



Administrative Draft IS/MND for the

Kiddie Academy Educational Child Care Project Conditional Use Permit 20-0008 ND 21-004

Prepared for:

City of San Marcos 1 Civic Center Drive San Marcos, CA 92069

March 2022

ADMINISTRATIVE DRAFT IS/MND FOR THE

Kiddie Academy Educational Child Care Project Conditional Use Permit 20-0008 ND 21-004

Prepared for:

City of San Marcos 1 Civic Center Drive San Marcos, CA 92069

Prepared by:



Ascent Environmental 1230 Columbia Street, Suite 440 San Diego, CA 92101

March 2022

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LIST OF ABBREVIATIONS

2017 Scoping Plan 2017 Climate Change Scoping Plan

AB Assembly Bill

asl above sea level

BCLA Biological Core and Linkage Areas

BMP best management practice

CAAQS California ambient air quality standards
CalEEMod California Emissions Estimator Model

CAL FIRE California Department of Forestry and Fire Protection

Caltrans California Department of Transportation

CAP Climate Action Plan

CARB California Air Resources Board

CDFW California Department of Fish and Wildlife

CEQA California Environmental Quality Act

CFD Community Facilities District

City of San Marcos

CNEL community noise equivalent level

 ${\sf CO}$ carbon monoxide ${\sf CO}_2$ carbon dioxide

CO₂e carbon dioxide equivalent

CRHR California Register of Historical Resources

CWPP Community Wildfire Protection Plan

dB decibel

dBA A-weighted decibel

diesel PM diesel particulate matter

draft IS/MND draft Initial Study/Mitigated Negative Declaration

EIR environmental impact report

EO Executive Order

EPA U.S. Environmental Protection Agency
FEMA Federal Emergency Management Agency

FHSZ Fire Hazard Severity Zone

FTA Federal Transit Administration

GHG greenhouse gas

I-5 Interstate 5
I-15 Interstate 15

in/sec inches per second
lbs/day pounds per day
LBV least Bell's vireo

 $\begin{array}{cc} L_{eq} & & \text{Equivalent Noise Level} \\ L_{max} & & \text{Maximum Noise Level} \end{array}$

LOS level of service

MHCP Multiple Habitat Conservation Program

MND mitigated negative declaration

MTCO2e metric ton of carbon dioxide equivalent
NAAQS national ambient air quality standards
NAHC Native American Heritage Commission
NCCP Natural Community Conservation Plan

ND negative declaration

OPR Governor's Office of Planning and Research
Pechanga Temecula Band of Luiseño Mission Indians

PM₁₀ respirable particulate matter

PM_{2.5} fine particulate matter
PPV peak particle velocity
PRC Public Resources Code

Rincon Band of Luiseño Indians

RMS root-mean-square

ROG reactive organic gas

RPS Renewables Portfolio Standard

SANDAG San Diego Association of Governments

SB Senate Bill

SDAB San Diego Air Basin

SDAPCD San Diego Air Pollution Control District

SDG&E San Diego Gas & Electric Company

SDP Site Development Permit
SIP State Implementation Plan
SLT screening level threshold

SMFD San Marcos Fire Department

Kiddie Academy Educational Child Care Project

SMMC San Marcos Municipal Code

 SO_X oxides of sulfur SR State Route

SWPPP stormwater pollution prevention plan

TAC toxic air contaminant

TCA Tribe Traditionally and Culturally Affiliated Native American Tribe

U.S. Fish and Wildlife Service

V/C volume-to-capacity

VdB vibration decibels

VMT vehicle miles traveled

WQMP Water Quality Management Plan

WUI wildland-urban interface

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1 INTRODUCTION

1.1 INTRODUCTION/OVERVIEW

This draft Initial Study/Mitigated Negative Declaration (draft IS/MND) has been prepared for the City of San Marcos (City) by Ascent Environmental to evaluate potential environmental effects resulting from implementation of the Kiddie Academy Educational Child Care project (proposed project). Chapter 2, "Project Description," presents a detailed description of the proposed project.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]) and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare...a proposed negative declaration (ND) or mitigated negative declaration (MND)...when: (a) The initial study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are made by or agreed to by the applicant before a proposed mitigated negative declaration and Initial Study are released for public review would avoid the effects or mitigate to a point where clearly no significant effects would occur. When preparing an ND or MND, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report (EIR). By contrast, an EIR is required when the project may have one or more significant environmental impacts that cannot clearly be reduced to a less-than-significant level by adoption of mitigation or by revisions to the project.

1.2 PURPOSE OF THIS CEQA DOCUMENT

As described in Chapter 3, "Environmental Checklist," the proposed project would not result in any unmitigated significant environmental impacts. Therefore, an IS/MND is the appropriate document for compliance with the requirements of CEQA. This draft ISM/MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. The City of San Marcos is the CEQA lead agency because it is responsible for adopting and implementing the proposed Kiddie Academy Educational Child Care project. This draft IS/MND will be circulated for a 30-day public review period, from March 28, 2022 to April 27, 2022. Comments on this draft IS/MND must be received by 5:00 p.m. on April 27, 2022. Comments must be clearly labeled "IS/MND COMMENTS FOR KIDDIE ACADEMY PROJECT (CUP20-0008)" and can be emailed to Sdelsolar@san-marcos.net or sent to the following address:

Sean del Solar, Senior Planner City of San Marcos Planning Division 1 Civic Center Drive San Marcos, CA 92069

Comments received on the draft IS/MND will be considered and responded to before consideration of adoption of the draft IS/MND. The draft IS/MND, along with comments received by the date indicated above, will be considered by the City in conjunction with consideration of approval of the proposed project.

1.3 PROJECT SITE CEQA DOCUMENTATION HISTORY

A Mitigated Negative Declaration (ND 07-758 / SCH 2007091069) was adopted on September 7, 2007, for a previously approved office project on the project site. Final conditions of approval were issued on April 21, 2008. ND 07-758 is incorporated by reference into this IS/MND. The previously approved project included Tentative Parcel Map 656 and Site Development Permit (SDP) 06-323. SDP 06-323 expired on April 21, 2010. Following approval of the project, Parcel Map 20935 was prepared and recorded, creating 1.4-acre Parcel A, which is the current project site evaluated in this Initial Study. Parcel Map 20935 includes a 25-foot biological buffer and open space easement on Parcel A to buffer the existing riparian habitat associated with Twin Oaks Valley Creek from future Parcel A development proposals. The 25-foor buffer/easement was developed based upon substantial input from the U.S. Fish and Wildlife Service (USFWS), documented in a 2007 mitigated negative declaration comment letter dated October 11, 2007, and is included in Appendix B.

The western edge of the recorded 25-foot biological buffer and open space easement serves as the basis for the limits of the current project design footprint/impact area. The proposed project does not encroach into the recorded biological buffer and open space easement. This IS/MND assumes that the previously established 25-foot biological buffer and open space easement remains adequate.

1.4 SUMMARY OF INITIAL STUDY FINDINGS

Chapter 3, "Environmental Checklist," contains the analysis and discussion of potential environmental impacts of the proposed project. The Environmental Checklist for this draft IS/MND includes the checklist questions from Appendix G of the State CEQA Guidelines. The analysis in Chapter 3 demonstrates that the proposed project would have either no impact, a less-than-significant impact, or a less-than-significant impact with mitigation incorporated for the following environmental topics:

- Aesthetics
- Agriculture and Forestry Resources
- ▶ Air Quality
- ► Biological Resources
- Cultural Resources
- ▶ Energy
- Geology and Soils
- ▶ Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality

- ▶ Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- ▶ Public Services
- ▶ Recreation
- Transportation
- ► Tribal Cultural Resources
- ▶ Utilities and Service Systems
- ▶ Wildfire

1.5 DOCUMENT ORGANIZATION

This draft IS/MND is organized as follows:

Chapter 1: Introduction. This chapter introduces the environmental review process. It describes the purpose and organization of the draft IS/MND and presents a summary of findings.

Chapter 2: Project Description. This chapter describes the purpose of and need for the proposed project, identifies objectives, and provides a detailed description of the proposed project.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the Environmental Checklist and determines if implementation of the proposed project would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any potentially significant impacts could not be reduced to less than significant, an EIR would be required. The analysis of Chapter 3 demonstrates that the proposed project would have either no impact, a less-than-significant impact on the environment, or a less-than-significant impact with mitigation incorporated.

Chapter 4: References. This chapter lists the references used in preparation of this draft IS/MND.

Chapter 5: List of Preparers. This chapter identifies report preparers.

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2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

This chapter presents a detailed description of the proposed Kiddie Academy Educational Child Care project (proposed project). The City of San Marcos is the lead agency for the proposed project under CEQA. The proposed project includes construction and operation of a two-story childcare facility and associated parking on the project site.

2.2 PROJECT LOCATION

As shown in Figure 2-1, the City is in northwestern San Diego County (North County), approximately 40 miles north of downtown San Diego. The City is bounded by unincorporated San Diego County to the north and south, Vista and Carlsbad to the west, and Escondido to the east. Regional access to the City is via State Route 78 (SR 78), Interstate 5 (I-5), and Interstate 15 (I-15).

The 1.61-acre project site (Assessor's Parcel Number 218-120-30-00) is located in the Richmar neighborhood, east of and adjacent to North Twin Oaks Valley Road, north of Windy Way, west of Woodward Street, and south of Montessa Way, as shown in Figure 2-2. A 25-foot-wide open space easement is located along the eastern boundary of the project site, and is not part of this proposed project. The net site area is 1.41 acres. Twin Oaks Valley Creek runs along the project site's eastern boundary. Surrounding land uses include Twin Oaks Valley Creek and residential to the east and north, residential to the west, and commercial/light industrial to the south. An existing decomposed granite riding/hiking trail, with split rail fencing, landscaping, and signage, is located along the North Twin Oaks Valley Road frontage. The vicinity map is shown in Figure 2-2. The project site location is show in Figure 2-6.

