provides procedures for private land owners to follow upon discovering Native American human remains. Land owners are encouraged to consider culturally appropriate measures if they discover Native American human remains as set forth in California PRC 5097.98.

Local

San Marcos General Plan Conservation and Open Space Element

The Conservation and Open Space Element of the City's General Plan contains several policies pertaining to the protection of archaeological and historic resources. The following goals and policies apply to the project:

- Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.
- Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.
- Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning. As detailed in Table 3.8-12, the project is consistent with the applicable General Plan goals and policies pertaining to cultural resources.

San Marcos Archaeological and Historical Resources Consultant Guidelines

The City of San Marcos published guidelines for archaeological and historical resources consultants in January 2024. The guidelines are generally meant to aid third party consultants who prepare archaeological or architectural history inventories, surveys, evaluations, and other technical documents. These guidelines include information pertaining to the minimum qualifications, records

searches, tribal outreach, pedestrian surveys, reporting, research design, findings, discussion and evaluations, management conclusions, references, and appendices of inventories, surveys, evaluations, and other technical documents (City of San Marcos 2024). ASM prepared the archaeological resources inventory report in accordance with these guidelines.

3.12.3 Thresholds of Significance

The determination of significance for tribal cultural resources is based on *CEQA Guidelines Appendix G*. Impacts to tribal cultural resources would be significant if the proposed project would:

- Threshold #1: Cause a substantial adverse change in the significance of a tribal cultural resource 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); or
- Threshold #2: Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of 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.

3.12.4 Project Impact Analysis

Tribal consultation under AB 52 and SB 18 identified P-37-040572/CA-SDI-23456 as a tribal cultural resource. As discussed in Section 3.4, Cultural Resources, P-37-040572/CA-SDI-23456 was identified during the project survey and represents a small prehistoric site with two cultural features (the western cultural feature and the eastern cultural feature). Additional information about this resource is restricted from public distribution and is only generally summarized herein; however, the specific information that led to the impact assessment in this EIR was taken into account by the City.

Grading for the proposed project would impact P-37-040572/CA-SDI-23456. It is anticipated that the western cultural feature can be avoided; however the eastern cultural feature will be impacted by the project grading.

Threshold #1: Cause a substantial adverse change in the significance of a tribal cultural resource 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).

The project will impact a portion of P-37-040572/CA-SDI-23456, specifically the eastern cultural feature. Based upon the cultural resources study prepared for the project (ASM 2024) P-37-040572/CA-SDI-23456 is not eligible for listing in the CRHR, and therefore it does not qualify as a tribal cultural resource under CEQA.

Threshold #2: Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of 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.

The City received written comments from one tribe regarding the significance of P-37-040572/CA-SDI-23456 as a tribal cultural resource. The nature of the comments and the specific information provided is confidential and cannot be disseminated to the public; however, this information was reviewed in detail by the City. Ultimately, the City determined that implementation of the proposed project would result in a significant impact on a tribal cultural resource based on the substantial evidence threshold.

The project civil engineer examined the feasibility of an alternative project design, however, the design requirements for the access road, the steep topography and limited buildable area made it infeasible to create an alternative design which would avoid the eastern cultural feature. Only partial preservation in place was deemed feasible, and this has been incorporated into the mitigation measures.

As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource. This represents a **significant impact (Impact TCR-1)** and mitigation is required.

- **Impact TCR-1** As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is determined, by the City, based on substantial evidence, to be a tribal cultural resource.

3.12.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to tribal cultural resources, the cumulative analysis is based upon a regional approach to determine the proposed project’s contributing effect on potential cumulative impacts on tribal cultural resources.

The proposed project will have a significant impact on a tribal cultural resource. Other development projects in the City that are subject to CEQA would require consultation with local tribes. Tribal consultation may provide information on whether tribal cultural resources are present on a given project site. Depending on the information provided, these sites may be determined to be a tribal cultural resource and how a given project may impact them. If projects are determined to have a significant impact on tribal cultural resources, mitigation would be required to reduce potential impact. The date, all projects in the City have reduced potential tribal cultural resources impacts to below a level a significance.

Information provided by one consulting tribe included statements about the cumulative effect on tribal cultural resources in the City as well as the cumulative effect on the tribal cultural resource caused by past mitigation efforts. The City considered this information in light of the substantial evidence and significant nexus thresholds, the development of property in other parts of the City, and the existing laws that require tribal consultation as described above. The City has determined that the project

would result in a less than significant cumulative impact on tribal cultural resources. No mitigation is required.

3.12.6 Mitigation Measures

Mitigation measures MM-TCR-1 through MM-TCR-12 would reduce potential tribal cultural resources impacts to below a level of significance.

MM-TCR-1 Project-Specific Ethnographic Synthesis. The Applicant shall fund the preparation of a project-specific ethnographic synthesis, not to exceed what is described in the confidential proposal provided by the Rincon Band of Luiseño Indians dated August 27, 2024. No later than 30 days after the final Project approval, the Applicant shall extend a written offer to the Rincon Band of Luiseño Indians to enter into an agreement with their ethnographer to conduct and prepare the ethnographic synthesis in accordance with the aforementioned proposal. In the event of a dispute between the parties in entering into the agreement for the ethnographic synthesis, and after a good faith and reasonable effort, the City shall serve as the final arbiter. The City will determine the scope and content of an ethnographic synthesis in that event.

The synthesis will draw from oral histories, elder knowledge, and other sources of confidential Indigenous knowledge that relate to the tribal cultural resource affected by the proposed project. The ethnographer shall be afforded up to 90 days following funding of the ethnography to carry out any field visits with appropriate tribal representatives. After 90 days, or sooner if the ethnographer completed the field studies, the Applicant shall be permitted to proceed with ground disturbing activities and construction of the project while non-field-based data gathering, such as ethnographic interviews of informants and review of tribal documents, is being carried out. Upon completion, a public (redacted) version of the ethnographic synthesis shall be submitted to the California Historical Resources Information System and the City. The final non-redacted study shall belong to the Rincon Band of Luiseño Indians.

MM-TCR-2 Monitoring Agreement. Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall enter into a Monitoring Agreement with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Monitoring Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the monitoring for Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the TCA Tribe requirements for protocols and protection of tribal cultural resources that were agreed to during the tribal consultation.

The landowner shall relinquish ownership of all non-burial related tribal cultural resources collected during construction monitoring and from any previous archaeological studies or excavations on the project site to the TCA Tribe for proper treatment and disposition per the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Monitoring Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

MM- TCR-3 Construction Monitoring. Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City's Planning Division stating that the Rincon Band and San Luis Rey Band have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Monitoring Agreement. Native American monitoring shall include one monitor from the Rincon Band of Luiseno Indians and one monitor from the San Luis Rey Band of Luiseno Indians simultaneously. In the event that either tribe chooses not to enter into an agreement or fails to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented.

The monitors shall be provided at least 72 hours' notice of the initiation of construction and be kept reasonably apprised of changes to the construction schedule. In the event that a monitor is not present at the scheduled time, work can continue without the monitor present, as long as the notice was given and documented.

The TCA Native American monitor shall be invited to attend all applicable pre-construction meetings with the General Contractor and/or associated subcontractors to present the construction monitoring program. The TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that occur in areas of native soil or other permeable natural surfaces that have the potential to unearth any evidence of potential archaeological resources or tribal cultural resources. In areas of artificial paving, the TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb the original pre-project ground surface to identify any evidence of potential tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either: 1) from existing commercial (previously permitted) sources of materials; or 2) are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the TCA Native American monitor.

The Qualified Archaeologist (CR-1) and TCA Native American monitor shall maintain ongoing collaborative coordination with one another during all ground disturbing activities. The requirement for the construction monitoring program shall be noted

on all applicable construction documents, including demolition plans, grading plans, etc. The Applicant/Owner or Grading Contractor shall provide written notice to the Planning Division and the TCA Tribes, preferably through e-mail, of the start and end of all ground disturbing activities.

MM-TCR-4 Exclusionary Fencing of ESA. Prior to the commencement of clearing and grubbing of the project area, the contractor shall install high visibility temporary exclusionary fencing around the western cultural feature under the direction of the Qualified Archaeologist and TCA Native American monitor. The contractor shall be responsible for ensuring that the fence is maintained throughout the duration of ground disturbing activity associated with project construction. The feature shall be designated as an Environmentally Sensitive Area on grading plans.

MM-TCR-5 Monitoring of Activity. When heavy equipment operation or construction-related activity that do not involve ground disturbance reach 100 feet of the eastern cultural feature, a TCA Native American monitor must be present. The purpose of the monitoring of non-ground disturbing activity at this location is to ensure that personnel do not inadvertently impact the resource. Monitoring of non-ground disturbing activity shall not be required beyond 100 feet of the eastern cultural feature.

MM-TCR-6 Capping. Prior to the commencement of ground disturbing activities associated with project construction, the contractor shall, under the direction of the Qualified Archaeologist and TCA Native American monitor, cap the eastern cultural feature. The cap shall be composed of a layer of geotextile or geogrid on the surface of the feature, followed by at least 10 feet of culturally sterile soil.

MM-TCR-7 Controlled Grading. Grading plans for the project construction shall direct the contractor to use controlled grading methods within 500 feet of the eastern and western cultural features. Controlled grading will involve use of a small piece of equipment or a road grader to peel away native soil using shallow cuts made in approximately five-inch-deep layers. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area. This deposited soil may be sampled and screened to ensure adequate detection of any cultural materials that may be present. The Qualified Archaeologist and TCA Native American monitor will direct the controlled grading process, including the pace of the grading and the depth of layers to be removed. If potential tribal cultural resources are encountered, the procedures in Mitigation Measure TCR-8 shall apply. If no cultural deposits are encountered, the road grader will continue to make passes until one of two conditions are met (whichever occurs first): 1) Grading will continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits; or 2) non-cultural formational soils are encountered that predate any human occupation of this location. Once the cultural deposit has been completely removed, the controlled grading process will be terminated and mass grading may proceed.

MM-TCR-8 Unanticipated Discovery Procedures. TCA Native American monitors may temporarily halt or divert ground disturbing activities if previously unknown tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a

reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be not associated with Native American culture, it will be subject to MM CR-2. Native American tribal cultural resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource and a potentially significant archaeological resource that is associated with Native American culture (subject to MM-CR-2), then the Qualified Archaeologist, TCR Tribes, TCR monitors, and City shall coordinate on appropriate treatment.

All unearthed tribal cultural resources will be collected, temporarily stored in a secure location, and repatriated according to the consulting tribes, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the tribal cultural resources are considered potentially significant by the TCA Tribe and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the Applicant/Owner, the culturally appropriate treatment of those resources.

All sacred sites and significant tribal cultural resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency, then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation. Any cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site, and repatriated according to the terms of the Monitoring Agreement, unless ordered to do otherwise by a responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the TCA Native American monitor.

MM-TCR-9 Human Remains. As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98.

If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not

under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the Most Likely Descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in situ (in place) until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the Most Likely Descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

- MM-TCR-10** Reburial. Prior to the approval of grading plans, the Applicant shall designate a reburial location onsite and note the location as excluded from construction-related activity on grading plans. The reburial location shall be used to rebury any cultural materials encountered during monitoring, and to rebury existing collections from the previous data recovery effort. Following the completion of all ground disturbing activity and reburial of all materials and before the issuance of a Certificate of Occupancy, the Applicant shall: 1) ensure that native plants and natural barriers are installed (in consultation with TCA tribes) as part of landscaping; 2) file a deed restriction on the parcel that protects the reburial location from future disturbance and provide a copy to the City. The exhibit for the deed restriction and purpose of it shall be kept confidential and out of the public record.
- MM-TCR-11** Deed Restriction. Prior to the issuance of a Certificate of Occupancy, the Applicant shall record a deed restriction with the County of San Diego for the western cultural feature that restricts ground disturbing activities at that location. A copy of the recorded deed restriction shall be provided to the City as proof of compliance.
- MM-TCR-12** Access Agreement. Prior to the issuance of a Certificate of Occupancy, the Applicant shall extend a written offer to each consulting tribe to enter into an access agreement, which is binding on successors and heirs to the property, that allows for legal access to visit the reburial location after construction is completed. If more than one tribe elects to enter into an access agreement, each tribe shall have its own agreement. In the event that one or more consulting tribe does not respond to the offer within 30 days of receipt, then the City will deem this mitigation measure satisfied provided that the offer was extended and documented in accordance with this measure.

3.12.7 Conclusion

The project would demolish a portion of site P-37-040572/CA-SDI-23456. Based upon consultation with local tribes pursuant to SB 18 and AB 52, the project site contains known tribal cultural resources that are listed or eligible for listing in the CRHR or in a local register of historical resources.

The City has determined, in consultation with Tribes, that the proposed project would result in a significant impact to a tribal cultural resource under Threshold #1. Mitigation measures MM-TCR-1 through MM-TCR-12 shall be required to reduce the level of impact to less than significant.

3.13 Utilities and Service Systems

Introduction

This section identifies the existing service providers for utilities and service systems, including water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities and analyzes the ability of these providers to serve the proposed project based upon current utility infrastructure. A detailed energy consumption analysis is included in Section 3.5, Energy, of the EIR.

The analysis in this section relies on the following document, which is included as **Appendix N** of the EIR. of the EIR:¹²

- *Woodward 46 Water and Sewer Study, Final Technical Memorandum*, prepared by Vallecitos Water District, April 6, 2023.

The Water and Sewer Study, prepared by the Vallecitos Water District (VWD) considered water demand and sewage generation increases due to the proposed General Plan Amendment and development of the proposed project. The study also analyzed the ability of VWD's infrastructure to serve the proposed project and made recommendations for the capital improvements for demand generated by the proposed project.

Table 3.13-1 summarizes the utilities and service system analysis, by threshold.

Table 3.13-1. Utilities and Service Systems Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 - 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

¹² Full references for documents cited in this section are included in Chapter 7, References, of this EIR.

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#4 – 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?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#5 – Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.13.1 Existing Conditions

The following provides background information about the water, wastewater, solid waste, and other utility service providers that would serve the proposed project.

Water Service Area

The project lies within the service area of VWD for both water and sewer services. VWD provides water, wastewater, and reclamation services to a population of more than 108,000 within its 45-square-mile boundary including: San Marcos, the community of Lake San Marcos, parts of Carlsbad, Escondido and Vista and other unincorporated areas in north San Diego County. VWD also wholesales recycled water to the City of Carlsbad and the Olivenhain Municipal Water District.

The project site lies completely within VWD's 920 Pressure Zone. The project site is currently undeveloped. Potable water is delivered to the project area by an existing 8-inch water main in Woodward Street at the main entry to the project site.

Water Supply

VWD is a member of the San Diego County Water Authority (SDCWA), thus eligible to purchase water transported into San Diego County via the massive aqueducts of SDCWA and its wholesaler, Metropolitan Water District (MWD) of Southern California. To understand water supply availability for the proposed project, it is important to begin with MWD and follow the water supply through these agencies.

MWD was formed in 1928 to develop, store and distribute supplemental water to southern California for domestic and municipal purposes. MWD consists of 26-member agencies and has a service area covering six counties, 5,200 square miles, and 19 million people. MWD obtains water from local sources as well as the Colorado River (via the Colorado River Aqueduct) and the Sacramento-San Joaquin Delta (via the State Water Project). MWD's Urban Water Management Plan (UWMP) documents the availability of these supplies to meet future demands. With a projected annual water demand of 5,374,000 acre-feet per average year for 2045, the MWD UWMP concludes that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021).