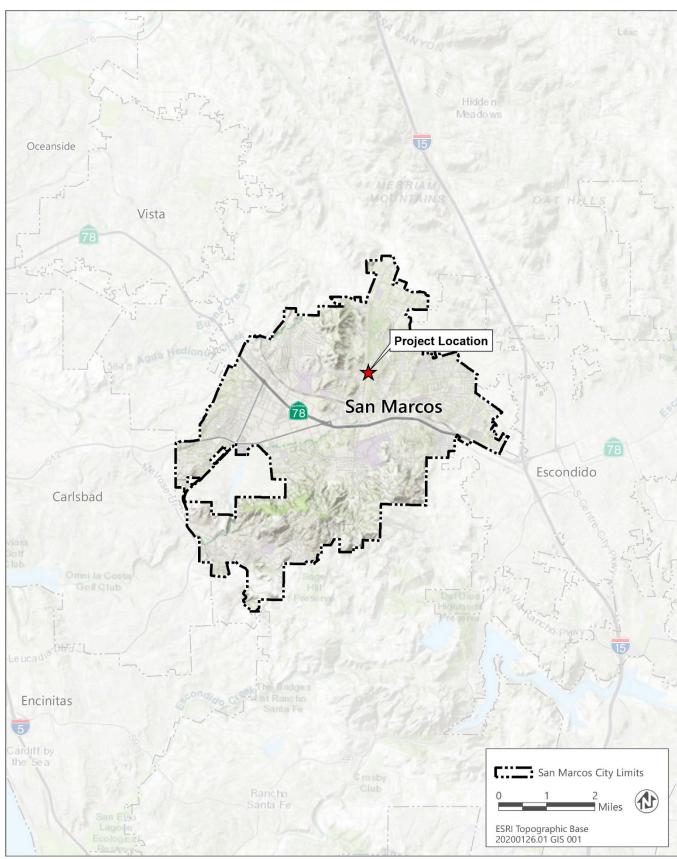
2.3 PROJECT BACKGROUND

Kiddie Academy Educational Child Care is a national operation providing educational childcare for infants and prekindergarten-age children. In addition, Kiddie Academy offers summertime daycare and camps/activities for older children. Kiddie Academy was founded in 1981 and is registered with the National Association for the Education of Young Children and the National Early Childhood Educational Program Accreditation. All Kiddie Academy facilities operate in compliance with local and state guidelines and adhere to established caregiver/teacher-to-child ratios.



Source: Data downloaded from San Diego Association of Governments in 2019

Figure 2-1 Regional Location



Source: Data downloaded from San Diego Association of Governments in 2019

Figure 2-2 City of San Marcos Boundary Project Objectives

The fundamental purpose of the proposed project is to construct an educational childcare facility and provide on-site childcare and educational services.

The following objectives have been developed for the proposed project:

- ▶ Develop an educational childcare facility in response to local demand and in compliance with the City of San Marcos General Plan, Zoning Ordinance, and state and county requirements;
- ▶ Ensure that the proposed childcare facility is elevated above the Twin Oaks Valley Creek floodplain;
- ▶ Design the project to avoid encroachment into the existing recorded biological buffer and open space easement;
- Provide adequate on-site indoor and outdoor spaces to accommodate the anticipated age group based occupancy;
- Provide for adequate access, parking, and circulation;
- ▶ Provide an architecturally compatible building design, compatible with current and future surrounding land uses;
- Ensure that an adequate buffer is provided between the proposed facility and Twin Oaks Valley Creek to minimize impacts to habitat and wildlife; and
- ▶ Implement local street and trails improvements.

2.4 PROJECT DESCRIPTION

The proposed project will be implemented in one phase and contain the following components:

- ► Two-story building with 11,430 square feet of indoor space for classrooms, kitchen facilities, restrooms, storage, and janitorial and mechanical space;
- ▶ 12,578 square feet of outdoor play area space;
- Two access driveways (one shared) and 44 parking spaces;
- Perimeter security fencing and lighting;
- Landscaping and signage;
- ► Fuel modification/brush management zone; (parking lot)
- Stormwater quality treatment facilities;
- ► Connection to existing water and sewer lines located in North Twin Oaks Valley Road;
- ▶ 25-foot biological resource buffer and open space easement; and
- ▶ Temporary construction blanket sound wall to buffer Twin Oaks Valley Creek habitat.

The project site plan is shown in Figure 2-3, site photographs are shown in Figure 2-4, and project elevations are shown in Figures 2-5a and 2-5b. The project is expected to take approximately 12 months to construct. Project construction will utilize typical construction equipment including scrapers, front loaders, rollers, lifts, and haul trucks. Project grading will require the import of 3,458 cubic yards of soil to raise the pad elevation out of the existing Twin Oaks Valley Creek floodplain. Operational hours will be 5 days a week from 7 a.m. to 6 p.m., with occasional on-site activities on select weekends.

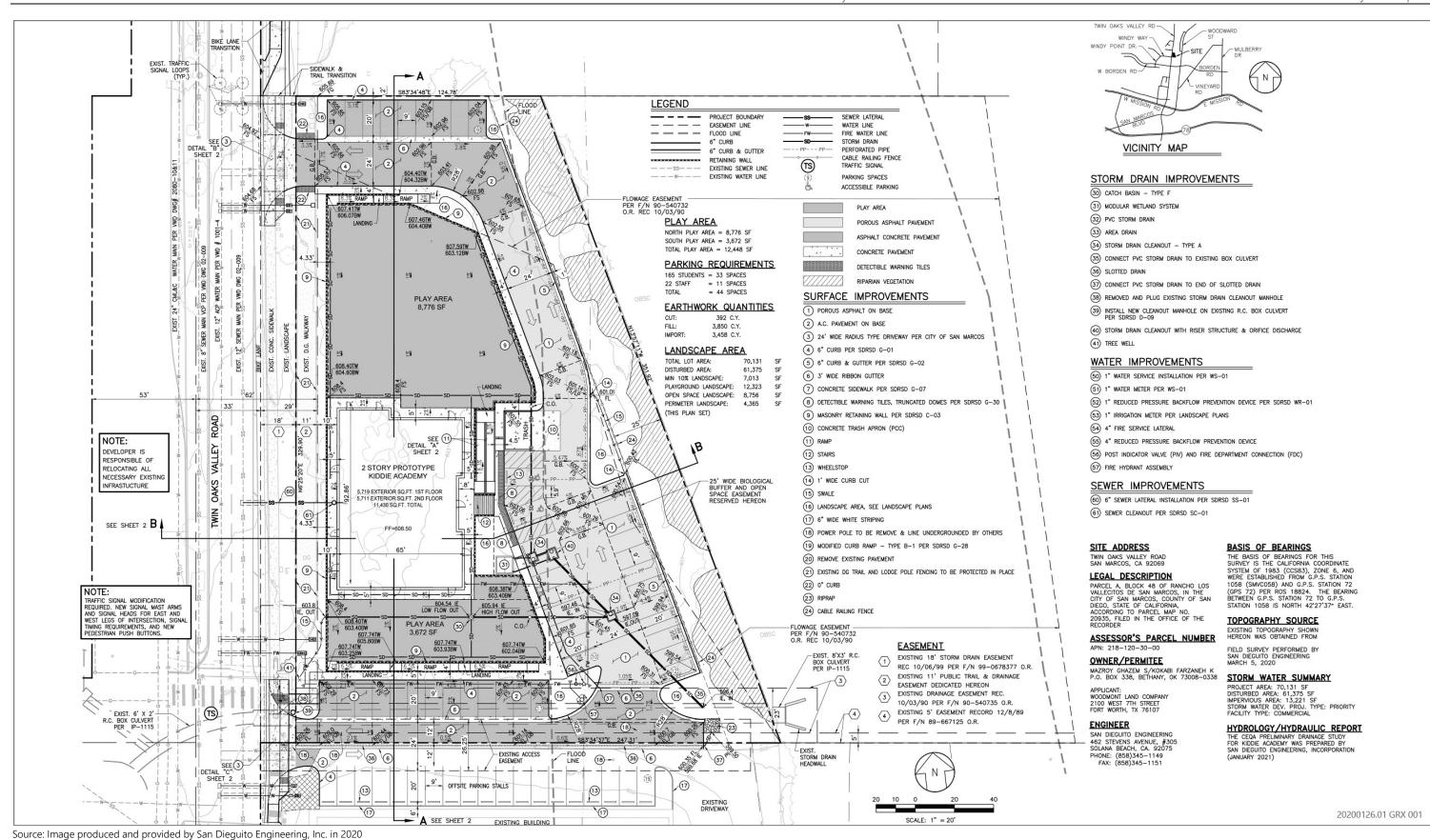


Figure 2-3 Site Plan



Source: Ascent 2021

Photo 1 Project site looking south



Source: Ascent 2021

Photo 2 Project site looking north



Source: Ascent 2021

Photo 3 Project site looking northwest

Figure 2-4 Project Site Photos



Source: The Woodmont Company and Oculus Inc. in 2020

Figure 2-5a Project Elevations



Source: The Woodmont Company and Oculus Inc. in 2020

Figure 2-5b Project Perspective

Proposed project occupancy is summarized in Table 2-1.

Table 2-1 Kiddie Academy Proposed Maximum Occupancy Summary

Floor	Area/Room	Maximum(?) Occupancy
1	1	12 Infants
1	2	12 Toddlers
1	3	12 Toddlers
1	4	24 2½-Year-Olds
1	5	12 Infants
1	Staff	10 Staff
Subtotal		82
2	6	24 2½-Year-Olds
2	7	24 4-Year-Olds
2	8	24 3-Year-Olds
2	9	24 3-Year-Olds
2	Staff	8 Staff
Subtotal		104
Total		186

Existing General Plan land use designations are shown in Figure 2-6.

2.5 POTENTIAL PERMITS AND APPROVALS REQUIRED

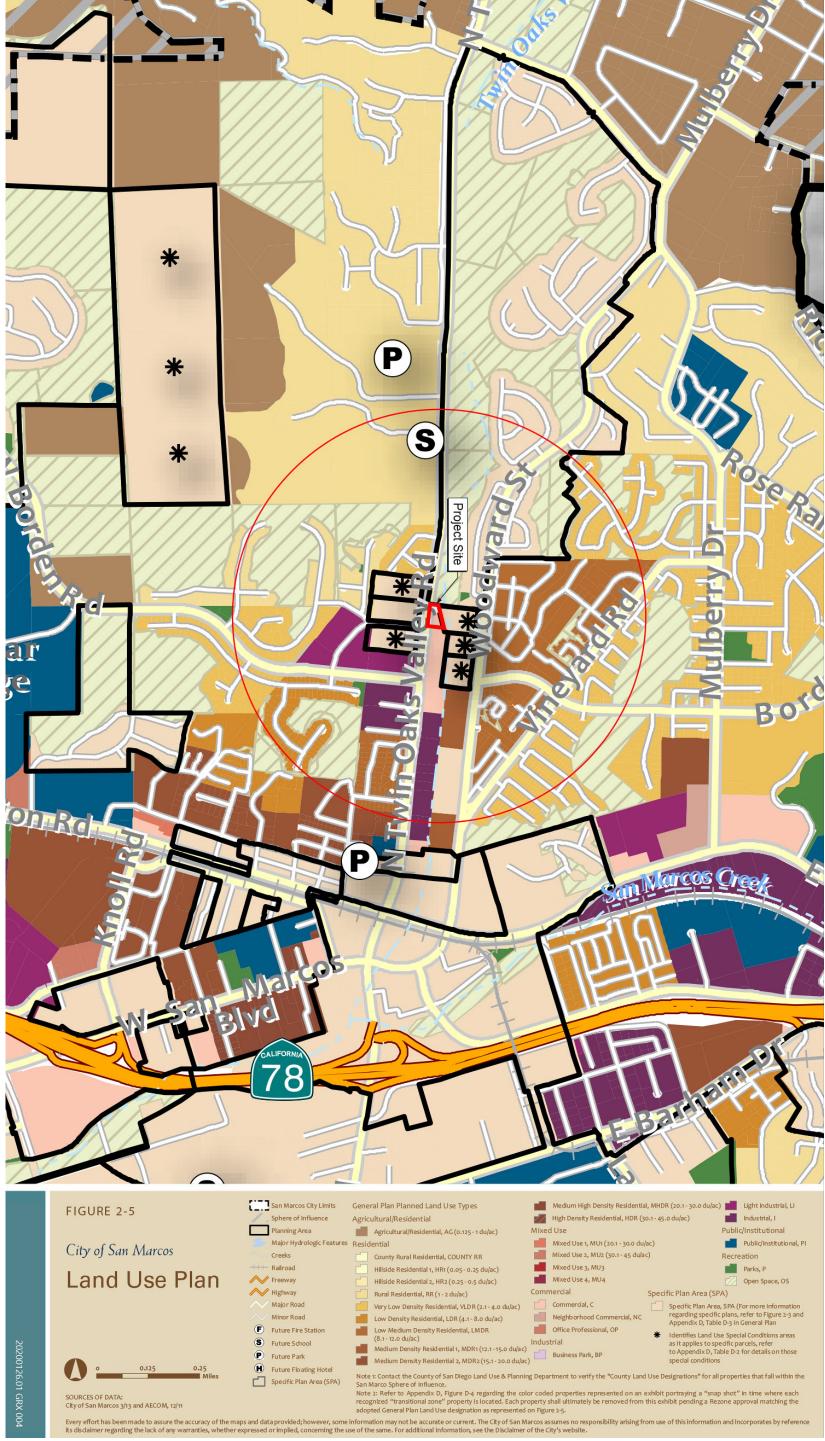
The City of San Marcos is the CEQA lead agency responsible for considering approval of the proposed project. As the lead agency, the City is responsible for considering the adequacy of the Initial Study/Mitigated Negative Declaration before determining if the overall project should be approved. Required permits and project approvals are summarized in Table 2-2.

Table 2-2 Required Permits and Project Approvals

Project Approval	Approving Authority		
Adopt Initial Study/Mitigated Negative Declaration	City of San Marcos (Planning Commission)		
Approve Site Development Permit/Conditional Use Permit	City of San Marcos (Planning Commission)		
Approve CLOMR/LOMR	FEMA		

The IS/MND is intended to apply to all listed project approvals and to any other approvals necessary or desirable to approve the proposed project.

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Source: Image produced and provided by the City of San Marcos in 2020 $\,$

Figure 2-6 Existing General Plan Land Use Designations

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: Kiddie Academy Educational Child Care Project

CUP 20-0008

2. Lead Agency Name and Address: City of San Marcos

Planning Division 1 Civic Center Drive San Marcos, CA 92069

3. Contact Person and Phone Number: Sean del Solar, Senior Planner

(760) 744-1050, extension 3223 sdelsolar@san-marcos.net

4. Project Location: 1.4-acre site located on North Twin Oaks Valley Road, north of

Windy Way, west of Woodward Street, and south of Montessa Way. See Chapter 2, "Project Description," for more detailed

information.

Project Sponsor's Name and Address: The Woodmont Company

2100 West 7th Street Fort Worth, TX 76107

6. General Plan Designation: Commercial (C). See Chapter 2, "Project Description," for more

detailed information.

7. Zoning: Light Industrial (L-I). See Chapter 2, "Project Description," for more

detailed information.

8. Description of Project:

Development of a Kiddie Academy Educational Child Care project on the 1.4-acre project site. See Chapter 2, "Project Description," for more detailed information.

9. Surrounding Land Uses and Setting:

The City of San Marcos is located in northern San Diego County (North County), approximately 40 miles north of downtown San Diego. The project site is bounded by North Twin Oaks Valley Road and residential land uses to the west, open space to the north and east, and commercial/light industrial uses to the south.

- **10.** Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement) Federal Emergency Management Agency (FEMA).
- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Four California Native American tribes have requested to be informed of proposed projects by the City. In compliance with PRC section 21080.3.1, the City provided formal written notification of the proposed project to each of the four Native American tribes on November 16, 2020. In response to this notification, three (3) tribes (Rincon, San Luis Rey Band of Mission Indians, and Pechanga) have requested consultation. The ongoing consultation details are discussed further in the Section 3.18, "Tribal Cultural Resources," of this IS/MND.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

-		d below would be potentially affected by t pact" as demonstrated by the analysis pr		-
	es. If checked below, the topi aration .	c with a potentially significant impact wi	ll be	addressed in a mitigated negative
	Aesthetics	Agriculture and Forest Resources		Air Quality
\boxtimes	Biological Resources	Cultural Resources		Energy
	Geology/Soils	Greenhouse Gas Emissions		Hazards/Hazardous Materials
	Hydrology/Water Quality	Land Use/Planning		Mineral Resources
	Noise	Population/Housing		Public Services
	Recreation	Transportation		Tribal Cultural Resources
	Utilities/Service Systems	Wildfire		Mandatory Findings of Significance
		None		None with Mitigation

Incorporated

DETERMINATION

On the	e basis of this initial evaluation:							
	I find that the proposed project could not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.							
	I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.							
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.							
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.							
	potentially significant effects (a) have been analy pursuant to applicable standards, and (b) have	d have a significant effect on the environment, because all zed adequately in an earlier EIR or NEGATIVE DECLARATION been avoided or mitigated pursuant to that earlier EIR or mitigation measures that are imposed upon the proposed						
		March 24, 2022						
S	ignature	Date						
S	ean del Solar, AICP	Senior Planner						
P	Printed Name	Title						
	City of San Marcos							
A	agency							

3.1 AESTHETICS

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
l.	Aesthetics.						
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:							
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes			
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?						
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?						
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?						

3.1.1 Environmental Setting

The City of San Marcos has varied topography that includes developed land, creeks, lakes, and hillsides. Elevation ranges from 590 feet above sea level (asl) along SR 78, to 1,600 feet asl along prominent ridgelines in the northern and southern areas of the City. The varied topography and range in elevations affords the community long-range views of prominent landforms including Mount Whitney, Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, and Franks Peak. Public viewsheds of these prominent landforms are visible from overlook points, trails, and roads throughout the project area. Other scenic resources in the project area include, but are not limited to, creek corridors, eucalyptus stands, rock outcroppings, landmark or historic buildings, and ocean views (City of San Marcos 2012a).

There are no State-designated scenic highways or corridors in the project area (Caltrans 2020). However, SR 78 is designated by the City as a view corridor and eligible as a state scenic highway outside of the project area in other areas of San Diego County. This highway corridor provides highway users with views of the Merriam Mountains, Mount Whitney, Double Peak, California State University San Marcos, and Palomar Community College (City of San Marcos 2012a).

Light and glare conditions in developed portions of the project area are typical of those associated with urban uses. The main sources of daytime glare in the project area are from sunlight reflecting from structures with reflective surfaces such as windows, and from vehicles on major roadways. Nighttime lighting is prevalent throughout the project area along roadways, parking lots, and building perimeters and in residential areas. Areas with substantially less night-lighting include residential development in Questhaven/La Costa Meadows, Twin Oaks Valley and College Area neighborhoods, and outlying agricultural areas (City of San Marcos 2012b).

3.1.2 Discussion

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

Less-than-significant impact. Implementation of the proposed project would result in short- and long-term changes to the physical environment. The project site is located along North Twin Oaks Valley Road, which includes a combination of commercial, office, light industrial, and residential land uses. Construction of the proposed Kiddie Academy two-story building is compatible with the existing surrounding land uses and would not have a substantial adverse effect on a scenic vista.

For all the foregoing reasons, the proposed project would not result in a substantial adverse effect on a scenic vista and would not substantially degrade the visual character or quality of public views in non-urbanized areas. This impact would be **less than significant**.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less than significant. There are no State-designated scenic highways or corridors in the project area. However, SR 78 is designated by the City as a view corridor and eligible as a state scenic highway, outside of the City of San Marcos in San Diego County. Implementation of the proposed project would result in short- and long-term changes to the physical environment. Because the duration of construction activities would be limited to relatively short periods of the overall construction phase, their temporary effect on scenic resources would not be substantial. The completed two-story building would not damage trees, rock outcroppings, or historic buildings. An existing 25-foot-wide biological buffer and open space easement protects the on-site riparian woodland resources from the proposed development area.

In addition, enforcement of the San Marcos Municipal Code (SMMC) would avoid substantial damage to scenic resources. For example, SMMC Section 20.300.020(D) requires that all mechanical and electrical equipment, including solar panels, and accessory structures be architecturally integrated with associated structures and appropriately screened from view, especially from SR 78. SMMC Section 20.450.040 requires solar panels to be limited to a maximum height of 5 feet from the base mount of the unit and any accessory structures to be treated to blend with the existing surroundings. Pursuant to SMMC Section 14.20.060, any person desiring to plant a tree along any City highway or on public property is required to file an application for a permit with the City's Planning Division Director. Before the issuance of the permit, the Planning Division Director must approve the species of tree and enforce terms and conditions as appropriate to protect persons and property. For all of the foregoing reasons, the proposed project would not substantially damage scenic resources and the impact would be **less than significant**.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant. Implementation of the proposed project would result in the use of temporary security lighting sources during construction of the proposed structure. Project implementation would not involve short- or long-term physical changes that could result in new substantial sources of light and glare. The project is proposed to include typical building, landscaping, and energy efficient/auto dim parking lot lighting, which will be directed away from the on-site riparian woodland area and North Twin Oaks Valley Road.

During the short term, temporary construction activities would not result in the installation of permanent lighting structures. Enforcement of the SMMC would regulate new sources of light and glare to avoid affecting day or nighttime

views in the project area. For example, photovoltaic solar facilities and renewable energy systems, including solar and non-solar, are regulated under the City's renewable energy development and design guidelines established by SMMC Chapter 20.450. Pursuant to Section 20.450.040(E), renewable energy systems are required to be non-reflective in all areas possible to blend with the surroundings. For all the foregoing reasons, the proposed project would not create new sources of substantial light or glare. The impact would be **less than significant**.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
II.	Agriculture and Forestry Resources.						
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.							
In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).							
Would the project:							
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?						
b)	Conflict with existing zoning for agricultural use or a Williamson Act contract?						
c)	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))?						
d)	Result in the loss of forest land or conversion of forest land to non-forest use?						
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?						

3.2.1 Environmental Setting

The project site and the majority of the project area is urbanized, specifically areas adjacent to North Twin Oaks Valley Road and nearby SR 78. The northern portion of the project area supports a broad range of agricultural uses including nurseries, horse farms, and produce production. Smaller areas of grazing land, Farmland of Local Importance, and Unique Farmland are located south of SR 78. The project area contains Prime Farmland, Farmland of Statewide Importance, and Unique Farmlands (City of San Marcos 2012b).