The MWD water demands through normal, single dry year, and multiple dry years are shown below in Table 3.13-2.

Table 3.13-2. Metropolitan Water District Total Water Demands in Acre Feet Per Year

Year	2025	2030	2035	2040	2045
Average Year	4,925,000	5,032,000	5,156,000	5,261,000	5,374,000
Single Dry Year	4,929,000	5,037,000	5,156,000	5,265,000	5,374,000
Multiple Dry Years	4,877,000	5,064,000	5,182,000	5,299,000	5,410,000

Source: MWD 2020 Urban Water Management Plan (MWD 2021).

SDCWA is the largest member agency of MWD and supplies 75 to 95 percent of the water needs in San Diego County. The population within the SDCWA's service area was approximately 3.3 million people in 2020 and is projected to increase to roughly 3.8 million people by 2045. The County of San Diego is expected to develop an additional 130,000 acres between 2020 and 2050, with the majority (125,000 acres) of development dedicated to residential land uses. These regional growth projections are based on the San Diego Association of Government (SANDAG)'s Series 14 Regional Growth Forecast, developed for its 2019 Federal Regional Transportation Plan adopted by SANDAG's Board of Directors on October 25, 2019. In fiscal year 2020, total water demand in the SDCWA's service area was 463,128 acre-feet, of which 92% was for municipal and industrial use and 8% was for agricultural water use. By 2045, the SDCWA's annual water demands are projected to reach 630,771 acre-feet. This projection accounts for planned future water conservation savings (SDCWA 2021).

SDCWA is historically the largest purchaser of MWD water; however, as SDCWA and its member agencies have increased their locally controlled water resources and investments in water use efficiency, SDCWA purchases have declined. In fiscal year 2020, SDCWA purchased 62,852 acre-feet, or about 6% of all the water MWD sold. SDCWA's UWMP assessed water reliability from 2025 through 2045 and determined that there are sufficient supplies to meet projected demands under Single Dry-Year and Multiple Dry-Year conditions (SDCWA 2021).

According to the VWD Master Plan Report, VWD imports about 75% of its water supply from SDCWA. The rest of VWD's water supply is provided by the recently completed Carlsbad seawater desalination plant as well as up to 2,200 acre-feet per year of supply from the Olivenhain MWD. Currently, VWD delivers water through 356 miles of pipeline and operates 10 pump stations and 19 potable water storage reservoirs ranging in size from 350,000 gallons to 40 million gallons (MG). VWD's total operational storage capacity is 121.6 MG. During Fiscal Year 2013-2014, VWD provided an average of 14.8 million gallons per day (MGD) to approximately 21,900 meters serving residential, commercial, light industrial, institutional, construction, landscape irrigation and agricultural uses (VWD 2018).

Wastewater Service Area

VWD provides wastewater and reclamation services to a 23-square mile area serving approximately 93,000 people as well as commercial, light industrial, institutional, construction, landscape irrigation, and agricultural customers. Their service area includes the City of San Marcos, parts of the cities of Carlsbad, Escondido, and Vista, and unincorporated areas within the County of San Diego. In addition, VWD wholesales recycled water to the City of Carlsbad and the Olivenhain MWD. Within its service area, there are some rural areas that still use septic systems for sewage disposal, thus VWD's current 23-square mile sewer service area is much smaller in size than its water service area, although VWD's

sphere of influence is equal in size for both. VWD has over 20,000 sewer service connections with 4 lift stations and approximately 250 miles of pipeline (VWD 2018).

VWD would provide the proposed project's wastewater service. The project site is completely within VWD sewer shed 17C (VWD 2023). The project site is currently undeveloped. Sewer service is provided to the project area by an existing 8-inch gravity sewer mainline located north of the project site in Woodward Street.

Wastewater Flows

The VWD 2018 Master Plan includes a wastewater system analysis assessing existing and projected wastewater flows, existing and projected capacity and needed capital improvements.

Table 3.13-3 presents the existing and projected future average wastewater flows for VWD's service area at 5-year increments from the base year of 2014 to 2035 and ultimate buildout conditions. These interim flow projections were estimated based upon SANDAG's growth forecasts for the region that were available at the time of the Master Plan's preparation (VWD 2018). As shown in Table 3.13-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The average annual flow projection for the ultimate condition is 14.4 MGD. This total represents the maximum potential flow based on allowable land uses and existing flows. While the ultimate flow is potentially higher, continued conservation and water use efficiency would delay reaching ultimate conditions (VWD 2018).

Table 3.13-3. Projected Wastewater Flows within VWD Service Area

Year	Average Annual Flows (MGD)	Peak Dry Weather Flows (MGD) ⁽¹⁾	Peak Wet Weather Flows (MGD) ⁽¹⁾
Existing 2014	7.5	11.7	17.5
2020	8.7	13.2	20.0
2025	9.5	14.2	21.6
2030	9.6	14.4	21.9
2035	9.6	14.4	22.0
Ultimate	14.4	20.2	31.7
Ultimate w/ NTA ⁽²⁾	15.2	21.2	33.4

Source: VWD 2018 Master Plan, page 7-19.

Notes: (1) Peak flows were estimated by applying District Peaking Curves as presented in Chapter 6 of the 2018 Master Plan.

(2) NTA is the Northern Tributary Area, a separate drainage basin located in the northern part of VWD's service area that drains away from the wastewater collection system. NTA flows were estimated and would need further evaluation if this area is to be connected into VWD's sewer system.

Wastewater Infrastructure and Capacity

VWD's sewer service area is divided between two principal drainage basins which are named based on the treatment facility which serves it. The treatment facilities used by VWD are the Meadowlark Water Reclamation Facility (MRF) and the Encina Water Pollution Control Facility (EWPCF). The existing wastewater collection system includes treatment facilities, major conveyance facilities, gravity mains, trunk sewers, lift stations, siphons, and force mains. VWD is able to recycle up to 74% of the wastewater generated in the service area.

Solids Treatment Capacity

The EWPCF is a regional treatment facility located in the City of Carlsbad with a treatment capacity of up to 40.51 MGD. VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. MRF does not have solids treatment capacity and therefore all solids are treated at the EWPCF. As shown in Table 3.17-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The ultimate average wastewater flow identified in the 2018 VWD Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD (VWD 2023).

Liquids Treatment Facility

VWD currently has a total of 12.67 MGD liquids treatment capacity between EWPCF and MRF. VWD owns 7.67 MGD of liquids treatment capacity at the EWPCF. MRF has a liquid treatment capacity of 5.0 MGD, with a peak wet weather capacity of 8.0 MGD. As shown in Table 3.17-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD (VWD 2023).

Ocean Disposal Capacity

EWPCF's ocean outfall consists of approximately 1,000 feet on land and extends approximately 7,900 feet into the Pacific Ocean. The EWPCF employs peak flow management procedures and has constructed facilities to manage peak flows, including storage tanks and pump stations. Per the 2018 Master Plan, the plant has provisions to incrementally increase capacity by adding two more 8 MG basins in the future, for a maximum storage capacity of 24 MG. The member agencies' ability to manage inflow and infiltration into the sewer system is a major factor in deferring additional peak flow facilities or future outfall upgrades at the EWPCF (VWD 2018).

VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 3.93 MGD (VWD 2023).

Land Outfall Capacity

A majority of VWD's wastewater is conveyed to the EWPCF using VWD's maintained Land Outfall. The Land Outfall is approximately 8 miles long and conveys flow by gravity as well as pressure through siphon sections. VWD maintains the entire pipeline from Lift Station No. 1 to the EWPCF. From Lift Station No. 1 to El Camino Real, VWD is the sole user of this pipeline. Total capacity of the land outfall is 20.85 and the land outfall capacity controlled by VWD is 12.10 MGD (VWD 2023).

As stated above, the MRF has a capacity of 5.0 MGD with a peak wet weather capacity of 8.0 MGD. Combined with the 12.10 MGD capacity of the land outfall controlled by VWD, VWD has a combined peak wet weather wastewater collection capacity of 20.10 MGD (12.10 MGD + 8.0 MGD). According to the VWD's 2018 Master Plan, average daily wastewater flow through the land outfall was approximately 7.5 MGD in 2014. This corresponds to a peak wet weather flow of 17.5 MGD, which falls within VWD's combined peak wet weather collection capacity. However, the 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development, the 2018 Master Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall (VWD 2023).

VWD Planned System-wide Wastewater Facility Improvements

VWD's 2018 Master Plan analyzed the existing wastewater system to determine size of pipeline replacements and extensions utilizing a hydraulic model developed by collecting the system's physical data, estimating existing wastewater flows, and calibrating the model using actual meter data. The 2018 Master Plan does not include developments that were not approved prior to June 30, 2014. As development projects are proposed, the project proponents will be required to prepare a study that will, at a minimum, define the location and size of the sewer facilities required to serve the development, including the necessary regional collection, transfer, and treatment infrastructure (VWD 2018).

VWD's 2018 Master Plan has identified sewer pipe segments W-8 and W-9 for upsizing from 18-inch to 24-inch diameter pipe as part of Capital Improvement Project (CIP) #SP-34, a phase 4 project. Phase 4 projects are planned for construction in the 2031 to 2035 timeline (VWD 2018). Since there is currently capacity in pipes W-8 and W-9 and the need for additional capacity in these sewer mains is not anticipated until Phase 4, the CIP # SP-34 project would address and accommodate the pipeline deficiencies (VWD 2023).

Solid Waste

Solid waste disposal in the city is provided by a private franchise hauler, EDCO Waste and Recycling (EDCO), a private waste collection and recycling company which handles all residential, commercial, and industrial collections within the city. Waste collected by EDCO is hauled to the Escondido Transfer Station where it is then transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials are processed at the Escondido Resource Recovery Transfer Station. The project site would be serviced by EDCO. The Escondido Transfer Station has a permitted daily tonnage of 3,223 tons per day (CalRecycle 2019a). Solid waste is consolidated here and then trucked to a landfill for disposal.

The County of San Diego prepared a Five-Year Review Report of its Integrated Waste Management Plan (June 2022) to plan for the next 15 years of countywide landfill disposal capacity and to determine the adequacy of the region's planning documents based on updated demographic trends and regulations. The report used an average of the past 15 years in-county disposal data (2005-2020) to project disposal for the next 15 years (2022-2037). Though in-county disposal may both increase and decrease over the next 15 years, a conservative projection is that disposal will remain near the average. The 15-year disposal average is 3,206,009 in-county tons annually (County of San Diego 2022).

The report included a second disposal projection scenario, which anticipates organic materials being diverted from the landfills at a greater rate to align with the statewide organics legislation and goals (AB 32, AB 1826, AB 1594, and SB 1383). When the 75% organics diversion rate was applied to the County's baseline disposal, organics waste disposal projections were reduced to 288,541 tons for the year 2025. These reductions were deducted from the overall disposal projection to provide a disposal scenario if organics regulations result in increased diversion. Considering the additional organics diversion scenario, the projected disposal by 2037 would be 2,282,678 tons annually, nearly a million tons (923,330 tons) less than the average disposal projection of 3,206,009 tons (County of San Diego 2022).

The second component of determining disposal capacity is the permitted daily capacities allowed by the Local Enforcement Agencies including any projected maximum disposal limits. The maximum annual allowable permitted capacity for all San Diego County landfills was 6,967,600 tons in 2021 and will be 4,134,600 tons in 2032. Landfill operators project that Otay Landfill will close in 2030 and

Miramar Landfill will close in 2031. Sycamore Landfill is anticipated to receive additional waste flows at that time. The County's report projections assumed that Sycamore Landfill will apply for three expansions to their daily permitted capacity. Sycamore Landfill has completed CEQA for these landfill expansions; however, there has been no application to the Local Enforcement Agency to revise the Solid Waste Facility Permit. For the purposes of projection, the County assumed that the first expansion at Sycamore Landfill is estimated to occur in 2025 and daily permitted capacity is projected to increase permitted capacity from its current 5,000 tons per day to 7,000 tons per day. The second expansion is estimated to occur in 2027 and permitted capacity is projected to increase to 9,000 tons per day followed by a third expansion estimated to occur in 2030 to increase permitted capacity to 11,000 tons per day. The County's report indicated that there would be adequate landfill capacity to serve the County for the next 15 years. Specifically at Sycamore Landfill, the report estimated that there was 105,064,991 cubic yards (or 86,153,293 tons) remaining based on aerial survey/calculations occurring in February 2021. Estimated closure date is listed as 2042, though the permit is anticipated to be revised and extended to 2054 (County of San Diego 2022).

Electricity and Natural Gas

SDG&E provides energy service to an estimated 3.3 million consumers through 1.3 million electric meters and approximately 800,000 natural gas meters in San Diego County and southern Orange County (City of San Marcos 2012a). Electrical facilities throughout the city include a combination of aboveground and belowground electrical distribution lines and utilities structures. The City's fiber-optic network is facilitated by a 72-strand fiber-optic line that runs in various streets throughout the city. All major arterials in the city have implemented fiber optics. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing electricity and natural gas infrastructure within Woodward Street. This work would take place within the existing right-of-way and would not disturb any vegetation.

Telecommunications

Telecommunications services to the project site may be provided by various distributors. Existing AT&T, Cox, and other independent cable companies telecommunication lines are available in the project vicinity.

3.13.2 Regulatory Setting

Existing federal, state, and local regulations related to water, wastewater, and solid waste that are applicable to the proposed project are summarized below.

Federal

Clean Water Act

The federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The City of San Marcos is required to monitor water quality and conform to regulatory requirements of the CWA.

Resource Recovery and Conservation Act

The Resource Recovery and Conservation Act Subtitle D focuses on state and local governments as the primary planning, regulating, and implementing entities for the management of non-hazardous solid waste, such as household solid waste and nonhazardous industrial solid waste. Subtitle D

provides regulations for the generation, transportation, and treatment, storage, or disposal of hazardous wastes.

State

California Green Building Standards Code (CCR, Title 24, Part 11 – CALGreen)

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations) is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2022 building standards code became effective on January 1, 2023. The mandatory standards require the following measures that relate to utilities and service systems (24 CCR Part 11):

- Mandatory reduction in indoor water usage through compliance with specified flow rates for plumbing fixtures and fittings and faucets and fountains.
- Mandatory reduction in outdoor water usage through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- 65% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

Urban Water Management Plans

Urban water purveyors are required to prepare and update an UWMP every 5 years. The UWMPs address water supply, treatment, reclamation, and water conservation, and contain a water shortage contingency plan. Local UWMPs and those of other water districts are supplemental to the regional plans prepared by MWD. The Water Conservation Bill of 2009 (SBX7-7) requires each urban retail water supplier to develop an urban water use target and an interim urban water use target. Notably, SBX7-7 authorizes urban retail water suppliers to determine and report progress toward achieving these targets on an individual agency basis or pursuant to a regional alliance as provided in California Water Code (CWC) Section 10608.28(a). In accordance with this regulation, the MWD prepared and their Board of Directors adopted its 2020 UWMP in 2021. MWD's UWMP includes estimated future

water demands until 2045, using updated population projections and a conservative assumption that, in the absence of mandatory water conservation measures, per-capita consumption could rebound to its 2020 target value (MWD 2021). Demands provided in MWD's UWMP have been coordinated with SDWCA, VWD's wholesale supplier.

Assembly Bill 939 and 341

In 1989, Assembly Bill (AB) 939, known as the Integrated Waste Management Act (California Public Resources Code, Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring 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 annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020.

Senate Bill 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.