3.2.2 Discussion

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less-than-significant impact. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation. The project site is not designated as Prime or Unique Farmland, or Farmland of Statewide Importance. The project site has been previously graded and is maintained on an annual basis for weed control/fire protection.

For all the foregoing reasons, implementation of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and the impact would be **less than significant**.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact The project site is not covered by a Williamson Act contract. Implementation of the proposed project would not involve changes to policies or regulations related to land use or zoning for land under Williamson Act contract. Further, all projects are required to comply with General Plan Policy COS-2.3, which directs the City to protect existing agricultural areas. Therefore, implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract and the impact would be **less than significant**.

c) 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))?

No impact. The project site does not contain any forest land, timberland, or timberland zoned for timberland production. Therefore, implementation of the proposed project would not conflict or rezone any forest land, timberland, or timber land zoned for timberland production. **No impact** would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. The project site does not contain any forest land. Therefore, implementation of the proposed project would not result in the loss of forest land. **No impact** would occur.

3.3 AIR QUALITY

ENV	NVIRONMENTALISSUES		Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	Air Quality.				
	ere available, the significance criteria established by the ap trol district may be relied on to make the following detern		uality managen	nent district or	air pollution
	significance criteria established by the applicable air rict available to rely on for significance determinations?	\boxtimes	Yes	1	No
Wo	uld the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

3.3.1 Environmental Setting

CRITERIA AIR POLLUTANTS

The U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) for six criteria air pollutants that are known to be harmful to human health and the environment: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (which is categorized into particulate matter less than or equal to 10 microns in diameter [PM₁₀] and particulate matter less than or equal to 2.5 microns in diameter [PM_{2.5}]), and sulfur dioxide. The State of California has established the California ambient air quality standards (CAAQS) for these six pollutants, as well as for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. NAAQS and CAAQS were established to protect the public from adverse health impacts caused by exposure to air pollution. A brief description of the criteria air pollutants and their effects on health is provided in Table 3-1.

Table 3-1 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute1 Health Effects	Chronic2 Health Effects
	secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	resistance; cough, pain, shortness of breath, lung inflammation	1.
Carbon monoxide (CO)	incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage

Pollutant	Sources	Acute1 Health Effects	Chronic2 Health Effects
Nitrogen dioxide (NO ₂)	combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	, ,	decreased lung function
Sulfur dioxide (SO ₂)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	irritation of upper respiratory tract, increased asthma symptoms	insufficient evidence linking SO ₂ exposure to chronic health impacts
matter (PM ₁₀), fine	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO ₂ and ROG	aggravation of existing respiratory and	
Lead	metal processing	reproductive/developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

^{1. &}quot;Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases

Source: EPA 2018

The project site is located in the San Diego Air Basin (SDAB), which includes all of San Diego County. The SDAB is bounded by the Pacific Ocean to the west and high mountain ranges to the east. San Diego County is currently designated as nonattainment for both the federal and state ozone standards, the state PM_{2.5} standard, and the state PM₁₀ standard. The region is designated as in attainment or being unclassifiable for all other NAAQS and CAAQS (SDAPCD n.d.).

TOXIC AIR CONTAMINANTS

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from toxic air contaminants (TACs) can be attributed to relatively few compounds, the most important being diesel particulate matter (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, headache). Odor sources of concern include wastewater treatment plants, landfill and composting facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, and food processing facilities.

SENSITIVE RECEPTORS

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals,

² "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants. The nearest sensitive receptors to the project site are single-family residences on the west side of Twin Oaks Valley Road, located approximately 165 feet northwest of the nearest project site boundary. Other residential receptors are located farther from the project site.

AIR QUALITY PLANNING

The San Diego Air Pollution Control District (SDAPCD) is the local agency responsible for air quality planning and development of air quality plans in the project area. In response to the federal nonattainment designation for the 8-hour ozone standard, SDAPCD prepared the 2008 Eight-Hour Ozone Attainment Plan for San Diego County and the 2008 Eight-Hour Ozone Reasonably Available Control Technology Demonstration for San Diego County, which identify control measures and rules implementing "reasonably available control technology" necessary to bring the air basin into attainment (SDAPCD 2016a, 2016b). These documents are submitted to the EPA through CARB for approval as part of the San Diego County portion of the State Implementation Plan for attaining and maintaining the 2008 8-hour ozone standard. An updated plan was prepared in 2020 but has not yet been approved by the SDAPCD Board or CARB (SDAPCD 2020). In compliance with the California Clean Air Act, SDAPCD also developed the 2016 Revision of the Regional Air Quality Strategy for San Diego County to address state-regulated ozone (SDAPCD 2016c). In 2005, SDAPCD developed a plan to address particulate matter, Measures to Reduce Particulate Matter in San Diego County (SDAPCD 2005).

Neither the City of San Marcos nor SDAPCD has adopted air quality significance thresholds. However, the San Diego County Planning & Development Services Department prepared the *Guidelines for Determining Significance*, *Air Quality*, which present screening level thresholds (SLTs) of significance for regional air pollutant emissions (SDAPCD 2007). The SLTs are shown in Table 3-2.

Table 3-2 County of San Diego Screening-Level Thresholds for Air Quality Impact Analysis

Pollutant	Mass Daily Thresholds (lbs/day)
Respirable Particulate Matter (PM ₁₀)	100
Fine Particulate Matter (PM _{2.5})	55
Oxides of Nitrogen (NO _X)	250
Oxides of Sulfur (SO _X)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs)	75

Source: San Diego County 2007: Table 5

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less-than-significant impact. The emission inventories used to develop the applicable air quality attainment plans (i.e., 2008 Eight-Hour Ozone Attainment Plan for San Diego County, 2008 Eight-Hour Ozone Reasonably Available Control Technology Demonstration for San Diego County, 2016 Revision of the Regional Air Quality Strategy for San Diego County, and Measures to Reduce Particulate Matter in San Diego County) are based primarily on projected population and employment growth and vehicle miles traveled (VMT) for the SDAB, which are largely based on the planned growth identified in regional and local plans. Thus, projects that propose the same or less development as accounted for in a general plan would not conflict with or obstruct implementation of air quality planning efforts for the SDAB. The proposed project is consistent with the current zoning, provided that a CUP is approved, and the general plan land use designation of the project site. In addition, implementation of the proposed project would not induce population growth directly or indirectly because the project does not propose new housing or propose changes to policies or

regulations related to land use or residential zoning. Therefore, the project would not result in substantial population growth, employment growth, or an increase in VMT that would conflict with or obstruct implementation of any applicable air quality plans. This impact would be **less than significant**.

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

Less-than-significant impact. The SDAB is designated as a nonattainment for ozone with respect to the CAAQS and NAAQS and nonattainment for PM₁₀ and PM_{2.5} with respect to the CAAQS. Impacts would be cumulative in nature if the project, in combination with cumulative development, leads to violation of any air quality standard or contributes substantially to an existing or projected air quality violation. In developing thresholds of significance for air pollutants, San Diego County considered the emission levels for which a project's individual emissions would be cumulatively considerable. Thus, the project would result in a significant cumulative impact if it would cause construction-generated or operational criteria air pollutant or precursor emissions that exceed the County's SLTs, as shown in Table 3-2 above.

Emissions of criteria pollutants and precursors were modeled using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 computer program (CAPCOA 2016). Detailed information regarding modeling assumptions and outputs can be found in Appendix A. Project construction would generate exhaust emissions from construction equipment and vehicle trips, fugitive dust from grading and ground-disturbing activities, and off-gas emissions from architectural coatings and paving. Construction would commence in early 2022 and occur over a 12-month period. Operation of the project, beginning in 2023, would result in emissions from vehicles accessing the project site (mobile sources) as well as operation of landscaping equipment (area sources) and the limited use of consumer products. Tables 3-3 and 3-4 summarize the projected construction and operational emissions, respectively, that would be generated by the project.

Table 3-3 Maximum Daily Emissions of Criteria Pollutants and Precursors Associated with Project Construction

Year	ROG (lbs/day)	NO _X (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)	SO _X (lbs/day)	CO (lbs/day)
2022	27.9	34.0	8.7	4.5	0.08	14.8
2023	27.9	1.3	0.09	0.07	<0.01	1.9
San Diego County Screening Level Threshold	75	250	100	55	250	550
Exceeds Threshold?	No	No	No	No	No	No

Notes: ROG = reactive organic gases; NOx = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_X = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = oxides of sulfur; CO = carbon monoxide; CO = oxides of sulfur; CO = oxides oxid

Source: Modeling conducted by Ascent Environmental in 2021 using CalEEMod v. 2016.3.2

Table 3-4 Maximum Daily Operational Emissions of Criteria Pollutants and Precursors for the Project

Source	ROG (lbs/day)	NO _X (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)	SO _X (lbs/day)	CO (lbs/day)
Mobile	1.0	3.2	2.1	0.6	0.03	7.9
Energy	<0.01	0.02	<0.01	<0.01	<0.01	0.02
Area	0.3	<0.01	<0.01	<0.01	0	<0.01
Total	1.3	3.2	2.1	0.6	0.03	7.9
San Diego County Screening Level Threshold	75	250	100	55	250	550
Exceeds Threshold?	No	No	No	No	No	No

Notes: ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_X = oxides of sulfur; CO = carbon monoxide; DS_X = oxides of sulfur; DS_X = oxides o

Source: Modeling conducted by Ascent Environmental in 2021 using CalEEMod v. 2016.3.2

As shown in Tables 3-3 and 3-4, construction and operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5}, SO_x, and CO would not exceed the County's SLTs. Therefore, construction-related and operational emissions would not result in a cumulatively considerable net increase of any criteria pollutant or precursor, and this impact would be **less than significant**.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-significant impact. Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children and the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and the potential for these individuals to experience increased and prolonged exposure to pollutants. The nearest sensitive receptors are residential uses to the northwest of the project site, the closest residence being approximately 165 feet from the nearest project site boundary. In addition, senior housing is located at 650 Woodward Street.

During construction, particulate matter from diesel construction equipment exhaust is the primary toxic air contaminant of concern. Diesel PM dissipates rapidly from the source, and exposure concentrations decline with distance from construction activities (Zhu et al. 2002). The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70- or 30-year exposure period. However, such assessments should be limited to the period/duration of activities that generate TAC emissions (OEHHA 2015).

As shown above in Table 3-3, construction activities would result in maximum emissions of 8.7 pounds per day (lbs/day) of PM_{10} and 4.5 lbs/day of $PM_{2.5}$, which would not exceed the SLTs. Furthermore, construction would be temporary and intermittent over a limited period of approximately 12 months, a duration substantially shorter than the exposure period used for typical health risk calculations (i.e., 30 to 70 years). Due to the relatively low levels of anticipated emissions and the temporary nature of construction activities, project-generated construction emissions of TACs would not result in substantial concentrations at nearby receptors. Operation of the project would not include any new stationary TAC sources. This impact would be **less than significant**.

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

Less than significant. Odors are generally regarded as an annoyance rather than a health hazard. New major odor sources typically include industrial land uses, coating operations, foundries, refineries, sewage treatment plants, landfills, and recycling facilities. As a childcare center, the project would not include any long-term odor sources. During construction, odorous exhaust would be emitted from diesel-fueled heavy equipment and during the application of fresh asphalt. Grading operations could result in odors associated with organic materials being daylighted. These emissions would be temporary and intermittent and would dissipate rapidly from the source with increases in distance. Therefore, the project would not adversely affect a substantial number of people due to objectionable odors. This impact would be less than significant.

3.4 BIOLOGICAL RESOURCES

ENV	ENVIRONMENTALISSUES		Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	Biological Resources.				
Wo	uld the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

3.4.1 Environmental Setting

A comprehensive Biological Resource Technical Report (January 2022), including an Aquatic Resource Technical Report and least Bell's vireo survey on have been completed for the proposed project by Schaefer Ecological Solutions and are included in Appendix B of this IS/MND. Land cover in the project area comprises developed land, upland vegetation communities, and riparian and wetland communities.

The Multiple Habitat Conservation Program (MHCP), adopted by the San Diego Association of Governments (SANDAG) in 2003, is a comprehensive, multiple jurisdictional subregional habitat planning program designed for northwestern San Diego County. The City of San Marcos is included in the MHCP study area for which SANDAG, in cooperation with the City of San Marcos, created a Draft San Marcos Subarea Plan. The subarea plans describe specific biological conservation policies each city agrees to institute to implement the MHCP (City of San Marcos 2012b). The Draft San Marcos Subarea Plan has not been adopted, and the City is no longer an active participant in the Natural Community

Conservation Plan (NCCP) program and the subregional MHCP conservation planning effort. However, pursuant to General Plan policy, the City complies with the conservation policies identified in the MHCP through use of the Draft San Marcos Subarea Plan as an implementation tool, including areas identified as Biological Core and Linkage Areas (BCLA), which are areas of undisturbed native vegetation, and Focused Planning Areas, which were designed to conserve as much of the BCLA as possible, minimize preserve fragmentation, maximize use of existing public lands and open space, and maintain private property rights and economic viability.

The project has been designed to not encroach into the existing 25-foot wide biological buffer and open space easement area previously established by Parcel Map No. 20935. The biological buffer and open space easement was established to provide a buffer between the proposed development are and the riparian habitat associated with Twin Oaks Creek.

BIOLOGICAL RESOURCE SURVEY

A reconnaissance and vegetation communities mapping survey was conducted by Schaefer Ecological Solutions (SES) biologist Christina Schaefer on January, 2022. Survey conditions were favorable for the detection of any sensitive species; conditions were sunny with minimal wind, and temperatures between 63 and 67 degrees Fahrenheit. The presence, and/or percent cover of indicator plant species were used to determine the vegetation community. Vegetation community and land use mapping was conducted by walking meandering transects throughout the project site. The vegetation community and land cover types classification follows Holland (1986) and Oberbauer et al. (2008). Vegetation community acreages were mapped to the hundredth (0.01) of an acre. The boundaries of vegetation communities were then drawn onto a 200-feet-to-the-inch scaled aerial photograph and then digitized using Geographic Information System (GIS).

In combination with the vegetation mapping, Ms. Schaefer conducted a general pedestrian biological reconnaissance survey. The survey was conducted in the morning hours between 9 and 11 am to increase the detectability of sensitive wildlife species potentially occurring in the project area. Ms. Schaefer inventoried plant species, observed and recorded wildlife and wildlife sign (e.g. vocalizations, burrows, tracks, prey remains, scat, etc.), and categorized the potential for occurrence of listed or sensitive plant and wildlife species. A complete species inventory is included in this report for reference (Appendix A). Site photos from each project location are included in Appendix B.

VEGETATION COMMUNITIES

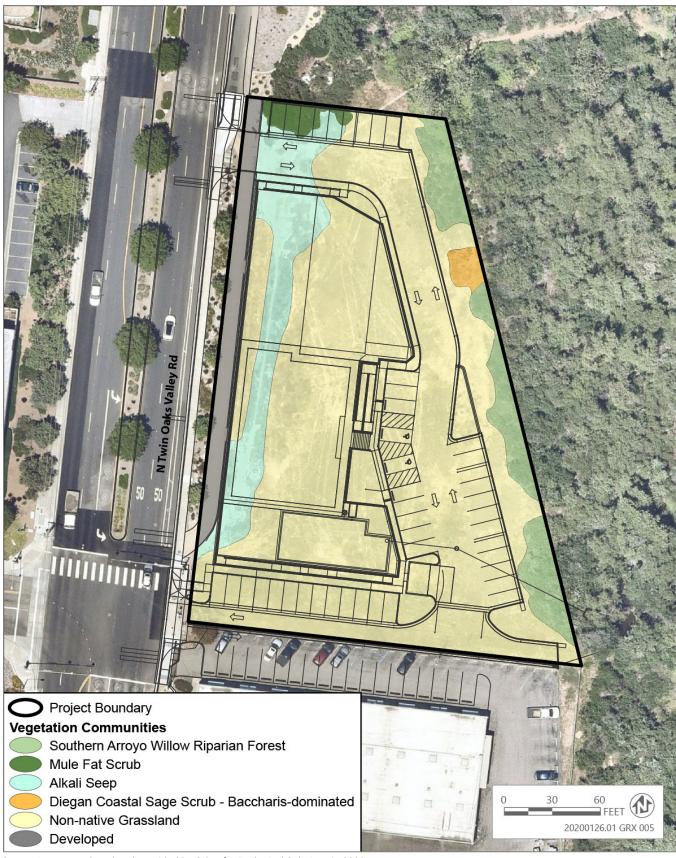
Six vegetation communities and land cover types were mapped on the project site based on the field visit results. These include southern arroyo willow riparian forest, mule fat scrub, alkali seep, Diegan coastal sage scrub – baccharisdominated, non-native grassland, and developed land (Baldwin et al. 2012; Oberbauer et al. 2008; Holland 1986). Arroyo willow riparian forest and mule fat scrub are linked with waters and wetlands and may be considered sensitive. Diegan coastal sage scrub and non-native grassland are considered sensitive vegetation communities by the MHCP that may require mitigation. The existing vegetation communities are depicted in Figure 3-1 and listed in Table 3-5.

Table 3-5 Vegetation Communities and Land Cover Types on the Project Site

Vegetation Community	Existing	Impact
Southern arroyo willow riparian forest (61320)1	0.101	0
Mule fat scrub (63310) ¹	0.018	0.018
Non-Native Grassland (42200) ²	1.023	0.924
Diegan Coastal Sage Scrub – Baccharis-dominated (32530) ²	0.011	0
Disturbed Habitat (11300)	0.186	0.186
Developed Land (12000)	0.071	0.071
Total	1.409	1.198

Sensitive vegetation community under federal and state aquatic resource regulations

² Sensitive vegetation community under the Multiple Habitat Conservation Program (MHCP)



Source: Image produced and provided by Schaefer Ecological Solutions in 2020

Figure 3-1 Biological Resources

Southern Arroyo Willow Riparian Forest (61320)

Southern arroyo willow riparian forest is a closed canopy riparian forest that is generally greater than 6 m (20 ft) high and occupies drainages, streams, and floodplains. Southern arroyo willow riparian forest is a wetland habitat, and as such, is regulated by the resource agencies. A variety of wetland obligate species comprise the herbaceous layer. The habitat is winter deciduous.

On the project site, the habitat is dominated by arroyo willow (*Salix lasiolepis*) and black willow (*S. gooddingii*). Western sycamore (*Platanus racemosa*) and cottonwood (*Populus fremontii*) are less dominant. The herbaceous layer includes broadleaf cattail (*Typha latifolia*); drier openings support wild grape (*Vitis girdiana*), California wild rose (*Rosa californica*), and poison oak (*Toxicodendron diversilobum*). The habitat on the project site is associated with Twin Oaks Valley Creek and amounts to 0.101 acre.

Mule Fat Scrub (63310)

Mule fat scrub is an early seral herbaceous riparian scrub community dominated by mule fat (*Baccharis salicifolia*). This vegetation community occurs along intermittent stream channels with a fairly coarse substrate and moderate depth to the water table. Mule fat scrub is maintained by regular or frequent flooding of intermittent stream channels with fairly course substrate and moderate depth to the water table. This community is generally medium to tall in stature and may be very dense to sparse depending on the amount of time elapsed since the most recent flooding/disturbance.

On the project site, the mule fat scrub vegetation community is relatively homogeneous, and besides mule fat contains coyote bush (*Baccharis sarothroides*). It occurs as a transitional community between the arroyo willow riparian forest and upland habitats and is not directly associated with a stream or creek or any other regulated aquatic resources; it encompasses 0.018 acre.

Non-Native Grassland (42200)

Nonnative grassland generally occurs on fine-textured loam or clay soils which are moist or even waterlogged during the winter rainy season and very dry during the summer and fall. It is characterized by a dense to sparse cover of annual grasses, often with native and nonnative annual forbs (Holland 1986). This habitat is a disturbance-related community most often found in old fields or openings in native scrub habitats. Nonnative or annual grassland is considered sensitive where it occurs in large contiguous areas because it provides vital foraging habitat for raptors and often supports other sensitive wildlife species.

Non-native grassland on the project site is dominated by Bermuda grass (*Cynodon dactylon*), and also consists of a variety of other non-native grasses such as ripgut grass (*Bromus diandrus*), perennial rye grass (*Festuca perennis*), and slender oat (*Avena barbata*). Nonnative forbs such as English plantain (*Plantago lanceolata*), field mustard (*Brassica rapa*), thistle (*Carduus* sp.), fennel (*Foeniculum vulgare*), and cheeseweed (*Malva parviflora*) occur in openings or patches. Isolated native shrub species are infrequently interspersed within the grassland. Non-native grassland is the most dominant vegetation community on the project site and occurs on approximately 1.023 acres.

Diegan Coastal Sage Scrub - Baccharis-dominated (32530)

Diegan coastal sage scrub is an endemic, fire-adapted vegetation community considered sensitive by local, state, and federal regulatory agencies primarily because it supports a number of state- and/or federally-listed vascular plant and wildlife species. Formerly widely distributed in the region, coastal sage scrub has lost much of its historic range due to development and agricultural conversion.