Senate Bill 1383

SB 1383 establishes a statewide organic waste diversion rate goal of 75 percent by 2025. Beginning in 2022, SB 1383 required every jurisdiction to provide organic waste collection services to all residents and businesses, including food, green material, landscaping waste, organic textiles, lumber, paper products, manure, biosolids, digestate, and sludges. Jurisdictions are also required to educate residents and businesses about the collection requirements.

Local

San Diego County Integrated Waste Management Plan

Pursuant to the Integrated Waste Management Plan, the Countywide Integrated Waste Management Plan for San Diego County describes the goals, policies, and objectives of the county for coordinating efforts to divert, market, and dispose of solid waste during the planning period through the year 2017 (County of San Diego 2005). A Five-Year Review Report was prepared in June 2022 to plan for 15 years of countywide landfill disposal capacity and to determine the adequacy of the region's planning documents based on updated demographic trends and regulations. The report identified reduced landfill disposal rates compared to the high in 2005. The plan presumes waste disposal tonnages will not reach the 2005 level again due to increased State and local recycling programs. Another reason

for reduced landfill disposal rates is increased conservation and recycling activities, expansion of compost and construction and demolition facilities, and implementation of mandatory recycling ordinances by jurisdictions. Average disposal quantities and landfill capacities are discussed above in Section 3.17.1 (County of San Diego 2022).

Countywide policies for reducing waste and implementing the programs identified in the individual jurisdiction Source Reduction and Recycling Elements and Household Hazardous Waste Elements, are intended to reduce costs, streamline administration of programs, and encourage a coordinated and planned approach to integrated waste management.

To avoid duplication of effort, all jurisdictions in the county participate in the San Diego County Integrated Waste Management Local Task Force. The Local Task Force coordinates mandated planning, oversees implementation of new or countywide integrated waste management programs, and carries out an active legislative program. Regulatory reform, changes to state diversion requirements, and reduction of the costs of compliance are considered by the Local Task Force, as well as other solid waste issues of regional or countywide concern.

City of San Marcos Municipal Code

Title 8, Health and Sanitation

San Marcos Municipal Code Title 8 contains regulations and provisions on sewers and sewage disposal plants, sewer connections, septic tanks, waste matter, garbage and refuse collection, and other matters concerning sanitation. Chapter 14.15 contains regulations concerning storm water management and discharge control. Chapter 14.24 contains regulations concerning underground utility facilities. Title 19 regulates subdivision requirements, including the installation of utility facilities and connections and payment or fees for such installations.

Title 20, Chapter 20.330 Water Efficient Landscaping Ordinance

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. Title 20, Section 20.330, details the City's Water Efficient Landscape (WELO). In accordance with State law, Chapter 20.330 establishes specific standards for landscape and irrigation design and installation to ensure beneficial, efficient, and responsible use of water resources within the city.

City of San Marcos General Plan

The General Plan Conservation and Open Space Element includes two goals and one policy that are applicable to the proposed project (related to water supply and solid waste):

- Goal COS-5: Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.
- Goal COS-10: Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.
 - Policy COS-10.1: Promote the curbside recycling program to divert residential refuse from the landfills.

The General Plan Land Use and Community Design Element identifies the following goals and policies regarding utilities and services systems that are applicable to the proposed project:

- Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.
 - Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.
 - Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
- Goal LU-13: Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.
 - Policy LU-13.1: Work closely with local and regional water providers to ensure high quality water supplies are available for the community.
 - Policy LU-13.2: Actively promote water conservation programs aimed at reducing demand.
 - Policy LU-13.3: Encourage exploration and use of deep underground wells to reduce reliance on treatable water.
- Goal LU-14: Wastewater: Ensure an adequate wastewater system for existing and future development.
 - Policy LU-14.1: Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.
 - Policy LU-14.2: Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.
- Goal LU-16: Solid waste: reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.
 - Policy LU-16.1: Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.
 - Policy LU-16.2: Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.
- Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective, and efficient service for San Marcos.
 - Policy LU-17.2: Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.
 - Policy LU-17.3: The City shall prohibit above ground utility equipment within any of the pedestrian pathways and street frontage areas. All above ground utilities shall be placed either within; “wet closets” within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.
 - Policy LU-17.4: Require utility location to be shown on all site development plans at the time of development/project application.

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.8, Land Use and Planning of this EIR. As detailed in Table 3.8-12 in Section 3.8, the project is consistent with the applicable utilities-related goals and policies.

3.13.3 Thresholds of Significance

The determination of significance for utilities and service systems is based on *Appendix G of the CEQA Guidelines*. Utilities and services system impacts would be significant if the proposed project meets any of the following thresholds:

- Threshold #1: 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?
- Threshold #2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- Threshold #3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Threshold #4: 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?
- Threshold #5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.13.4 Project Impact Analysis

The project proposes to connect to the existing 8-inch water main in Woodward Street at the main entry to the project site. Water connections to the dwelling units would be provided via 4-inch lines. An 8-inch fire main would parallel the potable water line for fire service to the site. For sewer service, the project would extend the existing 8-inch gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. The proposed sewer line extension would be within the existing roadway on Woodward Street. Dwelling units would connect to sewer via an 8-inch sewer main that will run the length of the main driveway.

VWD Construction and Board acceptance of all onsite and offsite water and sewer facilities would be required prior to service, including installation of the expansion of the 8-inch Sewer main (Pipes W-1 and W-2 in VWD 2018 Master Plan). Additionally, the project applicant would pay all of the applicable Water and Wastewater Capital Facility Fees in effect at the time service is committed in accordance with VWD rules and regulations. Proof of payment would be provided to the City's Planning Manager.

The design for the dry utility connection is still under preparation, however the project proposes to connect to existing infrastructure within Woodward Street. This work would take place within the existing right-of-way and would not disturb any vegetation.

Threshold #1: 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?

Water

The project site lies within VWD's water service area and would be served by VWD for potable water and water for fire protection. VWD has confirmed their ability to serve the project and has prepared a Technical Memorandum which includes a Water System Analysis. The memorandum analyzes water demand, water distribution, water storage capacity and water pump station capacity (VWD 2023, Appendix N).

Water Demand

The project site has a General Plan designation of SPA (Specific Plan Area) and is associated with the Heart of the City Specific Plan (HOCSP). In the HOCSP, certain properties along the Mission Road corridor, such as the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses.

The project proposes a Specific Plan Amendment of the HOCSP to remove the Richmar Sub-Plan designation from the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan which would allow for 5.7 dwelling units per acre. The General Plan Amendment of the Land Use Element would amend land use maps and text related to changing the sub-plan designation of the project site from Richmar Specific Plan to Woodward 46 Specific Plan.

VWD's 2018 Master Plan based its ultimate water demand planning on the Residential 2-4 du/ac land use. The project is proposing 46 multi-family residential units on 8.6 acres. **Table 3.13-4** provides the average water demand generated both under the density planned for the VWD 2018 Master Plan and for the proposed project. As shown, the proposed project would increase the projected average water demand from the 2018 Master Plan land use by 6,020 gallons per day (GPD) (VWD 2023).

Table 3.13-4 Estimated Water Demands for Proposed Project

Land Use Type	Area (Acres)	Residential Units	Duty Factor (GPD/Acre)	Water Demand (GPD)
2018 Master Plan Land Use Demand				
Residential (2-4 du/ac)	8.6		1,800	15,480
Proposed Project Demand				
Residential (4-8 du/ac)	8.6	46	2,500	21,500
Water Demand Increase				6,020

Source: VWD 2023.

Notes: GPD= Gallons per Day
du/ac- dwelling units per acre

Water Distribution System Analysis

VWD prepared a water distribution system analysis to identify potential system impacts that may be created by the proposed water demand, and to recommend any improvements required to provide service to the project. Modeling focused on the infrastructure in the direct vicinity of the project site. Per the 2018 Master Plan, maximum day demands for the proposed project are 300% those of average day demands, and peak hour demands are 620% those of average day demands (VWD 2023). VWD modeling focused on the infrastructure in the direct vicinity of the project site. The model found that the proposed project would not create any distribution system deficiencies under an average day demand or maximum day plus fire flow demand conditions (VWD 2023). Therefore, the proposed project would not result in deficient water distribution system, and would not require new or expanded water distribution system that could result in significant environmental impacts.

Water Storage Analysis

The 2018 Master Plan outlines VWD's potable water storage reservoirs for each pressure zone. The project is located entirely within the VWD 920 pressure zone. Water storage for this zone is located within the 920 zone and 1028 Twin Oaks pressure zones. **Table 3.13-5** shows the required storage in the 855, 920, and 1028 Twin Oaks pressure zones for existing and ultimate build-out conditions relative to the existing storage provided within each zone. As shown in Table 3.13-5, there is sufficient existing storage available to meet existing demand. The proposed project would increase the projected average water demand by approximately 6,020 GPD. The amount of additional reservoir storage required is 500% of the project's average day demand, which is 30,100 gallons (6,020 gallons X 500%). VWD's analysis found that water storage capacity is currently available to serve the project's increased storage requirements. The proposed project increases the ultimate water demand planned in the 2018 Master Plan and would further contribute to the deficiency. However, per VWD, future project identified in the 2018 Master Plan would address and accommodate the ultimate build-out storage deficiency. As a project design feature (Table 2-2), the project applicant would pay Water Capital Facility Fees which would be used for the increase in storage necessitated by the project's demand (VWD 2023).

Water Pump Station Analysis

Since the proposed project is located in a pressure zone that is not served by pumping, there would be no impacts to existing or proposed pump stations (VWD 2023).

Table 3.13-5 Existing Reservoir Storage Capacity and Requirements

Pressure Zone	Existing Average Day Demand (MGD)	Existing Storage Requirement (MG)	Ultimate Average Day Demand (MGD)	Ultimate Storage Requirement (MG)	Existing Storage Available (MG)
855	3.74	50.05	6.79	101.25	0
920	5.61		10.40		18
1028 Twin Oaks	0.66		3.06		73
Totals	10.01	50.05	20.25	101.25	91

Source: VWD 2023.

Notes: MGD= Million Gallons per Day
MG= Million Gallons

Summary

The project proposes to connect to the existing 8-inch water main in Woodward Street at the main entry to the project site and provide water connections to the dwelling units via 4-inch lines. These water lines would be constructed within the existing right-of-way on Woodward Street and within the project's footprint of disturbance. These improvements would occur within the project site or within existing paved roads and have been accounted for in this EIR.

While the project would increase water demand by 6,020 GPD above what the 2018 Water Master Plan identified, VWD's analysis determined that with payment of the required Water Capital Facility Fees, the project would have less than significant impacts related to VWD's water distribution, water storage, and water pumping facilities (VWD 2023). The project would not require the location or construction of new or expanded water facilities, the construction of which could cause significant environmental effects. Therefore, impacts related to the relocation or construction of new or expanded water collection facilities would be less than significant.

Wastewater

The proposed project lies completely within VWD sewer shed 17C. The analysis of wastewater infrastructure is based upon the Water and Sewer Study, prepared by VWD (VWD 2023). The Water and Sewer Study is included in Appendix N of this EIR.

As discussed above, for the project site, the land use options for the Richmar Specific Plan designation allow for multi-family residential development. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP. The project proposes a Specific Plan Amendment of the HOCSP to remove the Richmar Sub-Plan designation from the project site in order to establish its own development criteria under the proposed Woodward 46 Specific Plan which would allow for 5.7 dwelling units per acre. The General Plan Amendment of the Land Use Element would amend land use maps and text related to changing the sub-plan designation of the project site from Richmar Specific Plan to Woodward 46 Specific Plan.

VWD's 2018 Master Plan based its ultimate wastewater generation planning on the Residential 2-4 du/ac land use. The project is proposing 46 multi-family residential units on 8.6 acres. **Table 3.13-6** provides the average wastewater flows generated both under the density planned for the VWD 2018 Master Plan and for the proposed project. As shown, the proposed project would increase the projected average wastewater flows from the 2018 Master Plan land use by 4,730 GPD (VWD 2023).

Table 3.13-6 Estimated Wastewater Flows for Proposed Project

Land Use Type	Area (Acres)	Residential Units	Duty Factor (GPD/Acre)	Wastewater Flow (GPD)
2018 Master Plan Land Use Demand				
Residential (2-4 du/ac)	8.6		750	6,450
Proposed Project Demand				
Residential (4-8 du/ac)	8.6	46	1,300	11,180
Sewer Generation Increase				4,730

Source: VWD 2023.

Notes: GPD= Gallons per Day
du/ac- dwelling units per acre

Wastewater Collection System Analysis Model Results

VWD modeled several wastewater scenarios to identify system impacts that may be created by the proposed sewer generation, and to recommend any improvements required to provide service to the project. Modeling focused not only on the sewer collection infrastructure in the direct vicinity of the project site, but also on all downstream infrastructure from the development to Lift Station No. 1 on San Marcos Boulevard that would be receiving project flows.

VWD modeling results showed that there are deficiencies in pipe segment W-8 under the currently approved density under peak wet weather flows during ultimate build-out conditions. The wastewater flows from the proposed project would increase those deficiencies (VWD 2023). VWD concluded that approximately 232 feet of existing 18-inch sewer main within a VWD easement along San Marcos Creek must be replaced with a 24-inch main (W-8 and W-9). However, the upsizing of these pipes is included in VWD's 2018 Master Plan as part of CIP #SP-34, a phase 4 project planned for construction in the 2031 to 2035 timeline. Since there is currently capacity in pipes W-8 and W-9 and the need for additional capacity in these sewer mains is not anticipated until Phase 4, the CIP #SP-34 project would address and accommodate the pipeline deficiencies. Wastewater Capital Facility Fees paid by the project would be used toward the construction of these pipelines (VWD 2023).

Wastewater Lift Station Analysis

Since the project is not located in a sewer shed that is served by a lift station, no lift station upgrades would be required, and no impacts would occur (VWD 2023).

Parallel Land Outfall Analysis.

VWD's existing land outfall is approximately 8 miles in length and consists of four gravity pipeline sections and three siphon sections varying in diameter from 20 inches to 54 inches. Total landfall

capacity is 20.85 MGD, and VWD controls 12.10 MGD. The MRF has a capacity of 5.0 MGD with a peak wet weather capacity of 8.0 MGD. Therefore, VWD has a combined peak wet weather wastewater collection capacity of 20.10 MGD (12.10 MGD + 8.0MGD). VWD's 2014 average daily wastewater flow through the land outfall was 7.5 MGD. This corresponds to a peak wet weather flow of 17.5 MGD, which falls within VWD's combined peak wet weather collection capacity (VWD 2023).

The 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average dry weather flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development, the 2018 Water Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall (VWD 2023).

The project proposes to generate 4,730 GPD of additional average wastewater flow that was not accounted for in the Land Outfall's capacity studied in the 2018 Master Plan. However, per the Water and Sewer Study prepared for the proposed project, VWD determined that outfall capacity is currently available to serve the project's proposed wastewater generation. Wastewater Capital Facility Fees paid by the project would be used toward design and construction of a parallel land outfall to be sized to accommodate ultimate build-out wastewater flows (VWD 2023).

Wastewater Treatment Facility Analysis

Because VWD utilizes both MRF and EWPCF for wastewater treatment, wastewater generated by the proposed project would be treated at either facility. MRF has liquids treatment capacity of up to 5 MGD with a peak wet weather capacity of 8 MGD. MRF does not have solids treatment capacity, and therefore all solids are treated at the EWPCF. The EWPCF is a regional facility with treatment capacity of up to 40.51 MGD (VWD 2023).