On the site, the Diegan coastal sage scrub is baccharis dominated and almost exclusively comprised of coyote bush (*Baccharis pilularis*); it occurs on the eastern edge of the project site adjacent to mule fat scrub. The habitat consists of a few individual coyote bush plants and occurs at the edge of riparian habitat isolated from other coastal sage scrub; therefore it would not be suitable for nesting and breeding by the federally threatened coastal California gnatcatcher (*Polioptila californica californica*). The habitat comprises approximately 0.011 acre.

Disturbed Habitat (11300)

Disturbed habitat is characterized by predominantly non-native species introduced and established through human action and that are no longer recognizable as native or naturalized vegetation. They are dominated by ruderal or ornamental species that take advantage of disturbance, such as areas that have previously been graded or otherwise disturbed.

Plant species observed within the disturbed portions of the study area mainly include non-native forbs and are dominated by Russian thistle (*Salsola tragus*). A variety of herbaceous species also occupy this area including salt grass (*Distichilis spicata*), sea heliotrope (*Heliotropium curvassavicum*), and spreading alkaliweed (*Cressa truxiliensis*). The soils are dense and contain a high clay content. Based on the extant vegetation of this area, the site is characterized by alkaline conditions. A total of 0.186 acre occur onsite.

Developed Land (12000)

Urban/developed land includes permanently impacted areas such as structures, roads, driveways, and other paved surfaces including ornamental landscaping associated with urban structures.

The project site is undeveloped with the exception of a pedestrian/bicycle path, and is mainly located within an urban context. Ornamental vegetation associated with urban and developed land types consists of cultivated plants that have naturalized into otherwise native habitat areas or were put in place by humans, usually for the purpose of beautification, windbreaks, ornamental vegetation associated with the fringes of developments and spill-over from private yards, parks, golf courses, or other related purposes. In the project site, this classification is associated with the landscaped trail and bike path alongside of North Twin Oaks Valley Road on the eastern edge of the project site. Developed land on the project site comprises approximately 0.071 acre.

Focused Least Bell's Vireo Surveys

The USFWS does not require a 10(a)1(a) threatened and endangered recovery permit to conduct presence/absence (P/A) surveys for the federally endangered least Bell's vireo (*Vireo bellii pusillus*, LBV); however, the USFWS requires that LBV surveys be conducted by an experienced biologist approved by the USFWS. The USFWS provides survey guidelines (USFWS 2001) for conducting these surveys. Survey guidelines stipulate eight (8) surveys between April 10 and July 31 (LBV breeding activity period) to determine presence/absence. USFWS-approved biologist Jessie Vinje conducted eight LBV P/A surveys following the USFWS survey guidelines (USFWS 2001) between April 17 and July 22, 2021 to locate any LBV using the riparian habitat adjacent to the Project prior to construction. Ms. Vinje conducted surveys between 6:47 am and 9:45 am and in weather conditions suitable to detecting LBV. No least Bell's vireo were detected during the surveys. The focused LBV report is included in Appendix C.

Aquatic Resources Delineation

On November 13, 2021, Christina Schaefer of SES conducted a formal aquatic resources delineation of habitats and vegetation communities that contain wetland indicator plant species and would potentially be impacted by the Project. The aquatic resources delineation was conducted using the routine on-site determination method described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region (USACE 2008). At least two sampling points were excavated in each unique vegetation community, including mule fat scrub, disturbed habitat that contained wetland indicator species, non-native grassland habitat that contained wetland indicator species, and one control within the area characterized as non-native grassland that did not contain wetland indicator species. Representative photographs are appended to the aquatic resources delineation report in Appendix D.

At each sampling point, an USACE 3-parameter wetland determination data form, Arid West Region, was completed. The three-parameters included hydrophytic vegetation, hydric soil, and hydrology. In order to meet the USACE definition of a wetland, the sampling area must contain all three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology as defined in the USACE 1987 USACE Wetland Delineation Manual and the 2008 Arid West Regional Supplement. The Regional Water Quality Control Board (RWQCB) uses the same wetlands parameters as the USACE. However, unlike the USACE, the RWQCB also includes in their wetland definition any area of hydric indicators void of hydrophytic vegetation (State Water Resources Control Board 2020).

Based on the absence of wetland hydrology in all of the sample stations, the project site does not contain any federally regulated aquatic resources. The area is characterized by a raised floodplain of Twin Oaks Valley Creek and may receive period flooding, but not frequent enough or for long enough durations to develop the characteristics of wetlands or waters of the U.S.

3.4.2 Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less-than-significant impact with mitigation incorporated. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could result in substantial adverse direct and indirect effects to special-status species, including injury, mortality, habitat modification, and disturbance. The project is required to comply with General Plan Policy COS-1.1, which directs the City to support the protection of biological resources, and Policy COS-1.2, which directs the City to ensure that development maintains the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats. Further, Policy COS-1.3 directs the City to work with federal, state, regional, and local agencies to implement SANDAG's MHCP, which identifies conservation areas and protected species.

No candidate, sensitive or special-status species have been identified on or adjacent to the project site. USFWS protocol (April–July 2021) least Bell's vireo (LBV) surveys have been completed and no LBV have been identified on the project site or adjacent areas.

Mitigation measures Bio-5 and Bio-6 will ensure that no candidate, sensitive or special-status species will be adversely affected by the proposed project. For these foregoing reasons, implementation of the proposed project would not cause a substantial adverse direct and indirect effects to special-status species. Impacts would be **less than significant with mitigation incorporated.**

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less than significant impact with mitigation incorporated. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and would result in substantial adverse direct and indirect effects to riparian habitat or other sensitive natural communities. Projects are required to comply with General Plan Policy COS-1.1, which directs the City to support the protection of biological resources, and Policy COS-1.2, which directs the City to ensure that development maintains the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats. Further, SMMC Section 14.15.050(d) requires development projects in the project area to preserve riparian buffers and corridors.

Impacts to sensitive vegetation communities are summarized in Table 3-6.

Table 3-6 Impacts to Sensitive Vegetation Communities on the Project Site

Vegetation Community	Impacts	Significance	Mitigation Ratio	Mitigation Acreage
Mule fat scrub (63310) ¹	0.018	Significant w/o mitigation	1;1	0.018
Non-native grassland (42200) ²	0.924	Significant w/o mitigation	0.5:1	0.463
Total	0.942			0.481

¹ Source: Schaefer Ecological Solutions. Potentially sensitive resource

² Considered a sensitive vegetation community

Implementation of the proposed project would potentially involve short- or long-term physical changes that could cause substantial adverse direct and indirect effects to the adjacent riparian habitat and special-status species. An existing 25-foot-wide biological buffer and open space easement has been recorded on the project site associated with a previously approved project. The proposed project has been designed to not encroach into the buffer area.

Project-specific mitigation measures (Bio-1, Bio-2, Bio-3, and Bio-4) have been developed to minimize or avoid impacts to riparian habitat or other sensitive natural communities to the extent feasible in compliance with CEQA In addition, federal and state requirements would be adhered to and project-specific measures implemented to conserve, protect, and preserve riparian habitat and sensitive natural communities. For all of the foregoing reasons, implementation of the proposed project with the identified mitigation measures would not cause a substantial adverse direct and indirect effect to riparian habitat or other sensitive natural community. Impacts would be **less than significant with mitigation incorporated**.

Add preconstruction nesting bird survey mitigation measures

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

No impact. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, which could result in substantial adverse direct and indirect effects to wetlands. However, construction activities associated with the proposed project would occur in already disturbed areas,

An aquatic resources report (Appendix B) has been prepared to determine if any onsite area is classified as a wetland or jurisdictional feature. No wetlands or jurisdictional features have been identified within the project development impact rea. Implementation of the proposed project would not involve short- or long-term physical changes that could cause a substantial adverse effect to protected wetlands.

. For all of the foregoing reasons, implementation of the proposed project would not cause substantial adverse direct and indirect effects to wetlands. **No impact** would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than significant. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could result in indirect impacts to wildlife movement along Twin Oaks Valley Creek. The San Marcos General Plan identifies a wildlife movement corridor along the creek. Given that the proposed project would occur in already disturbed areas with an established 25-foot setback from Twin Oaks Creek, indirect impacts to a wildlife movement corridor would be less than significant.

For all of the foregoing reasons, implementation of the proposed project would not cause substantial adverse direct and indirect effects to wildlife corridors. Impacts would be **less than significant**.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation. The project is required to comply with General Plan Policy COS-1.1, which directs the City to support the protection of biological resources, and Policy COS-1.2, which directs the City to ensure that development maintains the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats. Pursuant to SMMC Section 14.20.030, any person desiring to remove a tree is required to file an application with the City's Planning Director. No trees are proposed to be removed as part of the development grading.

Impacts to onsite sensitive resources are mitigated by mitigation measures Bio-1, Bio-2, Bio-3, Bio-4, Bio-5, Bio-6, and Bio-7.For all of the foregoing reasons, implementation of the proposed project would not conflict with local policies or ordinances protecting biological resources. Impacts would be **less than significant**.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than significant impact with mitigation incorporated. The Draft San Marcos Subarea Plan has not been adopted, and the City is no longer an active participant in the NCCP program or the subregional MHCP conservation planning effort. However, pursuant to General Plan Policy COS-1.3, the City complies with the conservation policies identified in the MHCP through use of the Draft San Marcos Subarea Plan as an implementation tool. Further, implementation of the proposed project, including grading and excavation, would primarily occur within already disturbed, developed areas. Therefore, impacts would be less than significant impact with mitigation incorporated.

MITIGATION MEASURES

The project has been designed to be consistent with the City of San Marcos General Plan and the San Marcos Municipal Code (SMMC) and impacts would be minimized through the implementation of the City's General Plan policies and the SMCC. For example, SMMC Section 14.15.050(d) requires development projects in the project area to preserve riparian buffers and corridors. Mitigation would be required to compensate for any permanent, temporary, direct, indirect, and cumulative impacts to sensitive biological and aquatic resources that would be considered significant under CEQA and federal and state law. Implementation of mitigation would reduce these impacts to a level below significance. Impacts to sensitive vegetation communities would be mitigated to a less than significant level with implementation of Mitigation Measures BIO-1 to BIO-4. Impacts to foraging and nesting habitat for birds and raptors would be mitigated to a less than significant level with implementation of Mitigation Measure BIO-5. Potentially significant impacts to LBV and other birds and raptors from construction noise would be mitigated to below a level of significance with Mitigation Measure BIO-6 and BIO-7.