Solids Treatment Capacity

VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concluded that adequate solids treatment capacity exists at this time to serve the proposed project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD. Wastewater flows from the proposed project would contribute to that deficiency. Wastewater Capital Facility Fees paid by the project would be used towards the deficiency to accommodate the solid treatment capacity wastewater flows (VWD 2023).

Liquid Treatment Capacity

VWD currently owns 7.67 MGD of liquids treatment capacity at the EWPCF in addition to the liquids treatment capacity of 5.0 MGD at MRF, for a total of 12.67 MGD of liquids treatment capacity. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concluded that adequate liquids treatment capacity exists at this time to serve the project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD. Wastewater flows from the proposed project would contribute to that deficiency. Wastewater Capital Facility Fees paid by the project would be used towards the deficiency to accommodate the ultimate average wastewater flow (VWD 2023).

Ocean Disposal Capacity

VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concluded that adequate ocean disposal capacity exists at this time to serve the project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD resulting in an ocean disposal deficiency of 3.93 MGD. Wastewater flows from the proposed project would contribute to that deficiency. Wastewater Capital Facility Fees paid by the project would be used towards the deficiency to accommodate the ocean disposal wastewater flow (VWD 2023).

Wastewater Summary

The project proposes to extend the existing 8-inch gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. The proposed sewer line extension would be within the existing roadway on Woodward Street. Dwelling units would connect to sewer via an 8-inch sewer main that would run the length of the main driveway. These improvements would occur within the project site or within existing paved roads and have been accounted for in this EIR.

The proposed project would increase wastewater flows by 4,730 GPD above what the 2018 Master Plan identified. However, VWD's analysis determined that with payment of the required Water Capital Facility Fees, the project would not exceed current capacities of the wastewater treatment system and would not require the relocation or construction of existing wastewater treatment facilities. Payment of the Wastewater Capital Facility Fees is included as project design feature (Table 2-2). Therefore, impacts related to the relocation or construction of new or expanded sewer facilities, the construction of which could cause significant environmental effects would be **less than significant**.

Stormwater Drainage

As discussed in Section 3.7.4 (Hydrology and Water Quality), the proposed project would result in an increase of impervious areas on the site. If not carefully planned for, increased runoff from impervious surface can cause alterations to drainage courses. However, the proposed project has been designed to carefully handle runoff and to meet regulatory requirements to ensure that post-development runoff quantities and rates are similar to or less than the pre-development condition. Although the project would include new storm water infrastructure (underground storage pipes, brow ditches and two biofiltration basins) to support project facilities, the proposed infrastructure has been accounted for and analyzed throughout this EIR. The project would not contribute a substantial amount of new stormwater runoff relative to existing conditions, that would require the relocation or construction of new or expanded stormwater facilities and impacts are determined to be **less than significant**. Please refer to Section 3.7, Hydrology and Water Quality, for additional discussion related to drainage.

Electric Power/ Natural Gas

The project would be served by SDG&E for electricity and gas service. The project design incorporates features which would reduce the amount of electricity that would be required to serve the project. The project would install 246 trees which would provide shade. Each garage would be wired to accommodate EV chargers. Additionally, the project would adhere to the City's WELO ordinance, which would reduce landscaping water usage. The project would also be built under the most current Title 24 standards which are designed to reduce energy.

The design for the dry utilities' connection is still under preparation; however, the project proposes to connect to existing electricity and gas infrastructure within Woodward Street. These improvements

would take place within the existing right-of-way, would not disturb any vegetation, and have been accounted for in this EIR. Aside from these improvements, the project would not require the relocation or construction of new or expanded power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be **less than significant**.

Telecommunications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. Existing telecommunications infrastructure in the vicinity of the project site would be available to serve the proposed project. No specific systems upgrades are proposed or would be required to serve the proposed project. Thus, the project would not result in physical impacts associated with the construction or relocation of telecommunications systems. Impacts would be **less than significant**.

Threshold #2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

As discussed in the response to Threshold #1, the project would be served by VWD. Per the Water and Sewer Study (Appendix N), the project is anticipated to generate an additional 6,020 GPD over the ultimate demand projected in the 2018 Master Plan. This equates to approximately 6.75 acre-feet per year.

As discussed above and shown in Table 3.13-2, MWD's UWMP shows water supplies would be available to meet current and future demands of the region. With a projected annual water demand of 5,374,000 acre-feet per year in 2045, the MWD UWMP demonstrates that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021). Additionally, SDCWA's UWMP assessed water reliability from 2025 through 2045 and determined that there are sufficient supplies to meet projected demands under Single Dry-Year and Multiple Dry-Year conditions (SDCWA 2021). The additional 6.75 acre-feet per year generated by the project would present a less than significant increase in water demand relative to the annual water demand projected by the MWD's UWMP.

Further, the project site would be developed in compliance with CALGreen, which implements water efficiency standards for appliances and fixtures. Compliance with CALGreen would further reduce project water usage in combination with VWD and MWD's ongoing water conservation practices. Compliance with these regulations and conservation measures would ensure sufficient water supplies are available to service the project. Therefore, impacts to water supply would be **less than significant**.

Threshold #3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under Threshold #1, above, the project site is within VWD's service area, which would provide service to the project. The project is expected to increase wastewater flows by 4,730 GPD over what was assumed in the 2018 Master Plan. This would lead to an increase of 4,730 GPD in solids handling, liquids handling and ocean disposal capacity requirements at the EWPCF and in the parallel land outfall's capacity requirement. VWD has determined that adequate wastewater treatment and disposal capacity exists for the proposed project at this time. As discussed in the Water and Sewer Study (Appendix N), the project applicant would be required to pay all applicable Wastewater Capital

Facility fees in effect at the time of service in accordance with District rules and regulations. Under these conditions, VWD has determined that adequate wastewater treatment and disposal capacity exists for the proposed project at this time (VWD 2023). Because the project would not exceed current capacities of the wastewater treatment system and would contribute Wastewater Capital Facility fees that would be used towards improvements, impacts to water treatment capacity would be **less than significant**.

Threshold #4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction of the proposed project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, and plastics. The City works with EDCO to promote its construction and demolition material waste removal and recycling program. A minimum of 75% of non-hazardous construction and demolition waste would be recycled pursuant to the requirements of CalGreen and AB 939, and construction would not impair the attainment of solid waste reduction goals.

Operation of the proposed project would result in increased generation of solid waste. The anticipated solid waste generation from the proposed project was estimated using CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019b). It is estimated that the project (46 units) would generate approximately 563 pounds of solid waste per day (12.23 pounds per household). This does not consider any waste diversion through recycling. According to CalRecycle, the city has a disposal rate target of 8.9 pounds per person per day. If the City meets this target, the city is considered in compliance with the 50% diversion requirement of AB 939. The most recent data (2022) from CalRecycle identifies the annual per capita disposal rate as 5.3 pounds per person per day (CalRecycle 2022). Thus, the city is exceeding their target for diversion.

Solid waste generated by the proposed project would be collected and transported to the Sycamore Sanitary Landfill by EDCO. According to CalRecycle, the facility currently has a daily permitted capacity of 5,000 tons per day for solid waste but is projected to increase to 7,000 tons per day in 2025 and 9,000 tons per day in 2027. Sycamore landfill's estimated closure date is listed as 2042, though the permit is anticipated to be revised and extended to 2054 (County of San Diego 2022). Solid waste generated by the proposed project would contribute a minimal amount of solid waste to Sycamore Sanitary Landfill's daily permitted capacity. As such, the proposed project's solid waste generation can be accommodated at the landfill. 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. Therefore, impacts would be **less than significant**.

Threshold #5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed project would comply with all federal, state, and local statutes and regulations regarding solid waste. The project would include trash enclosures with clearly marked, source-sorted receptacles for disposing of solid waste, recyclables, and organic waste to facilitate compliance with the requirements of AB 341, AB 939, AB 1826, SB 1383, and CALGreen Code. Additionally, all solid waste facilities, including landfills, require solid waste facility permits to operate. In San Diego County, Public Resources Code (Sections 44001- 44018) and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4 (Section 21440 et seq.) authorizes the County Department of Environmental Health, Local Enforcement Agency to issue solid waste facility permits. Sycamore Sanitary Landfill is a permitted facility and EDCO is a licensed hauler. As such, the project would comply with existing

regulations related to solid waste disposal and would not violate federal, state, or local management and reduction statutes and regulations related to solid waste. Impacts would be **less than significant**.

3.13.5 Cumulative Impact Analysis

A “cumulative impact” refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project’s significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project’s cumulative impact with respect to utilities and services systems, the cumulative analysis is based upon a combined list and plan project approach.

Water

All of the cumulative projects included in Table 2-4 are within VWD’s service area for potable water service and would contribute to the cumulative demand for water supply and water infrastructure. However, MWD anticipates the demand of future development through their master planning process. According to MWD’s UWMP, no water shortages are anticipated within MWD’s service area in single or multiple dry years through 2045.

As described in Section 3.13.4, above, the proposed project would result in less than significant impacts to water supply services. As discussed in Section 3.13.1, MWD has determined that with supplies provided by SDCWA and compliance with the Water Conservation Bill of 2009, no water shortages would occur in a normal year through 2045 (MWD 2021). Other cumulative projects that are consistent with the land use assumptions made in MWD’s UWMP would have already been accounted for in demand projections. Projects that are inconsistent with the land use assumptions made in MWD’s UWMP would also be subject to CEQA and required to include water supply assessments to demonstrate adequate supply for development. Further, related projects would be required to show that adequate infrastructure exists to serve the related projects and mitigate any potential impacts to water infrastructure caused by the project. All projects would be required to pay applicable Capital Facility Fees to VWD or the applicable water service provider, which are required to go towards infrastructure improvements. Thus, cumulative impacts to water services would be **less than significant**.

Wastewater

Cumulative projects that are within the VWD service area for wastewater services would contribute to the cumulative demand for wastewater services. VWD anticipates the demand of future development through their master planning process. Cumulative projects that are consistent with the land use assumptions made in VWD’s Master Plan would have already had their demand accounted for.

As discussed in Section 3.13.4 above, VWD has sufficient capacity at this time to account for the proposed project’s estimated increase in wastewater generation. However, VWD identified existing system deficiencies in sewer pipe segments W-8 and W-9, as well as in capacity for solids handling, liquids handling, ocean disposal and parallel land outfall’s capacity for ultimate build-out wastewater flows. The cumulative projects that result in an increase in density or development over what was accounted for in VWD’s Master Plan would further exacerbate these deficiencies. Per VWD, payment

of Wastewater Capital Facility fees would go toward projects identified in their 2018 Master Plan including upsizing applicable pipelines and design and construction of a parallel land outfall (VWD 2023). The project applicant for the proposed project and for cumulative projects would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with District rules and regulations, which would be utilized to fund the identified projects in the 2018 Master Plan. Thus, with payment of all applicable Wastewater Capital Facility fees to VWD, cumulative impacts to wastewater treatment facilities would be **less than significant**.

Electrical Power and Natural Gas

Potential cumulative impacts related to energy and natural gas infrastructure would result if the project, in combination with past, present, and future projects, would require or result in the relocation or construction of new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

As described in Section 3.13.4, above, the proposed project would have a less than significant impact related to energy and natural gas. Each of the cumulative projects identified in Table 2-4 would be within the service area of SDG&E. Each of the cumulative projects would be required to analyze their potential for impacts related to the provision of electricity and natural gas services, including the need for new or expanded utility infrastructure, and would be required to mitigate potential impacts from expanded infrastructure to below a level of significance. Cumulative projects are also required to comply with the state's energy efficiency standards and local regulations. Additionally, SDG&E regularly undertakes upgrades and expansions, as needed, throughout their service area to continue to provide reliable electricity and natural service. SDG&E conducts their own CEQA review on these projects. In conclusion, cumulative impacts related to the provision of electrical power and natural gas would be **less than significant**.

Solid Waste

Future development projects would generate solid waste to be disposed of at the Sycamore Sanitary Landfill. According to CalRecycle, the facility has a daily permitted capacity of 5,000 tons/day for solid waste (expected to increase to 7,000 tons per day in 2025, and 9,000 tons per day in 2027). As of February 2021, remaining capacity was 105,064,991 cubic yards or approximately 86 million tons with an anticipated closure date of 2042, likely to be revised and extended to 2054 (County of San Diego 2022). Further, there are five other landfills in the County. This includes Borrego Landfill, with a remaining capacity of 88,750 cy and a closure date of 2046; Miramar Landfill, with a remaining capacity of 11,080,871 cy and a closure date of 2031; Otay Landfill, with a remaining capacity of 11,122,997 cy and closure date of 2030, and two US Marine Corps landfills – Las Pulgas and San Onofre, with remaining capacities of 5,657,717 and 1,057,605 cy and 2060 and 2031 closure dates respectively (County of San Diego 2022).

The proposed project and cumulative projects include 3,085 residential units, approximately 211,600 s.f. of commercial, 555,000 s.f. of office and 104,000 s.f. of industrial. When the CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019b) are applied to the proposed project and the cumulative projects, the total solid waste anticipated to be generated is 48,088 pounds per day (lbs/day) or 24.04 tons/day. This is prior to any diversion from mandatory recycling and green waste/organics program. Assuming a 75% diversion rate, as required by AB 341, the net solid waste generation would be approximately 6.01 tons/day. The Sycamore Sanitary Landfill has a daily permitted capacity of 5,000 tons/day, which is expected to increase to 7,000 tons/day in 2025 and

9,000 tons/day in 2027. The cumulative projects would result in incremental contribution to the landfill capacity; however, the impact would be less than significant.

3.13.6 Mitigation Measures

Impacts would be less than significant, so no mitigation measures are required.

3.13.7 Conclusion

Development of the proposed project would result in an incremental increase in the need for water, wastewater, stormwater, energy, and solid waste services. However, as outlined in the project impact analysis above, it is determined that water, wastewater, stormwater, energy, and solid waste services would be adequate and **project- and cumulative-level impacts would be less than significant.**

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4.0 Alternatives

4.1 Introduction to Alternatives

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines states that an Environmental Impact Report (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.”

The range of alternatives evaluated in an EIR is governed by the “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (Section 15126.6(a) of the CEQA Guidelines).

In developing the alternatives to be addressed in the EIR, the potential alternatives were evaluated in terms of their ability to meet the basic objectives of the project, while reducing or avoiding the environmental impacts of the project identified in Section 3.0, Environmental Analysis, of the EIR.

In determining what alternatives should be considered in an EIR, it is important to acknowledge the objectives of the project, the project’s significant effects, and unique project considerations. These factors are important to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of “potentially feasible” alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency’s decision-making body, the San Marcos City Council (see Public Resources Code Section 21081[a] [3]).

4.2 Project Objectives

The following project objectives describe the purpose of the proposed project and provide a basis for identification of a range of reasonable alternatives evaluated in the EIR:

- Provide multi-family housing opportunities close to major transit, educational facilities, shopping opportunities, employment uses, and trails to optimize alternative modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.
- To the extent possible given site constraints, maximize the opportunity to provide housing for the City of San Marcos in the 4.1 to 8.0 dwelling unit density range which is comparable to low-density housing developments in the City of San Marcos.
- Cluster development to lessen site impacts and minimize landform modification.
- Develop high-quality attainable housing which meets the housing needs of the City of San Marcos and the region.
- Create a development that promotes a high-quality-of-life by providing each dwelling unit its own private patio/yard space and by providing a common recreational open space gathering area.
- Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complements and enhances the existing

surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan Area.

- Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.
- Finance or contribute a fair share of funding to all community services and infrastructure needed to support Specific Plan development to promote economic stability.

4.3 Project Alternatives Considered in This EIR

4.3.1 Description of Alternative

The following alternatives are under consideration for this project:

- No Project/No Development Alternative (Section 4.3.3)
- No Project/ Existing Plan Alternative (Section 4.3.4)
- Reduced Density Alternative (Section 4.3.5)

Alternatives considered and removed from further consideration are summarized in Section 4.4.

4.3.2 Summary of Impacts

Project- and cumulative-level impacts associated with implementation of the proposed project are evaluated in Sections 3.1, Aesthetics, through 3.13, Utilities and Service Systems, of the EIR. As identified in Table 1-1, in Chapter 1, Executive Summary, construction and/or operation of the proposed project would have the potential to cause the following significant but mitigable environmental impacts:

- **Impact BIO-1:** The proposed project has the potential to result in direct and indirect impacts to coastal California gnatcatcher.
- **Impact BIO-2:** Focused surveys found the Diegan Coastal Sage Scrub on site to be occupied by Crotch's bumble bee. Thus, there is potential for "take" of Crotch's bumble bee and adverse impacts may occur through the removal of occupied habitat.
- **Impact BIO-3:** The project has the potential to result in direct and indirect impacts to special-status wildlife species including Orange-throated whiptail, coastal whiptail, Southern California rufous-crowned sparrow, Cooper's hawk, Crotch's bumble bee, and Bryant's woodrat.
- **Impact BIO-4:** The project has the potential to impact nesting birds and raptors that are afforded protection under the California Fish and Game Code and the Migratory Bird Treaty Act.
- **Impact BIO-5:** The proposed project has the potential to result in indirect impacts to sensitive species due to urban run-off, introduction of meso-predators (e.g., dogs and cats), invasive plant species, and noise and lighting effects.
- **Impact BIO-6:** The proposed project would impact 5.24 acres of Diegan coastal sage scrub and 0.26 acres of disturbed Diegan coastal sage scrub for a total of 5.50 acres of impact.

- **Impact CR-1:** Due to grading and ground disturbing activities, the proposed project has the potential to impact unidentified archeological resources on the project site.
- **Impact CR-2:** There is a potential for project construction activities to disturb previously unidentified human remains on the project site.
- **Impact N-1:** Due to temporary rock drilling and blasting activities during construction, the proposed project has the potential to create noise levels in excess of the 75 dBA standard if rock drilling equipment is staged closer than 160 feet to the nearest property line.
- **Impact N-2:** Due to temporary rock crushing activities, the proposed project has the potential to create noise levels in excess of the exterior daytime standards for single family residential use (60 dBA Leq) and multi-family residential use (65 dBA Leq) if the rock crusher is staged within 400 feet of a single-family residential use.
- **Impact TCR-1:** As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is determined, by the City, based on substantial evidence, to be a tribal cultural resource.

All project impacts would be mitigated to below a level of significance.

4.3.2.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the proposed project would not be implemented, and the project site would remain undeveloped and in its current condition. No grading or construction would occur on the project site under this alternative. The project site is currently undeveloped and supports Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, and urban/developed areas (Rincon 2025).

4.3.2.2 Comparison of the Effects of the No Project/No Development Alternative to the Proposed Project

Aesthetics

Under this alternative the project site would remain in its current condition. No grading would occur and no vegetation would be removed. The visual character of the site would not change. The project site is undeveloped and steeply sloped. Elevation ranges from 754 feet above mean sea level in the eastern portion of the project site down to 615 feet in the southwestern portion of the project site. The project site supports Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, and urban/developed areas (Rincon 2025). This alternative would not add additional sources of lighting to the project site and vicinity. Compared to the proposed project, this alternative would reduce impacts. No aesthetics impacts would occur under the No Project/No Development Alternative.

Air Quality

Under the No Project/No Development Alternative, air emissions associated with project construction including emissions associated with grading, blasting and rock crushing, site preparation, site finishing and building finishing would not occur. Implementation of this alternative would not introduce any uses that could generate operational air emissions. This alternative would not result in any construction or operational air pollutant emissions. As discussed in Section 3.2.4, impacts to air quality for the

proposed project would be less than significant and no mitigation would be required. Compared to the proposed project, this alternative would reduce air pollutant emissions. No air quality impacts would occur under the No Project/No Development Alternative.

Biological Resources

The No Project/No Development Alternative would not require any ground-disturbing activities, nor would it include development of the project site. This alternative would avoid potential impacts to coastal California gnatcatcher (Impact BIO-1), Crotch's bumble bee (Impact BIO-2), other special-status wildlife species and nesting birds (Impact BIO-3 and Impact BIO-4), indirect impacts to sensitive species (Impact BIO-5) and impact to Diegan coastal sage scrub (Impact BIO-6). Since impacts to biological resources would be avoided under the No Project/No Development Alternative, mitigation measures MM-BIO-1 through MM-BIO-6 would not be implemented or required. Compared to the proposed project, this alternative would eliminate the potential biological resources impacts. No biological resources impacts would occur under the No Project/No Development Alternative.

Cultural Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, there would be no potential to impact unknown archaeological resources potentially located within the project site (Impact CR-1). Further, there would be no potential to disturb previously unidentified human remains that may be present on the project site (Impact CR-2). As such, mitigation measures MM-CR-1 and MM-CR-2 would not be implemented or required. Compared to the proposed project, the No Project/No Development Alternative would eliminate potential cultural resources impacts. No impacts to cultural resources would occur under the No Project/No Development Alternative.

Energy

Under the No Project/No Development Alternative, there would be no energy use associated with construction and operation, since no development would occur. While impacts under the proposed project related to energy use were determined to be less than significant, they would be eliminated under this alternative since there would be no energy use. Compared to the proposed project, the No Project/No Development Alternative would eliminate the energy use identified for the project and there would be no energy impacts.

Geology and Soils

Under the No Project/No Development Alternative, the project site would remain in its current state. Existing topography and on-site soils would not be modified to accommodate proposed development. While geology and soils impacts were determined to be less than significant for the project, this alternative would eliminate any geology and soils impacts. No geology and soils impacts would occur under this alternative. Compared to the proposed project, the No Project/No Development Alternative would reduce potential impacts related to geology and soils.

Hydrology and Water Quality

Under the No Project/No Development Alternative, no development would occur, and no impervious surfaces would be created. The existing on-site hydrologic conditions, drainage patterns, and drainage volumes would remain unaltered. Water quality would also remain unchanged. While the proposed project's hydrology and water quality impacts were determined to be less than significant, this

alternative would further minimize potential impacts related to hydrology and water quality, and no impact would occur.

Land Use and Planning

Under this alternative, the project site would remain undeveloped and none of the discretionary approvals identified for the project would be required, including the Specific Plan Amendment, adoption of the new Woodward 46 Specific Plan, General Plan Amendment, Site Development Plan, Tentative Subdivision Map and Conditional Use Permit. While the proposed project's land use and planning impacts were determined to be less than significant, the No Project/ No Development would further minimize potential impacts related to land use and planning, and no impact would occur.

Noise

The project site is currently vacant and does not generate any noise. Under the No Project/No Development Alternative, the project site would remain undeveloped and would not create any new sources of construction or operational noise and vibration. As detailed in Section 3.9, Noise, the project has the potential for construction-related noise impacts due to rock drilling and rock crushing activities. Under this alternative, the potential for noise impacts would be eliminated since no blasting or rock crushing activities would occur. As such, noise impacts under this alternative would be reduced as compared to the proposed project.

Public Services

The No Project/No Development Alternative would not result in an increase in demand for public services, since no residential uses would be developed and there would be no increase in the City's population. Specifically, the No Project/No Development Alternative would not increase the demand for police and fire protection services, nor would this alternative increase demand for park, school, and library services. As stated in Section 3.10, Public Services, public service impacts for the proposed project would be less than significant. Since this alternative would not result in additional residents on site, impacts on public services would be reduced, compared to the proposed project. No public services impacts would occur under the No Project/No Development Alternative.

Transportation

The No Project/No Development Alternative would not result in the generation of vehicular trips. Under this alternative the minimum 50-foot southbound left-turn pocket on Woodward Street would not be constructed. While the proposed project would have less than significant transportation impacts, this alternative would have no impact related to transportation.

Tribal Cultural Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, there would be no potential to impact tribal cultural resources (Impact TCR-1). As such, mitigation measures MM-TCR-1 through MM-TCR-12 would not be implemented or required. No impact would occur, and compared to the proposed project, the No Project/No Development Alternative would result in a reduced level of potential impact to tribal cultural resources.

Utilities and Service Systems

No development would be constructed under the No Project/No Development Alternative. As such, there would be no increase in demand for water service, wastewater service, stormwater capacity, energy, and solid waste handling services. As discussed in Section 3.13.4, Utilities, project impacts related to utilities and service systems were determined to be less than significant. Because no development would occur under this alternative, the demand for utilities would be eliminated. Additionally, the sewer line extension within Woodward Street that is required to serve the project would not be needed under this alternative. Thus, impacts to utilities and service systems would be reduced compared to the proposed project. No utilities and service system impacts would occur for the No Project/No Development Alternative.

Conclusion

Since the No Project/No Development Alternative would not develop any residential uses on the project site, overall impacts would be less than those of the proposed project or eliminated entirely. There are some benefits of the project that would not be realized under this alternative, including providing additional housing units in the City which helps the City meet its Regional Housing Need Allocation numbers. Under this alternative there would not be any payment of the City's Public Facilities Fees (PFF), which goes toward supporting a variety of services and improvements in the City, including but not limited to Circulation Streets, State Route 78 Interchanges, National Pollutant Discharge Elimination System, Tech Improvements, Parks, and Habitat Conservation. Payment of these fees provide improvements that benefit all residents of the city. Similarly, this alternative would not contribute any school fees. Finally, this alternative would not meet any of the project objectives (**Table 4-1**).

4.3.3 No Project/Existing Plan Alternative

Typically, under a No Project/Existing Plan Alternative, the project site would be developed consistent with the site's existing land use designation. The project site has a General Plan Designation of SPA (Specific Plan Area) and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, including the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan have not been adopted by the City and there is no current City effort to do so. Therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The Richmar Specific Plan identifies commercial, office and multifamily residential as land use options within the Richmar planning area.

Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. City policy requires that a secondary access be provided if more than 50 units are proposed. Given the topographical constraints of the site and the adjacent residential land uses, multifamily residential land use is assumed as the existing land use for this analysis. The project site would not be suitable for commercial or office development given the site topography and adjacent uses. It is also assumed that a maximum of 50 multifamily residential units could be built on the site given the topographical constraints and the lack

of availability of a secondary/emergency vehicle access point. Under this scenario the site would have a density of 5.9 du/acre and a Specific Plan would be required.

The overall footprint of development for the 50 units (25 buildings with two units each) is assumed to be the same as the proposed project. The units would still be duplexes; however, the units would be smaller. Building heights would be up to 45 feet. Site access would be similar to the proposed project and would be via a driveway from Woodward Street. Grading, blasting and rock crushing as well as fire fuel modification would be required for this alternative.

4.3.3.1 Comparison of the Effects of the No Project/Existing Plan Alternative to the Proposed Project

Aesthetics

The No Project/Existing Plan Alternative would develop 25 two-unit buildings. The site would be modified through grading and retaining wall construction to allow for the access driveway and building pads. Building heights would be maximum of 45 feet. Similar to the proposed project, a Specific Plan would be prepared to establish the development rules and regulations of the land uses under this alternative. Similar to the proposed project, architectural treatments would be used to break up the bulk and scale of the buildings and add visual interest. Enhanced architectural treatments for highly visible buildings would also be incorporated. A landscape concept plan would also be implemented. Similar to the proposed project, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. The No Project/Existing Plan Alternative would have a similar level of aesthetics impact as the proposed project and those impacts would be less than significant.

Air Quality

Under the No Project/Existing Plan Alternative, air pollutant emissions associated with project construction including emissions associated with grading, blasting, rock crushing, site preparation, site finishing and building finishing would still occur. Since 25 buildings would be constructed (versus 23 with the proposed project), there would be more emissions associated with construction and architectural coatings under this alternative. Grading activities would be similar to the proposed project since a similar footprint for development is assumed.

Emissions from vehicles going to and from the project site typically account for the largest portion of air quality emissions. Vehicular trips under the No Project/ Existing Plan Alternative would be slightly higher than the proposed project. This alternative would generate approximately 400 average daily trips (ADT) compared to the 368 ADT anticipated for the project, an approximate 9% increase. As such, because this alternative would result in an increase of ADT on site, operational air pollutant emissions would be slightly increased when compared to the proposed project. Operational and construction air pollutant emissions under this alternative would still be less than significant. Similar to the proposed project, impacts related to odors would be less than significant under this alternative. Overall, the No Project/Existing Plan Alternative would increase air quality emissions during both project construction and operation compared to the proposed project, but impacts would continue to be less than significant.

Biological Resources

Since it would have a similar footprint of disturbance, the No Project/Existing Plan Alternative would have a similar level of biological resources impacts as the proposed project, including potential impacts to coastal California gnatcatcher (Impact BIO-1), Crotch's bumble bee (Impact BIO-2), other special-status wildlife species and nesting birds (Impact BIO-3 and Impact BIO-4), indirect impacts to sensitive species (Impact BIO-5) and impacts to Diegan coastal sage scrub (Impact BIO-6). Mitigation measures MM-BIO-1 through MM-BIO-6 would still be required under this alternative. Compared to the proposed project, this alternative would result in a similar level of biological resources impacts.

Cultural Resources

The No Project/Existing Plan Alternative would require a similar level of grading as the development footprint would be similar as the proposed project. Therefore, the potential to impact unknown archaeological resources or unidentified humans remains potentially located within the project site would be similar. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1 and MM-CR-2) and would reduce the impacts to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of cultural resources impacts as the proposed project.

Energy

Construction of the No Project/Existing Plan Alternative would include a similar amount of grading and soil hauling as the proposed project. Therefore, construction-related energy use would be similar to that of the proposed project. Operationally, the project would require slightly more energy use since the number of residential units would be slightly increased (50 units vs 46 units). Additionally, since this alternative would generate slightly more ADT compared to the proposed project, fuel use would also be slightly increased under this alternative. Similar to the proposed project, this alternative would incorporate energy conservation features consistent with the requirements of Title 24 and would not result in the wasteful or inefficient use of energy or a conflict with a state or local plan for energy efficiency. Compared to the proposed project, energy demand would be slightly greater with the No Project/Existing Plan Alternative, but impacts would continue to be less than significant.

Geology and Soils

Under the No Project/Existing Plan Alternative ground-disturbance would be required for the construction of the residential units. Development under this alternative would be required to implement the recommendations from the preliminary geotechnical investigation (GeoTek 2019). These recommendations include general provisions related to earthwork, and design recommendations related to stormwater infiltration, foundation design, seismic design parameters, corrosion, retaining all design and construction, and post-construction considerations. Compliance with the recommendations of the preliminary geotechnical investigation would ensure that seismic and soils hazards would be addressed through project design and impacts related to geological and soils hazards would be less than significant, similar to the proposed project. The No Project/Existing Plan Alternative would have a similar level of geology and soils impacts as the proposed project.

Hydrology and Water Quality

The No Project/Existing Plan Alternative would introduce impervious surfaces at the site in a similar quantity as the proposed project and the existing on-site hydrologic conditions, drainage patterns, and drainage volumes would be similarly modified. It is expected that this alternative would incorporate all

required and applicable best management practices in order to avoid any violations of water quality standards or otherwise modify or adversely affect surface and groundwater quality, similar to the proposed project. As compared to the proposed project, this alternative would result in similar impacts and the impacts would be less than significant.

Land Use and Planning

Under the No Project/Existing Plan Alternative, the same list of project approvals would be required, including a Specific Plan Amendment to modify the HOCSP to remove the current Richmar Sub-Plan designation on the project, a new Specific Plan to establish the development rules for the site, a General Plan Amendment to remove the Richmar Sub-Plan designation from the project site, a Site Development Plan, Tentative Subdivision Map and a Conditional Use Permit for a temporary rock crusher.

Development under this alternative would generate more traffic (400 ADT compared to 368 ADT) than the proposed project. The proposed project did not have any inconsistencies with the City's Mobility Element goal related to level of service (LOS). While this alternative would generate slightly more ADT, it is not anticipated to have any LOS-related issues. Development under this alternative would still be required to participate in Community Facility District: CFD2011-01 (Congestion Management). This alternative would have a similar level of impact as the proposed project, which is less than significant.

Noise

Grading-related noise under the No Project/Existing Plan Alternative would be similar to the proposed project, since grading activities would still be required, and similar types of equipment would be used. Noise related to building construction would be similar to the proposed project but would last for a longer duration since two additional buildings would be constructed. The potential for significant impacts related to rock drilling and rock crushing would still be expected under this alternative and implementation of mitigation measures MM-N-1 and MM-N-2 would still be required. Similar to the proposed project, construction noise impacts would be reduced to below a level of significance with implementation of mitigation.

The No Project/Existing Plan Alternative would generate operational noise from residential activities as well as vehicle trips generated by the project. This alternative would generate slightly more ADT than the project (400 ADT compared to 368 ADT). Therefore, offsite noise generated by the project would be slightly increased under this alternative compared to the proposed project. Compared to the proposed project, this alternative would generate more noise during construction and operation; however, similar to the proposed project noise impacts would be reduced to below a level of significance with mitigation.

Public Services

Similar to the proposed project, the No Project/Existing Plan Alternative would result in an increase in demand for public services, due to the construction of residential uses. Specifically, this alternative would increase the demand for police and fire protection services over existing conditions. Residential uses are the primary driver for demand for park, library, and school services. This project would increase the amount of residential development by approximately 9% (50 units instead of 46 units), which results in a proportional increase in the need for services. Development under this alternative would still be required to pay applicable PFF and school fees and participate in community facility districts for fire and police. Compared to the proposed project, this alternative would result in a slightly

increased demand for fire and police services and increased demand for park, library and school services. Overall, similar to the proposed project, impacts to public services would be less than significant.

Transportation

Under the No Project/Existing Plan Alternative, impacts associated with consistency with policies in the Mobility Element of the General Plan that address LOS are still anticipated to be less than significant. Development under this scenario would still be required to construct a minimum 50-foot southbound left-turn pocket on Woodward Street for left-turn access to the project site outside of the southbound through lane. This alternative would still be required to construct a sidewalk along the project access driveway to connect the development with existing pedestrian infrastructure on Woodward Street. With regard to Vehicle Miles Traveled (VMT), it is assumed that development under this alternative would be screened out of needing further analysis, similar to the proposed project. Overall, this alternative would generate slightly more VMT since four more residential units would be constructed. The No Project/Existing Plan Alternative would have a slightly increased level of transportation impacts as the proposed project, and those impacts would be less than significant.

Tribal Cultural Resources

The No Project/Existing Plan Alternative would require a similar level of grading as the development footprint would be similar to the proposed project. Therefore, the potential to impact tribal cultural resources would still occur under this alternative. Tribal cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-TCR-1 through MM-TCR-12) and would reduce the impacts to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of tribal cultural resources impacts as the proposed project.

Utilities and Service Systems

The No Project/Existing Plan Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service over existing conditions through the development of new residential uses. Proposed water use estimates and sewer generation rates for residential are based on the proposed density multiplied by the site acreage. Given that development under this alternative would be of the same land use type as the proposed project (Residential 4-8 du/acre), the projected water demand and wastewater generation under this alternative would be the same as the proposed project. The sewer line extension in Woodward Street identified for the proposed project in the VWD technical memorandum (2023) would also be required for this alternative.

Storm water infrastructure demands are anticipated to be similar to the proposed project as a similar amount of impervious surface would be created. Solid waste generation would be slightly increased under this alternative but still less than significant. Similar to the proposed project, utilities and service system impacts would be less than significant under the No Project/Existing Plan Alternative. This alternative would have a similar level of impact to utilities and service systems as the proposed project.

Conclusion

The No Project/Existing Plan Alternative would result in a slightly more intensive use on the project site, including an increase in trip generation compared to the proposed project (400 ADT compared to 368 ADT). This results in a corresponding proportional increase in air pollutants and noise from

vehicles compared to the proposed project. Construction-related air pollutants are expected to be slightly increased as construction duration would be longer due to additional building construction but a similar amount of grading, blasting, rock crushing and site preparation would be required. Construction-related noise impacts due to rock drilling and rock crushing would be similar to the proposed project.

Footprint-specific impacts, such as those related to biological resources, cultural resources, and tribal cultural resources, would be similar to the proposed project, as the same amount of site area would be disturbed.

This alternative would slightly increase the number of students generated for San Marcos Unified School District (SMUSD) and would increase demand for parks, libraries, and solid waste facilities compared to the proposed project. This alternative would have a similar water demand and wastewater generation as the proposed project. This alternative could meet the majority of the project objectives, as detailed in Table 4-1.

4.3.4 Reduced Density Alternative

Under the Reduced Density Alternative, the project site would be developed with single family residential uses at a reduced density of 2 du/acre, resulting in 16 single family homes. Prior to the last comprehensive update of the City's General Plan, the project site was designated for Single-Family Detached under the HOCSP with a density of 2 to 4 du/acre assigned to it. The Reduced Density Alternative assumes the lower end of the density range given the steep slope of the property and preparation of a Specific Plan would be required. The maximum building height under this alternative would be 35 feet or two stories. Due to the topographical constraints of the site access would be similar to the proposed project and would be via a driveway on Woodward Street. Grading, blasting and rock crushing as well as fire fuel modification would be required for this alternative.

4.3.4.1 Comparison of the Effects of the Reduced Density Alternative to the Proposed Project

Aesthetics

The Reduced Density Alternative would develop 16 single-family residences. The site would be modified through grading and retaining wall construction to allow for the access driveway and building pads. Building heights would be a maximum of 35 feet. Similar to the proposed project, a Specific Plan would be prepared to establish the development rules and regulations of the land uses under this alternative. Architectural treatments would be used to provide visual variety to the buildings, including enhanced treatments for highly-visible buildings. The Specific Plan would identify a planting palette and requirements for landscaping for each residence. Similar to the proposed project, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. Since the Reduced Density Alternative would develop single family residences, it would appear to be more visually consistent with the single-family residential development to the north and east. However, overall, development under this alternative would result in a generally similar level of visual change and would add lighting to an area where it does not currently exist. The Reduced Density Alternative would result in a similar level of impact as the proposed project and those impacts would be less than significant.

Air Quality

Under the Reduced Density Alternative, air pollutant emissions associated with project construction including emissions associated with grading, blasting, rock crushing, site preparation, site finishing and building finishing would still occur. Grading activities would be similar to the proposed project, since a similar footprint for development is assumed. Building finishing and coating would be less under this alternative since fewer buildings would be constructed.

Emissions from vehicles going to and from the project site typically account for the largest portion of air quality emissions. Vehicular trips under the Reduced Density Alternative would be lower than the proposed project. This alternative would generate approximately 192 ADT compared to the 368 ADT anticipated for the project, an approximate 48% reduction. As such, because this alternative would result in a reduction of ADT on site, operational air pollutant emissions would be reduced when compared to the proposed project. However, operational and construction air pollutant emissions under this alternative would still be less than significant. Similar to the proposed project, impacts related to odors would be less than significant under this alternative. Overall, this alternative would decrease air quality emissions during both project construction and operation compared to the proposed project, and impacts would continue to be less than significant.

Biological Resources

Since it would have a generally similar footprint of disturbance, the Reduced Density Alternative would have a similar level of biological resources impacts as the proposed project, including potential impacts to coastal California gnatcatcher (Impact BIO-1), Crotch's bumble bee (Impact BIO-2), other special-status wildlife species and nesting birds (Impact BIO-3 and Impact BIO-4), indirect impacts to sensitive species (Impact BIO-5) and impacts to Diegan coastal sage scrub (Impact BIO-6). Mitigation measures MM-BIO-1 through MM-BIO-6 would still be required under this alternative. Compared to the proposed project, this alternative would result in a similar level of biological resources impacts.

Cultural Resources

The Reduced Density Alternative would require a similar level of grading as the development. The location of the residential development would be generally similar to the proposed project. Development under this alternative would still have the potential to impact unknown archaeological resources or unidentified human remains potentially located within the project site. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1 and MM-CR-2) and would reduce the impacts to below a level of significance. The Reduced Density Alternative would have a similar level of cultural resources impacts as the proposed project.

Energy

Construction of the Reduced Density Alternative would include a similar amount of grading and soil hauling as the proposed project. Therefore, construction-related energy use would be similar to that of the proposed project. Operationally, the project would require less energy use since the number of residential units would be reduced (46 units to 16). Additionally, since this alternative would generate fewer ADT compared to the proposed project, fuel use would also be reduced under this alternative. Similar to the proposed project, this alternative would incorporate energy conservation features consistent with the requirements of Title 24 and would not result in the wasteful or inefficient use of energy or a conflict with a state or local plan for energy efficiency. Impacts are expected to be less

than significant. Compared to the proposed project, energy demand would be decreased with the Reduced Density Alternative and impacts would continue to be less than significant.

Geology and Soils

Under the Reduced Density Alternative ground-disturbance would be required for the construction of the residential units. Development under this alternative would be required to implement the recommendations from the preliminary geotechnical investigation (GeoTek 2019). These recommendations include general provisions related to earthwork, and design recommendations related to stormwater infiltration, foundation design, seismic design parameters, corrosion, retaining all design and construction, and post-construction considerations. Compliance with the recommendations of the preliminary geotechnical investigation would ensure that seismic and soils hazards would be addressed through project design and impacts related to geological and soils hazards would be less than significant, similar to the proposed project. The Reduced Density Alternative would have a similar level of geology and soils impacts as the proposed project.

Hydrology and Water Quality

The Reduced Density Alternative would introduce impervious surfaces at the site in a similar quantity as the proposed project and the existing on-site hydrologic conditions, drainage patterns, and drainage volumes would be similarly modified. It is expected that this alternative would incorporate all required and applicable best management practices in order to avoid any violations of water quality standards or otherwise modify or adversely affect surface and groundwater quality, similar to the proposed project. As compared to the proposed project, this alternative would result in similar impacts and the impacts would be less than significant.

Land Use and Planning

Under the Reduced Density Alternative, the same list of project approvals would be required, including a Specific Plan Amendment to modify the HOCSP to remove the current Richmar Sub-Plan designation on the project, a new Specific Plan to establish the development rules for the site, a General Plan Amendment to remove the Richmar Sub-Plan designation from the project site, a Site Development Plan, Tentative Subdivision Map, and a Conditional Use Permit for a temporary rock crusher.

Development under this alternative would generate less traffic (192 ADT compared to 368 ADT) than the proposed project. The proposed project did not have any inconsistencies with the City's Mobility Element goal related to LOS. Therefore, this alternative, since it would generate even fewer ADT, would not have any LOS-related issues. Development under this alternative would still be required to participate in Community Facility District: CFD2011-01 (Congestion Management). This alternative would have a similar level of impact as the proposed project, which is less than significant.

Noise

Grading- related noise under the Reduced Density Alternative would be similar to the proposed project, since grading activities would still be required, and similar types of equipment would be used. Noise related to building construction would be similar to the proposed project but would last for a shorter duration since 7 fewer buildings would be constructed. The potential for significant impacts related to rock drilling and rock crushing would still be expected under this alternative and implementation of mitigation measures MM-N-1 and MM-N-2 would still be required. Similar to the proposed project, construction noise impacts would be reduced to below a level of significance with implementation of mitigation.

The Reduced Density Alternative would generate operational noise from residential activities as well as vehicle trips generated by the project. This alternative would generate fewer ADT than the project (192 ADT compared to 368 ADT). Therefore, offsite noise generated by the project would be reduced under this alternative compared to the proposed project. Compared to the proposed project, this alternative would generate less noise during construction and operation; however, similar to the proposed project, noise impacts would be reduced to below a level of significance with mitigation.

Public Services

Similar to the proposed project, the Reduced Density Alternative would result in an increase in demand for public services, due to the construction of residential uses. Specifically, this alternative would increase the demand for police and fire protection services over existing conditions. Residential uses are the primary driver for demand for park, library, and school services. This project would reduce the amount of residential development by approximately 65% (16 units instead of 46 units), which results in a proportional decrease in the need for services. Development under this alternative would still be required to pay applicable PFF and school fees and participate in community facility districts for fire and police. Compared to the proposed project, this alternative would result in a reduced demand for fire and police services and decreased demand for park, library, and school services. Overall, similar to the proposed project, impacts to public services would be less than significant.

Transportation

Under the Reduced Density Alternative, impacts associated with consistency with policies in the Mobility Element of the General Plan that address LOS are still anticipated to be less than significant. Development under this scenario would still be required to construct a minimum 50-foot southbound left-turn pocket on Woodward Street for left-turn access to the project site outside of the southbound through lane. This alternative would still be required to construct a sidewalk along the project access driveway to connect the development with the existing pedestrian infrastructure on Woodward Street.

With regard to VMT, it is assumed that development under this alternative would not screen out of a VMT analysis since it would not meet the floor area ratio requirement of 0.75 or greater. Given the lower density of development, the floor area ratio of 0.75 would not be achieved under this alternative. According to San Diego Association of Government (SANDAG) San Diego Region SB 743 VMT Maps, the project site is within an area where the VMT is 101% of the regional mean for VMT (19.3 VMT/capita compared to the regional mean of 18.9 VMT/capita) (SANDAG 2023). In order to avoid a significant VMT impact, development under this alternative would be required to reduce VMT to 85% of the regional mean, or a total of 16%. There is a limit to the amount of VMT reduction that can be applied to a development project. Within the City, with its suburban land use the maximum feasible total reduction combining all VMT-reducing mitigation measures is 15%. Therefore, the Reduced Density Alternative would end up with a significant and unmitigated transportation impact related to VMT under the purposes of CEQA. This results in a greater level of impact compared to the proposed project.

Tribal Cultural Resources

The Reduced Density Alternative would require a similar level of grading as the proposed development. The location of the residential development would be generally similar to the proposed project and development under this alternative would still have the potential to impact tribal cultural resources. Tribal cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1 and MM-CR-2) and would reduce the impacts to

below a level of significance. The Reduced Density Alternative would have a similar level of tribal cultural resources impacts as the proposed project.

Utilities and Service Systems

The Reduced Density Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service over existing conditions through the development of new residential uses. Based upon the water/sewer technical memorandum prepared by VWD (2023) and according to assumptions in their 2018 Master Plan, development under this alternative would have a water demand of 15,480 gallons per day (gpd) and a sewer generation of 6,450 gpd. The proposed project would have a water demand of 21,500 gpd and a sewer demand of 11,180 gpd. Therefore, the demand for sewer and water services would be decreased under this alternative compared to the proposed project. However, the sewer line extension in Woodward Street identified for the proposed project in the VWD technical memorandum (2023) would also be required for this alternative.