- BIO-1: Impacts to 0.924 acre of non-native grassland shall be mitigated at a 0.5:1 ratio for a total of 0.462 acre of non-native grassland mitigation. Mitigation shall consist of the acquisition of 0.462 acre of non-native grassland at an offsite mitigation bank within the same or adjacent/close to the ecoregion in which the project occurs, and approved by and documented to the Wildlife Agencies and the City of San Marcos.
- BIO-2: Impacts to 0.018 acre of mule fat scrub may be regulated by the RWQCB and CDFW. Both agencies shall be contacted to identify the type of permit required by the respective agency. If appropriate, permit applications shall be prepared and submitted to the agencies, and mitigation identified as specified below (BIO-3).
- BIO-3: Mitigation for impacts to 0.018 acre of mule fat scrub shall be mitigated onsite at a 1:1 mitigation ratio by creating 0.018 acre of native mule fat scrub within the 25-foot open space buffer adjacent to the riparian habitat associated with Twin Oaks Valley Creek. A habitat restoration plan shall be prepared by a qualified and City of San Marcos-approved restoration ecologist. The restoration plan shall be approved by the regulatory agencies, as appropriate. The restoration plan shall include the removal of invasive species within and adjacent to the riparian habitat, and measures to avoid impacts to the riparian habitat and any sensitive species. Restoration shall occur in the winter months to take advantage of the wet and cooler months for the purpose of appropriate plant establishment, and shall also avoid the migratory bird, raptor, and LBV breeding season.
- BIO-4: Habitat Restoration shall occur within the recorded open space easement. A Long-Term Management Plan (LTMP) shall be prepared to manage the 25-foot open space easement and the mule fat restoration area in perpetuity. Long-term management shall be conducted by an accredited and CDFW-certified habitat management entity approved by the City of San Marcos. The project

proponent shall invest a non-wasting endowment to fund long-term management. The endowment shall be calculated using a Property Acquisition Record (PAR)-compatible calculation and documentation, which shall be appended to the LTMP and approved by the City of San Marcos and regulatory agencies. The endowment shall be invested with an agency-approved funding agencies such as the San Diego Foundation.

BIO-5:

Prior to grading the site or causing any impact to the site, grading and/or construction activities on site must be avoided during the nesting season which extends from February 1st to September 15th to prevent potential impacts to nesting of any migratory, songbirds, or raptors. In order to begin grading or construction activities within the nesting season, a nesting survey from a qualified biologist or other expert in the field must be submitted to the Planning Division to verify there are no active nests on the subject site. This survey must be submitted prior to any disturbance or impact of the site. If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a minimum of a twenty-five (25) foot buffer and up to a maximum buffer of 300 feet for raptors, as determined by the project biologist, and shall be avoided until the nesting cycle is complete.

Mitigation for impacts to migratory bird and raptors shall occur by conducting a preconstruction survey by a qualified biologist within 72 hours of the onset of vegetation removal to determine if migratory bird and raptor nests occur. If no birds or raptors are nesting (which includes nest building or other breeding or nesting behavior) in project site, clearing shall be allowed to proceed. If birds or raptors are observed nesting, construction shall be postponed until a qualified biologist determines that all nesting (or breeding or nesting behavior) has ceased.

BIO-6:

Construction will not avoid the LBV breeding season (April 15 through September 15); however, a temporary noise blanket or wall will be erected during construction. A preconstruction survey shall be conducted to determine if LVB occur in the areas impacted by construction noise. The LBV survey shall be conducted by a USFWS-approved biologist; pre-survey notification shall be submitted to the USFWS indicating that pre-construction nest surveys for this species would be conducted. If no LBV are nesting (which includes nest building or other breeding or nesting behavior), construction shall be allowed to proceed during the breeding season without noise monitoring. However, if LBV are observed within 500 feet of construction activities, noise monitoring shall be conducted to confirm that noise levels are reduced to below 60 dBA Leq (time weighted average of the level of sound in decibels) at the edge of habitat. Noise monitoring shall be conducted by an experienced noise engineer. The mitigation measure shall be approved by the City of San Marcos, USFWS and CDFW. If noise levels at the edge of habitat exceed 60 dBA Leq despite the noise blanket, alternative noise abatement measures shall be employed.

BIO-7:

A biological monitor shall inspect the construction site at least weekly throughout construction during the breeding season, and shall make sure that the noise abatement and monitoring measures are functional and that no noise pollution may affect the LBV habitat within 500 feet of the construction site.

Verify MM BIO-2 is consistent with the following standard Migratory Bird COA:

Prior to grading the site or causing any impact to the site, grading and/or construction activities on site must be avoided during the nesting season which extends from February 1st to September 15th to prevent potential impacts to nesting of any migratory, songbirds, or raptors. In order to begin grading or construction activities within the nesting season, a nesting survey from a qualified biologist or other expert in the field must be submitted to the Planning Division to verify there are no active nests on the subject site. This survey must be submitted prior to any disturbance or impact of the site. If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a minimum of a twenty-five (25) foot buffer and up to a maximum buffer of 300 feet for raptors, as determined by the project biologist, and shall be avoided until the nesting cycle is complete.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				

3.5.1 Environmental Setting

A comprehensive cultural resource assessment was completed for the proposed project by ASM Affiliates and is included in Appendix C of this IS/MND. CEQA defines historic resources as those that are listed on, or determined to be eligible for listing on, the California Register of Historical Resources (CRHR) or a local register, or are otherwise determined to be historical pursuant to CEQA (PRC Section 21084.1) or CEQA Guidelines Section 15064.5. The CRHR also includes properties formally determined eligible or listed in the National Register of Historic Places (PRC Section 5024.1). A historic resource may be an object, building, structure, site, area, place, record, or manuscript that is historically significant or significant in terms of California's architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records (PRC Section 5020.1[j]). Typically, historic resources are more than 50 years old. There are 25 historic architectural resources in the project area, including six residential complexes, eight residences, an industrial building, a commercial building, an adobe house, a cement silo, a farmhouse, and a historic cemetery (City of San Marcos 2012b).

Archaeological resources may be considered historic resources or, if not, they may be determined to be "unique" as defined by CEQA (PRC Section 21083.2[g]). A "unique archaeological resource" is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person. There are 103 prehistoric archaeological sites in the project area that contain lithic scatters, artifacts, bedrock milling sites, habitation sites, and prehistoric rock shelters. Four multicomponent archaeological sites containing both prehistoric and historic artifacts are also located in the project area. In addition, there are 13 historic archaeological sites containing historic foundations, chicken coop foundations, homestead sites, historic refuse scatters, mining site, rock alignment, rock cairn, and a historic water storage reservoir (City of San Marcos 2012b).

3.5.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less than significant. Implementation of the proposed project could result in direct or indirect changes to listed or eligible historical resources. However, given the vacant nature of the project site where historic resources are not present, no historic resource impacts would occur.

The proposed project is required to comply with existing federal, state, and local regulations that protect historical resources and undergo the City's discretionary review process, where applicable, including completion of subsequent project-level planning and environmental review under CEQA that would ensure that identified resources are appropriately protected. For example, following the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings would ensure that implementation of the proposed project would not adversely change any historical resources. Compliance with the California State Historical Building Code (per SMMC Chapter 17.27) would protect from substantial adverse change historic structures included on the national or state registers of historic places.

For all of the foregoing reasons, implementation of the proposed project would not cause a substantial adverse change in the significant of a historical resource. Impacts would be **less than significant**.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could impact archaeological resources.

The proposed project is required to comply with General Plan Policy COS-2.5, which directs the City to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and Senate Bill [SB] 18 tribal resources) are analyzed and conserved in compliance with CEQA requirements, and Policy COS-11.1, which directs the City to identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA. In addition, enforcement of mitigation measures in the General Plan EIR (State Clearinghouse No. 2011071028) would reduce impacts to archaeological resources. Specifically, General Plan Mitigation Measure CR-1 directs the City to require the preparation of a literature study and records search before any ground-disturbing activity to determine whether the project area has been previously surveyed and whether cultural resources were identified. General Plan Mitigation Measure CR-2 directs the City to require the project implementer to incorporate design measures in engineering documents to provide avoidance or minimization of impacts to significant archaeological or cultural resources. General Plan Mitigation Measure CR-3 directs the City to require monitoring of grading, ground-disturbing, and other major earth-moving activities in previously undisturbed areas or in areas with known archaeological resources projects by a qualified archeologist and tribal monitor during activities in areas with cultural resources of interest to local Native American tribes. Further, General Plan Mitigation Measure CR-4 directs the City to require a qualified archaeologist to evaluate any cultural resources discovered during site construction activities, and a tribal monitor will accompany a qualified archaeologist to identify, and determine the significance of, cultural resources and/or sacred lands. For all the foregoing reasons, the proposed project would not result in substantial adverse change in the significance of an archaeological resource. Therefore, the impact would be less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less-than-significant impact with mitigation incorporated. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could disturb human remains interred outside formal cemeteries. Implementation of the proposed project would involve short- or long-term physical changes that could disturb human remains.

Location of grave sites and Native American remains can occur outside identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or other graves could be present on project sites and could be uncovered during construction activities.

The State of California recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Codes Sections 7050.5 and 7052 and PRC Section 5097.

These statutes require that, if human remains are discovered during construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the county coroner and Native American Heritage Commission (NAHC) shall be notified immediately, in accordance with PRC Section 5097.98 and California Health and Safety Code Section 7050.5. If the remains are determined by NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94. Compliance with California Health and Safety Code Sections 7050.5 and 7052, and PRC Section 5097 would avoid or minimize the disturbance of human remains and appropriately treat any remains that are discovered. In addition, projects are required to comply with General Plan Policy COS-2.5, which directs the City 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. Therefore, the proposed project would not disturb humans remains, including those interred outside of formal cemeteries, and impacts would be **less than significant with mitigation incorporated**.

Mitigation Measure CR-1: Pre-Excavation Agreement

Before the issuance of a grading permit or ground-disturbing activities, the applicant/owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the applicant/owner and the TCA Tribe for the protection, treatment, and repatriation of 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 the project area 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 Pre-Excavation Agreement, unless ordered to do otherwise by a 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 Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

Mitigation Measure CR-2: Construction Monitoring

Before 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 a qualified archaeologist and Traditionally and Culturally Affiliated Native American monitor (TCA Native American monitor) have been retained at the applicant/owner's or grading contractor's expense to implement the construction monitoring program, as described in the Pre-Excavation Agreement.

The qualified archaeologist and TCA Native American monitor shall be invited to attend all applicable preconstruction meetings with the general contractor and/or associated subcontractors to present the construction monitoring program. The qualified archaeologist and 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 qualified archaeologist and 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 more than 6 inches below the original pre-project ground surface to identify any evidence of potential archaeological or 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 used at the site are either: (1) from existing commercial (previously permitted) sources of materials; or (2) from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the qualified archaeologist and TCA Native American monitor.

The qualified archaeologist 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 Tribe, preferably through email, of the start and end of all ground-disturbing activities.

Before the release of any grading bonds, or before the issuance of any project Certificate of Occupancy, an archaeological monitoring report which describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the qualified archaeologist, along with any TCA Native American monitor's notes and comments received by the qualified archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of Assembly Bill (AB) 52 consultation, to Rincon Band of Luiseño Indians, Pechanga Band of Luiseño Indians, San Luis Rey Band of Mission Indians, or any parties involved in the project-specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City.