Storm water infrastructure demands are anticipated to be similar to the proposed project as a similar amount of impervious surface would be created. Solid waste generation would be decreased under this alternative due to fewer residential units.. Overall, compared to the proposed project, water, sewer, and solid waste demand would be less under the Reduced Density Alternative but similar to the proposed project, utilities and service system impacts would be less than significant.

Conclusion

The Reduced Density Alternative would result in a less intensive use on the project site, including a reduction in trip generation compared to the proposed project (192 ADT compared to 368 ADT). This results in a corresponding proportional decrease in air pollutants and noise from vehicles compared to the proposed project. Grading-related air pollutants are expected to be similar under this alternative since a similar amount of grading, blasting, rock crushing and site preparation would be required. Fewer air pollutants would be generated from building coating and finishes, since seven fewer buildings would be constructed. Construction-related noise impacts due to rock drilling and rock crushing would be similar as the proposed project.

Footprint-specific impacts, such as those related to biological resources, cultural resources, and tribal cultural resources, would be similar as the proposed project, as the same amount of site area would be disturbed.

This alternative would reduce the number of students generated for SMUSD and would reduce demand for parks, libraries, water, sewer, and solid waste services compared to the proposed project. The Reduced Density alternative could meet the majority of the project objectives, as detailed in Table 4-1, but would not provide multi-family housing in the 4.1-8.0 dwelling unit range.

4.4 Alternatives Considered But Rejected

CEQA Guidelines Section 15126.6(c) provides guidance in selecting a range of reasonable alternatives for the project. An EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. CEQA Guidelines Section

15126.6(c) provides the following guidance in selecting a range of reasonable alternatives for the project. There are many factors that may be taken into account when addressing the feasibility of the range of potential alternatives for the project, such as 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 (or the site is already owned by the proponent). The alternatives discussion shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. An EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination.

The EIR need not discuss every alternative to the project. A range of alternatives that are “reasonable” for analysis have been evaluated and are discussed above in Section 4.3, Project Alternatives Considered in this EIR. The following describes other alternatives considered by the City but dismissed from further evaluation in this EIR, and a brief description of the reasons for their rejection.

4.4.1 Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. There are sites within the city of an approximately equivalent size to the project site that could be redeveloped with a residential project; however, the project applicant does not control another site within the city of comparable land area that is available for development of the proposed project. One of the factors for feasibility of an alternative is “whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.”

Because the city is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. It should also be noted that the project site is surrounded by development and located adjacent to transportation facilities, existing, transit and utility infrastructure. Further, the HOCSP identified the site for residential development. As such, an alternative location was ultimately rejected from further analysis in the EIR.

4.5 Environmentally Superior Alternative

Table 4-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As shown in Tables 4-1 and 4-2, the No Project/No Development Alternative would eliminate all of the potentially significant impacts identified for the project. However, the No Project/No Development Alternative would not meet any of the project objectives. Additionally, there is no certainty that the project site would remain undeveloped in perpetuity. CEQA Guidelines Section 15126.6(e)(2) states that if the No Project alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives. Among the other alternatives, not including the proposed project, the No Project/Reduced Density Alternative is the environmentally superior alternative because it would provide a reduced level of impact in some environmental analysis areas including air quality, energy, noise, public services, and utilities/service systems. Mitigation measures would still be required to mitigate impacts to biological resources, cultural resources/tribal cultural resources, and noise. However, the Reduced Density Alternative was not selected as it would result in a new significant and unmitigated impact related to transportation (VMT impact).

Table 4-1. Summary of Alternatives and Project Objectives

Objective	Proposed Project (46 units)	No Project/No Development	No Project/Existing Plan Alternative (50 units)	Reduced Density Alternative (16 units)
Provide multi-family housing opportunities close to major transit, educational facilities, shopping opportunities, employment uses, and trails to optimize alternative modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.	Meets objective	Does not meet this objective	Meets objective	Does not meet this objective
To the extent possible given site constraints, maximize the opportunity to provide housing for the City of San Marcos in the 4.1 to 8.0 dwelling unit density range which is comparable to low-density housing developments in the City of San Marcos.	Meets objective	Does not meet this objective	Meets objective	Does not meet this objective
Cluster development to lessen site impacts and minimize landform modification.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Develop high-quality attainable housing which meets the housing needs of the City of San Marcos and the region.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Create a development that promotes a high-quality-of-life by providing each dwelling unit its own private patio/yard space and by providing a common recreational open space gathering area.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complements and enhances the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan Area.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

Objective	Proposed Project (46 units)	No Project/No Development	No Project/Existing Plan Alternative (50 units)	Reduced Density Alternative (16 units)
Finance or contribute a fair share of funding to all community services and infrastructure needed to support Specific Plan development to promote economic stability.	Meets objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

Table 4-2. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative (50 Units)	Reduced Density Alternative (16 Units)
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Geology and Soils	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Hydrology and Water Quality	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)
Land Use and Planning	LTS	No Impact (Reduced)	LTS (Same)	LTS (Same)

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative (50 Units)	Reduced Density Alternative (16 Units)
Noise	LTSM	No Impact (Reduced)	LTSM (Increased)	LTSM (Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)
Transportation	LTS	No Impact (Reduced)	LTSM (Increased)	SU (Increased)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)

Notes: Impact Status: LTS = Less than significant impact; LTSM = Less than significant with mitigation; SU = Significant and Unmitigated

5.0 Environmental Effects Found not to be Significant

The City of San Marcos completed an Initial Study (IS) for the proposed project in accordance with Sections 21000-21189 of the Public Resources Code and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Preparation (NOP) was prepared by the City and mailed to applicable agencies, organizations, and neighboring property owners. The NOP is included in Appendix B.2 of this Environmental Impact Report (EIR).¹³

As required by Section 15128 of the CEQA Guidelines, the following is a discussion of the environmental effects that were considered as a part of the Initial Study but were determined to have “No Impact”, and, therefore, are not discussed in detail in this EIR.

In some instances, complete environmental issue areas were eliminated during the IS process, including agriculture/forestry resources, greenhouse gas emissions, hazards/hazardous materials, mineral resources, population and housing, recreation, and wildfire. In other instances, some of the specific CEQA thresholds were eliminated during the IS process including aesthetics (scenic vistas, scenic resources within a state scenic highway), biological resources (federally protected wetlands, wildlife movement), cultural resources (historical resources), geology and soils (septic systems), hydrology and water quality (groundwater, flood hazards/tsunami/seiche), land use and planning (physically divide and established community), and noise (project vicinity to private airports or within and airport land use plan).

5.1 Aesthetics

Threshold of Significance: Have a substantial adverse impact on a scenic vista.

The project site is located within the Richland Neighborhood in the City. The City has a Ridgeline Protection and Management Overlay Zone to protect natural viewsheds and unique natural resources, minimize physical impacts to ridgelines, and to establish innovative sensitive architectures standards. The project site is not located in the Ridgeline Protection and Management Overlay Zone. Further, the project site does not include any primary or secondary ridgelines, as identified in Figure 4-5 of the Conservation and Open Space Element of the General Plan (San Marcos 2012). Therefore, development of the project site would not have a substantial adverse effect on a scenic vista and no impact would occur.

Threshold of Significance: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.

The project site is located approximately 0.4 miles north of SR-78. A portion of SR-78 is recognized as a Scenic Highway by California Department of Transportation (Caltrans); however, that portion is not in the project vicinity. The portion identified as a Scenic Highway is approximately 50 miles east of the project site near Anza Borrego (Caltrans 2019). At a local level, SR-78 is designated by the City of San Marcos as a view corridor. The highway corridor provides views of the Merriam Mountains, Mount Whitney, and Double Peak. There are no scenic resources on the project site. The project site is undeveloped and does not support any historic buildings (ASM 2024). In summary, the project would

¹³ The Initial Study, NOP, and comment letters received on the NOP are included in Appendices B.1, B.2 and B.3 of the EIR.

not damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. No impact would occur.

A discussion of additional aesthetics significance thresholds is provided in Section 3.1, Aesthetics.

5.2 Agriculture and Forestry Resources

Threshold of Significance: 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.

The project site is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as determined by the Farmland Mapping and Monitoring Program, as shown on Figure 4-4 (Agricultural Areas) in the San Marcos General Plan (San Marcos 2012). Therefore, the project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No impact is identified for this issue area.

Threshold of Significance: Conflict with existing zoning for agricultural use, or a Williamson Act contract.

The project site has a General Plan designation of SPA (Specific Plan Area) and a zoning designation of Specific Plan Area (SPA). The project site does not support zoning for agricultural use. The Williamson Act, also known as the California Land Conservation Act of 1965, 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. The project site is not located within a Williamson Act contract area. Therefore, the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and no impact is identified for this topic.

Threshold of Significance: 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)).

Forest land is defined as “land that can support ten percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits” (California Public Resources Code Section 1220(g)). Timberland is defined as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees” (California Public Resources Code Section 4526). A Timberland Production Zone is defined as “an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses” (California Public Resources Code Section 51104(g)).

The project site has a General Plan designation of SPA (Specific Plan Area) and a zoning designation of Specific Plan Area (SPA). The proposed project is not located in an area that is zoned for forest land, timber land or for timber production nor is it adjacent to lands that are zoned forest land, timber land

or for timber production. Implementation of the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned timberland production. No impact is identified for this topic.

Threshold of Significance: Result in the loss of forest land or conversion of forest land to non-forest use.

The project site is undeveloped. As described above, the project site does not support forest lands, nor is there any forest land adjacent to the project site. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact is identified for this topic.

Threshold of Significance: Involve other changes in the existing environment that, 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.

The project would not result in any other changes to the existing environment that would, due to their location or nature, result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. There is no agricultural activity on the project site or in the project vicinity. No impact is identified for this topic.

5.3 Biological Resources

Threshold of Significance: 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?

Based upon the Biological Resources Report prepared by Rincon (2025), no natural drainages or wetlands were observed during the surveys or background research. Concrete v-ditches (brow ditches) were identified in the northeast portion of the study area along a chain link fence that runs along the slope and down towards the junction of Woodward Street and Vineyard Street. Vegetation has overgrown much of the areas along the man-made ditch. The concrete drainage ditches were constructed and installed by Ryland Homes as part of the Woodward Improvement Plan approved and permitted by the City of San Marcos on January 27, 2000. The construction of the "Type B" brow ditch along the northwestern boundary of the project site (including portions of the project impact area) was constructed on existing mitigated easements by Ryland Homes. An additional concrete v-ditch, constructed and installed by KB homes, is located along the southwest corner at the top of a retaining wall as part of the residential development to the south. The function of the concrete ditches is to safely direct stormwater flow off the roadways and slope as shown in site plans for the Woodward Improvement Plan. These manmade, non-natural, stormwater conveyance ditches originate in upland areas and not in any natural drainages.

The concrete ditches do not provide habitat functions for fish and wildlife. The ditches are intended to capture stormwater runoff and sheet flow from upslope areas and safely convey them for erosion control. Riparian habitat located to the west of Woodward Street adjacent and associated with San Marcos Creek is within the study area but outside of the project's boundaries. A formal jurisdictional delineation was not conducted; however, these human-constructed concrete v-ditches were determined to not be jurisdictional, with no evidence of presence of Waters of the US (WoUS) or Waters of the State (WoS) occurring within the project site or project impact area. Human-constructed concrete v-ditches on slopes are typically not considered to comprise WoUS or WoS. No connection

was identified from these ditches to San Marcos Creek or Twin Oaks Creek. Therefore, no direct or indirect impacts to state or federally protected wetlands have been identified for the implementation of the proposed project. No impact would occur.

Threshold of Significance: 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?

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, and areas with vegetation cover provide corridors for wildlife travel. The project site is a habitat island, with Woodward Street along the western boundary of the project site which separates it from Twin Oaks Valley Creek to the west, Mission Road south of the project site, and residential development north, south, and east of the project site blocking any significant wildlife movement. There is an Open Space lot directly north of the project site, however the project area and vicinity are not identified as being within or adjacent to a wildlife corridor per Figure 4-2 of the City of San Marcos General Plan (San Marcos 2012). The project area is also not within or adjacent to a Biological Core and Linkage Area (BCLA) as illustrated in Figure 2-3 of the Final Multiple Habitat Conservation Program (MHCP) Plan (SANDAG 2003). Areas identified as Focused Planning Areas (FPAs) within the Multiple Habitat Conservation Plan occur to the north, northeast, east, and west of the project site. These designated preserved native habitats provide local movement (i.e., “stepping stone”) rather than regional linkage, for local and migratory species such as birds, including federal, state, and MHCP covered species. No impact is identified for this topic.

A discussion of additional biological resources significance thresholds is provided in Section 3.3, Biological Resources.

5.4 Cultural Resources

Threshold of Significance: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Based upon the cultural resources report prepared for the project (ASM 2024) there are no historical resources on the project site. Therefore, the project would not have the potential to cause a substantial adverse change in historic resources, as defined in Section 15064.5 of the CEQA Guidelines. No impact is identified for this topic.

A discussion of additional cultural resources significance thresholds is provided in Section 3.4, Cultural Resources.

5.5 Geology and Soils

Threshold of Significance: 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 wastewater.

Septic tanks and alternative wastewater disposal systems are not proposed as part of the project. The project would receive wastewater service from Vallecitos Water District (VWD) and would connect to existing sewer infrastructure in Woodward Street (VWD 2023). Therefore, no impact is identified for this issue area.

A discussion of additional geology and soils significance thresholds is provided in Section 3.6, Geology and Soils.

5.6 Greenhouse Gas Emissions

Threshold of Significance: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The City adopted a Climate Action Plan (CAP) which was developed to help reduce the City's greenhouse gas (GHG) emissions (San Marcos 2020). As part of the CAP, the City developed a CAP Consistency Review Checklist (Checklist). The purpose of the Checklist is to implement the GHG reduction measures from the CAP that apply to new discretionary development. New development that demonstrates consistency with relevant CAP strategies would not conflict with the City's ability to achieve the identified GHG reduction targets through implementation of applicable measures. Projects that are consistent with the CAP, as determined through the use of the CAP Checklist, may rely on the CAP for the cumulative impact analysis of GHG emissions. The CAP Checklist identifies certain sizes and types of projects that would emit fewer than 500 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year. Projects that emit fewer than 500 MT CO₂e per year would be determined to have a less than significant GHG impact and would not be subject to the measures of the CAP. Multifamily residential projects of 55 dwelling units or less are considered to emit fewer than 500 MT CO₂e per year. The project proposes 46 multifamily units. Therefore, it would fall under the 55 multifamily unit criteria and GHG impacts would be less than significant. The project's CAP Checklist is included as Appendix F of the EIR.

Threshold of Significance: Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Under the City's CEQA thresholds, the method for determining significance for project-level environmental documents is through the CAP Checklist. The city's CAP is also consistent with state/regional goals. As discussed above, the project would be consistent with the City's CAP, no conflict is identified and GHG impacts would be less than significant.

5.5 Hazards and Hazardous Materials

Threshold of Significance: Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Hazardous materials include solids, liquids, or gaseous materials that, because of their quantity, concentration, or physical, chemical, or infectious characteristics could pose a threat to human health or the environment. Hazards include the risks associated with potential explosions, fires, or release of hazardous substances in the event of an accident or natural disaster, which may cause or contribute to an increase in mortality or serious illness or pose substantial harm to human health or the environment. The proposed project would involve the transport of fuels, lubricants, and various other liquids needed for operation of construction equipment at the site on an as-needed basis by equipment service trucks. Materials hazardous to humans, wildlife, and sensitive environments, including diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets, would be present during project construction. The potential exists for direct impacts to human health from accidental spills of small amounts of hazardous materials from construction equipment; however, the proposed project would be required to comply with Federal, State, and City Municipal Code restrictions which regulate and control those materials handled onsite.

5.0 Environmental Effects Found not to be Significant

Compliance with these restrictions and laws would ensure that potentially significant impacts would not occur during project construction.

In addition, as a residential project, the only hazardous materials anticipated for transport or disposal associated with the proposed project during operation are routinely used household products such as cleaners, paint, solvents, motor oil/ automotive products, batteries, and garden maintenance products. It is anticipated that the use, handling, and disposal of these products would be addressed by household hazardous waste programs that are part of the Integrated Waste Management Plan of the County of San Diego and other Federal, State, and City Municipal Code regulations.

In summary, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Threshold of Significance: 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?

The project site is vacant and undeveloped. There are no existing site conditions which would result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions that could involve the release of hazardous materials into the environment. No impact is identified for this issue area.

Threshold of Significance: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is not located within 0.25 miles of an existing or proposed school. The closest school is San Marcos Elementary school, which is located approximately 0.5 miles to the southwest. No impact is identified.

Threshold of Significance: 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 provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires California Environmental Protection Agency (CalEPA) to develop an updated Cortese List annually, at minimum. California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other California state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

A search of the DTSC EnviroStor site was conducted on May 16, 2023, to see if there are any current or historical environmental cleanups or permitted facilities on or adjacent to the project site. There are no current or past permitted facilities or cleanup activities on the project site (DTSC 2023). The closest listed sites per EnviroStor are:

- TRI-M-CO, 528 E. Mission Road - A leaking underground storage tank (LUST) cleanup site located approximately 0.4 miles east of the project site. The cleanup was completed in 1993 and the case is closed.

5.0 Environmental Effects Found not to be Significant

- United States Post Office, 420 N. Twin Oaks Valley Road - A LUST cleanup site located approximately 0.2 miles west of the project site. The cleanup was completed in 2006 and the case is closed.

Due to the distance of these listings from the project site as well as the fact that they have been cleaned up, there would be no impact associated with the project.

Threshold of Significance: 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?

The nearest airport is the McClellan-Palomar Airport in Carlsbad, which is located approximately 6.5 miles to the southwest of the project site. According to Figure 6-5 of the Safety Element of the City's General Plan, the project site is located within Review Area 2 of the airport influence area. Review Area 2 limits the heights of structures in areas of high terrain. While the project is on an elevated hillside, the site is situated, overall, in the lower elevation portion of the City. According to the Airport Land Use Compatibility Plan (ALUCP) for the McClellan-Palomar Airport, the project site is not located within the existing or future 60 dB CNEL noise contour of the airport (San Diego County Regional Airport Authority 2011). Therefore, the project would not result in a safety hazard of excessive noise for people residing or working in the project area. No impact is identified.

Threshold of Significance: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

According to the General Plan Safety Element, the San Marcos Emergency Operations Plan (EOP) governs the operations of the City during a disaster. This plan addresses response to moderate evacuation scenarios, including the identification of evacuation points and general routes (San Marcos 2012). The project would not result in any changes to the transportation network which could impair implementation of or physically interfere with an adopted emergency response plan. No impact would occur.

Threshold of Significance: 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?

The project site is located in a developed part of the City and is not located where wildlands are adjacent to urbanized areas, nor does the project propose residences mixed in with wildlands. There are two easements on the site associated with vegetation management for fire fuel reduction. One is located along a portion of the site's eastern boundary and the other is located along a portion of the site's southern boundary. The project site is located in a Local Responsibility Area, not a State Responsibility area (CAL FIRE 2022). The project site is in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per the California Department of Forestry and Fire Protection (CAL FIRE) San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding area are not identified as a San Marcos Fire Protection District (SMFPD) Community Hazard Zone. Impacts would be less than significant.

5.7 Hydrology and Water Quality

Threshold of Significance: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

The project would be served by VWD for water service. VWD water supplies come from the Metropolitan Water District and the San Diego County Water Authority. Both of these agencies use some groundwater for their supplies. The proposed project will be supplied from existing VWD supplies, which would have assumed the use of groundwater. VWD assumed development of the project site in the 2018 Master Plan and VWD has indicated their availability to serve the project (VWD 2023). The project would not develop any new groundwater wells to serve the project. The project site is not located within a sustainable groundwater management area and is not part of a significant groundwater recharge area. Therefore, the project would not substantially deplete groundwater supplies. The project would increase the amount of impervious surfaces on the project site; however, 37% of the proposed development area will revegetated/landscaped. Additional areas on the project site will remain as open space, which will allow for infiltration. The project would not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. No impact is identified for this issue area.

Threshold of Significance: In flood hazards, tsunami or seiche zones, risk release of pollutants due to project inundation.

Per the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map Number 06073C0793G the project site is not located within a 100-year flood hazard area (FEMA 2012). The project site is approximately 10 miles inland from the Pacific Ocean and would not be subject to inundation by tsunami. Given that the project site is not located near a large standing body of water, inundation by seiche (or standing wave) is considered negligible. No impact would occur.

A discussion of additional hydrology and water quality significance thresholds is provided in Section 3.7, Hydrology and Water Quality.

5.8 Land Use and Planning

Threshold of Significance: Physically divide an established community.

The project site is currently undeveloped. The project proposes residential uses in an area that is already developed with similar uses. The project would not physically divide an established community. No impact is identified for this issue area.

A discussion of additional land use and planning significance thresholds is provided in Section 3.8, Land Use and Planning.

5.9 Mineral Resources

Threshold of Significance: 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.

According to the City of San Marcos General Plan Conservation & Open Space Element, the City contains land classified in all four Mineral Resource Zones (MRZ) (San Marcos 2012). California does

5.0 Environmental Effects Found not to be Significant

not require that local governments protect land designated as MRZ-1, MRZ-3, or MRZ-4. However, the City is responsible for recognizing lands designated as MRZ-2 and protecting these areas from premature development incompatible with mining. The lands designated as MRZ-2 include small portions between Double Peak, Mount Whitney, and Franks Peak; and small portions in the northern Sphere of Influence within Twin Oaks Valley Neighborhood. These locations do not overlap with the project site; therefore, no loss of known mineral resources would occur. No impact is identified.

Threshold of Significance: 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 locally important mineral resource recovery site on any local general plan, specific plan, or other land use plan (City of San Marcos 2012). Due to the location and the nature of the proposed project, there would be no impact on mineral resources.

5.10 Noise

Threshold of Significance: 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?

The proposed project is not located within the vicinity of a private airstrip. The public airport closest to the project site is the McClellan-Palomar Airport, located approximately 6.5 miles to the southwest. According to the ALUCP for the McClellan-Palomar Airport, the project site is not located within the existing or future 60 dB CNEL noise contour of the airport (San Diego County Regional Airport Authority 2011). Therefore, people residing or working in the project area would not be exposed to substantial airport noise.

A discussion of additional noise significance thresholds is provided in Section 3.9, Noise.

5.11 Population and Housing

Threshold of Significance: 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 project site has a General Plan Designation of SPA and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, including the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. City policy requires that a secondary access be provided if more than 50 units are proposed. Given the

topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses. The Specific Plan allows for a density of 5.7 du/acre and the project is proposing 5.4 du/acre. Therefore, the project's development intensity and density would be slightly less than what is identified in the current General Plan and the project would not result in substantial unplanned population growth in an area, directly or indirectly and no impact is identified.

Threshold of Significance: Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.

There is no existing housing on the project site. Therefore, the project would not remove existing housing. The project proposes 46 multifamily units which would add to the housing stock in the City. No impact is identified for this issue area.

5.12 Recreation

Threshold of Significance: 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?

Threshold of Significance: Does the project include any recreational facilities or require the construction or expansion of recreation facilities which might have an adverse physical effect on the environment?

The project proposes residential uses which can result in an increase in demand for neighborhood and regional parks. The project proposes common open space areas, including a tot lot, turf play areas and a sensory garden. These features would be included within the development footprint of the project. This provides an opportunity for residents to recreate on site. Additionally, the project will pay Public Facility Fees (PFF), a portion of which goes toward funding a city-wide park and recreation facilities and would offset the future residents demand for such facilities. Since the project provides on-site recreational amenities and will pay PFF, impacts would be less than significant.

5.13 Wildfire

Threshold of Significance: A significant wildfire would be identified if the project was located in or near a state responsibility area or lands classified as very high fire hazard severity zone and would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing wind, and other factors exacerbate wildfire risk, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes.

5.0 Environmental Effects Found not to be Significant

The project site is located in a Local Responsibility Area, not a State Responsibility area (CAL FIRE 2022). The project site is in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per California Department of Forestry and Fire Protection (CAL FIRE) San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding area are not identified as a SMFPD Community Hazard Zone. It should be noted there are two easements on the site associated with vegetation management for fire fuel reduction. One is located along a portion of the site's eastern boundary and the other is located along a portion of the site's southern boundary. These are associated with fire buffer maintenance requirements of adjacent development. The project will also implement a zoned brush management plan which will provide a minimum of 150 feet of clearance. The brush management plan will follow CAL FIRE's guidance for defensible space (CAL FIRE 2023) which includes three zones of defensible space. No impact is identified for this issue area.

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6.0 Other CEQA Considerations

6.1 Significant and Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines, Section 15126.2(b), requires that an Environmental Impact Report (EIR) describe any significant impacts that cannot be avoided, including those impacts that can be mitigated but not reduced to a less-than-significant level. Chapter 3, Environmental Analysis, of this EIR describes the potential environmental impacts of the proposed project and recommends mitigation measures to reduce impacts, where feasible. Based upon the analysis in Sections 3.1 through 3.13 of this EIR, the proposed project would not have any significant and unavoidable impacts. All impacts would be mitigated to below a level of significance through the incorporation of mitigation measures. These mitigation measures would be identified in a Mitigation Monitoring and Reporting Program that will be adopted as part of the project and also be made a condition of approval of the project.

6.2 Growth Inducement

Section 15126.2(e) of the CEQA Guidelines mandates that the growth inducing nature of a proposed project be discussed. This CEQA Guideline states the growth-inducing analysis is intended to address the potential for the proposed project to “foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” Further, the CEQA Appendix G Checklist (Population and Housing) also mandates that a CEQA document speak to the proposed project’s likelihood to induce substantial population growth in an area, either directly (e.g., by proposing new homes or businesses) or indirectly (e.g., through extension of roads or other infrastructure).

A project may be distinguished as either facilitating planned growth or inducing unplanned growth. Facilitating growth is related to the establishment of direct employment, population, or housing growth that would occur within a project site. Inducing growth is related to lowering or removing barriers to growth or by creating an amenity or facility that attracts new population/economic activity.

For purposes of this EIR analysis, a significant growth inducement impact would occur if the proposed project, and associated infrastructure improvements, directly or indirectly removes obstacles to growth such that the induced growth would significantly burden existing community services, the environment or cause a demand for General Plan Amendments. This section contains a discussion of the growth inducing factors related to the proposed project and as defined under CEQA Guidelines, Section 15126.2(e). A project is defined as growth inducing when it directly or indirectly:

- Fosters population growth;
- Includes the construction of additional housing in the surrounding environment;
- Removes obstacles to population growth;
- Taxes existing community service facilities, requiring construction of new facilities that could cause significant environmental effects; and/or
- Encourages or facilitates other activities that could significantly affect the environments, either individually or cumulatively.

It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

As discussed in Section 5.12, Population and Housing, the project site has a General Plan Designation of SPA and is associated with the Heart of the City Specific Plan (HOCSP). The HOCSP comprises approximately 1,528 acres in the geographic center of the City. In the HOCSP, certain properties along the Mission Road corridor, including the project site, have a sub-plan designation of Richmar Specific Plan. Prior to the site's inclusion under the Richmar sub-plan, the underlying designation for the property was Single-Family Detached 2 to 4 du/ac per the HOCSP.

Development criteria for the Richmar Specific Plan has not been adopted by the City; therefore, properties requesting development within this sub-plan area are required to establish individual specific plans. As such, there is no fixed land use or density currently assigned to the project site. The General Plan identifies commercial, office and multifamily residential as land use options within the Richmar Specific Plan Area. Due to its location and the adjacent residential land uses, a multifamily residential development, under a Specific Plan, is the most suitable land use for the subject property. City policy requires that a secondary access be provided if more than 50 units are proposed. Given the topographical constraints and the lack of availability of a secondary/emergency vehicle access point, a maximum of 50 multifamily residential units could be built on the site. This would result in a density of 5.9 du/acre. The project site would not be suitable for commercial or office development given the site topography and adjacent uses. The proposed project has a proposed density of 5.7 du/acre. Therefore, the project's development intensity and density would be slightly less than what is identified in the current General Plan, and the project would not result in substantial unplanned population growth in an area, directly or indirectly and no impact is identified.

As detailed in Section 3.13, Utilities and Service Systems, the proposed project would extend the existing 8-inch gravity sewer main located north of the project site in Woodward Street for approximately 490 feet. This extension is only intended to serve the proposed project.

Additionally, the majority of the surrounding area is developed. The SANDAG population growth forecasts rely, in part, on individual jurisdiction's planning documents, such as the City's General Plan. The City has a population rate of 3.1 persons per dwelling unit. Therefore the project would result in the addition of approximately 143 people. Because the project proposes a General Plan Amendment the estimated population of 143 people would not have been accounted for in SANDAG's projections. Therefore, the project's induced population would exceed these projections. However, determination of impacts related to population growth are based upon whether the induced growth would be considered substantial.

The City's population is projected to grow from 94,258 people in 2016 to 104,365 people by 2035 (an increase of 10,107 people) (SANDAG 2022). The population increase of 143 people would account for 1.4% of SANDAG's projected population growth.

There is no hardline number or percentage available to determine whether or not this estimated introduction of 143 people (1.4 % of projected growth) could be considered a substantial increase in population. However, SANDAG's 2050 Regional Growth Forecast is intended to be used as a starting point for regional planning as opposed to a prescribed growth pattern. Although the City determined that there are adequate sites available with appropriate designations/zoning to accommodate the remaining Regional Housing Needs Allocation (RHNA) for the current Housing Element planning period, the City has the discretion to adjust allocated housing units/sites as necessary to balance proposed plans for residential development with approved/constructed residential development (City of San

Marcos 2021). Therefore, while the proposed project would directly induce growth beyond current estimates and forecasts, it would not be considered substantially growth inducing. Impacts would be less than significant.

6.3 Significant Irreversible Environmental Changes

CEQA Guidelines, Section 15126.2(d), requires that an EIR discuss any significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Per this guideline “Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Approval of the project would involve the development of 46 duplex residential units and associated infrastructure improvements.. Construction and/or operation of the proposed project would require the use of resources that include, but are not limited to, soils, gravel, concrete, and asphalt, lumber and other related forest products, petrochemical construction materials, steel, copper, and other metals, water, fuels, and energy. As such, the proposed project would result in the short-term and long-term use of fossil fuels and other nonrenewable resources. The grading proposed by the project would modify the undeveloped slopes permanently. These are irreversible environmental changes that would be realized with implementation of the proposed project.

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