Mitigation Measure CR-3: Unanticipated Discovery Procedures

Both the qualified archaeologist and the TCA Native American monitor may temporarily halt or divert ground-disturbing activities if potential archaeological resources or 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. Isolates and clearly non-significant archaeological resources (as determined by the qualified archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the qualified archaeologist and the TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by a responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the qualified archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the applicant/owner and the qualified archaeologist, the culturally appropriate treatment of those resources.

If the qualified archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based upon the provisions of CEQA and California Public Resources Code Section 21083.2(b) with respect to archaeological resources and California Public Resources Sections 21704 and 21084.3 with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological 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, such as, but not limited to, the funding of an ethnographic study and/or a data recovery

plan, as determined by the City in consultation with the qualified archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan, and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the qualified archaeologist and TCA Tribe) and repatriated according to the terms of the Pre-Excavation 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.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the qualified archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the qualified archaeologist does not collect the cultural resources that are unearthed during the ground-disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility in San Diego County and the curation shall be guided by the 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 before 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 TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

Mitigation Measure CR-4: 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 Section 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 2 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. NAHC 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 his/her 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 the 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 NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see PRC Sections 5097.98[e] and 5097.94[k]).

Please review the City's Standard Tribal COA's to ensure they are identical to mitigation measures CR-1 to CR-4:

- 42. The applicant/developer shall comply with the following conditions regarding cultural resources:
 - a. Pre-Excavation Agreement: Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the protection, treatment, and repatriation of 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 Pre-Excavation 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 Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

b. 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 a Qualified Archaeologist and Traditionally and Culturally Affiliated Native American monitor (TCA Native American monitor) have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Pre-Excavation Agreement.

The Qualified Archaeologist and 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 Qualified Archaeologist and 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 Qualified Archaeologist and 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 more than six inches below the original pre-project ground surface to identify any evidence of potential archaeological or 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 Qualified Archaeologist and TCA Native American monitor.

The Qualified Archaeologist 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 Tribe, preferably through e-mail, of the start and end of all ground disturbing activities.

Prior to the release of any grading bonds, or prior to the issuance of any project Certificate of Occupancy, an archaeological monitoring report, which describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the Qualified Archaeologist, along with any TCA Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of Assembly Bill (AB) 52 consultation, to [INSERT TRIBE] or any parties involved in the project specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City.

c. Unanticipated Discovery Procedures: Both the Qualified Archaeologist and the TCA Native American monitor may temporarily halt or divert ground disturbing activities if potential archaeological resources or 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. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the Qualified Archaeologist and the TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the Applicant/Owner and the Qualified Archaeologist, the culturally appropriate treatment of those resources.

If the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based upon the provisions of CEQA and California Public Resources Code Section 21083.2(b) with respect to archaeological resources and California Public Resources Section 21704 and 21084.3 with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological 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, such as, but not limited to, the funding of an ethnographic study and/or a data recovery plan, as determined by the City in consultation with the Qualified Archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan, and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the Qualified Archaeologist and TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by 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.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the Qualified Archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural 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 TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

d. 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)).

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

3.6.1 Environmental Setting

The following sources of energy are used in San Diego County and may be used by the project.

- ▶ Electricity and renewables: In 2002, Senate Bill 1078 established a Renewables Portfolio Standard (RPS) program. The program is jointly implemented by the California Public Utilities Commission and the California Energy Commission and requires all load-serving entities to procure 60 percent of their total electricity retail sales from renewable energy sources by 2030. Most retail sellers met or exceeded their 29 percent interim RPS target in 2018, including all large investor-owned utilities, which provide electricity to 72 percent of all utility customers (CPUC 2019; EIA 2019).
- ▶ Natural gas: While the majority of natural gas consumers in California are residential and small commercial users, these users consume only about 35 percent of natural gas in the state. Larger volume gas consumers, such as utilities for electricity generation and industrial consumers, although fewer in number, consume the remaining 65 percent of natural gas used in the state (CPUC 2020).
- ▶ Petroleum: Petroleum products (gasoline, diesel, jet fuel) are consumed almost exclusively by the transportation sector, which is responsible for almost 90 percent of the petroleum consumed in the state (EIA 2020). In 2015, a total of 15.1 billion gallons of gasoline were sold in California (CEC 2020). To meet CARB regulations, all gasoline and diesel fuel sold in California for motor vehicles is refined to be a specific blend of motor gasoline called California Reformulated Gasoline (EIA 2020).
- ▶ Alternative fuels: Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many alternative transportation fuels (e.g., biodiesel, hydrogen, electricity). Use of alternative fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, AB 32 Scoping Plan).

The San Diego Gas & Electric Company (SDG&E) is a regulated public utility that provides energy service to 3.6 million people in a 4,100-square-mile service area that encompasses 25 cities throughout San Diego and southern Orange Counties, including the City of San Marcos (SDG&E 2018a). SDG&E obtains electricity from a variety of sources, including SDG&E-owned facilities and other private and publicly owned facilities that provide electricity through contracts and agreements. Electricity is generated from a variety of energy sources, including coal, natural gas, hydroelectric, and a mix of other renewable resources (City of San Marcos 2012). In 2017, SDG&E achieved a renewable energy procurement rate of 44 percent (SDG&E 2018b).

In 2011, the San Diego Association of Governments prepared an Energy Roadmap for the City of San Marcos, in collaboration with SDG&E (SANDAG 2011). The roadmap provides a framework for San Marcos to identify ways to save energy in government operations and in the community.

3.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant. Implementation of the proposed project would result in the consumption of energy resources during construction and operation. Energy would be consumed during project construction to operate and maintain construction equipment and transport construction materials. It also would be consumed for worker commutes and material and equipment haul trips. Levels of construction-related fuel consumption were calculated using equipment assumptions consistent with CalEEMod Version 2016.3.2 (CAPCOA 2016) and fuel consumption factors from EMFAC 2014 (CARB 2014). See Appendix D for detailed calculations. An estimated 1,085 gallons of gasoline and 24,909 gallons of diesel would be consumed during project construction, accounting for both on-site equipment use and off-site vehicle travel for worker commutes and haul trips. This one-time energy expenditure required to construct the project would be nonrecoverable. However, energy needs for project construction would be temporary and would not require additional capacity or increase peak or base period demands for electricity or other forms of energy.

Operational energy use would increase electricity and natural gas consumption in the region relative to existing conditions. However, the project would comply with regulatory compliance measures outlined by the State and the City, including but not limited to Title 24 Building Energy Efficiency Standards. Table 3-7 summarizes the estimated energy consumption associated with project operation for the first full year (2023) of operations using CalEEMod Version 2016.3.2 and fuel consumption factors from EMFAC 2014. See Appendix D for detailed calculations.

Table 3-7 Operational Energy Consumption During the First Year of Operation (2023)

Energy Type	Energy Consumption	Units
Electricity	66.1	MWh/year
Natural Gas	67.7	MMBTU/year
Gasoline	25,501	gal/year
Diesel	5,233	gal/year

Notes: MWh/year = megawatt-hours per year; MMBTU/year = million British thermal units per year; gal/year = gallons per year Source: modeled by Ascent Environmental in 2021

The project does not propose any excessive or unnecessary energy consumption beyond what is typical for this type of development. Operation of the project would be typical of this type of land use, requiring electricity for lighting, climate control, kitchen facilities, and miscellaneous appliances. Title 24 Building Energy Efficiency Standards would be integrated into the project to reduce the project's energy demands and increase energy efficiency. The project would increase gasoline and diesel fuel consumption relative to the existing conditions. However, the proposed project's gasoline and diesel consumption would be subject to state and federal regulations regarding fuel efficiency standards for vehicles. The application of these regulations would reduce wasteful, inefficient, and unnecessary use of energy for buildings and transportation. This impact would be **less than significant**.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than significant. As discussed above, the project would comply with all state and local requirements and policies related to the consumption of energy, including but not limited to, Title 24 Building Energy Efficiency Standards, the San Marcos General Plan Conservation Element, and the Energy Roadmap for the City of San Marcos. Title 24 standards establish minimum efficiency standards related to various building features, including appliances, water, and space heating, and cooling equipment, building installation and roofing, and lighting. In addition, SDG&E, which provides energy service to the project site, is subject to California's Renewables Portfolio Standard to increase procurement from eligible renewable energy resource to 33 percent of total procurement by 2020, to 50 percent by 2026, and to 60 percent of total procurement by 2030. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

3.7 GEOLOGY AND SOILS

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.) 				
ii) Strong seismic ground shaking?				\boxtimes
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

3.7.1 Environmental Setting

The City of San Marcos is located in the Peninsular Ranges geomorphic province, which is characterized by northwest-trending mountains and valleys. Elevations range from approximately 1,715 feet above mean sea level south of the City to above 325 feet on the southwest. Underlying geologic formations include alluvium, sedimentary and crystalline rocks, and metavolcanic/crystalline rocks. Central portions of the project area are underlain with young alluvium tonalite "hard" bedrock, eastern portions are underlain with older alluvium deposits, and western portions of the project area are underlain with poorly bedded sandstone, siltstone, and claystone with conglomerate. The Cerro de las Posas

Mountains and the surrounding hills around Twin Oaks Valley are underlain with "hard" metavolcanics rocks with some plutonic crystalline rocks.

There are no known active fault lines in the project area, and the potential for surface fault displacements is considered low. The project area is not located in an Alquist-Priolo Fault Zone, liquefaction zone, or landslide zone (DOC 2020).

Expansive soils are deposited in a loose, highly porous state, then harden and remain dry after deposition. Upon contact with moisture, the weak cementation between the loose soil particles softens and can result in settlement or collapse. Expansive soils are known to occur in the project area (City of San Marcos 2012b).

The project area is located in the western foothills of the Peninsular ranges. The geologic units that underlie the area consist of younger sedimentary deposits that range from 11,000 years to 45 million years old. Paleontological resources are not known to occur in these geologic units; however, fossil localities have been identified in the nearby cities of Vista, Carlsbad, and Oceanside (City of San Marcos 2012b).

3.7.2 Discussion

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No impact. There are no delineated Alquist-Priolo Earthquake Fault Zones in the project area. No impact would occur.

ii) Strong seismic ground shaking?

No impact. No delineated Alquist-Priolo Earthquake Fault Zones or other potentially active faults have been mapped in the project area. **No impact** would occur.

iii) Seismic-related ground failure, including liquefaction?

No impact. No liquefaction zones have been identified in the project area. No impact would occur.

iv) Landslides?

No impact. No landside zones have been identified in the project area. No impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could cause soil erosion and loss of topsoil. Further, the project is required to comply with the SMMC Chapter 17.32, which contains design standards and performance requirements to avoid or reduce excessive erosion. For all the foregoing reasons, implementation of the proposed project would not result in substantial soil erosion of the loss of topsoil. Impacts would be less than significant.

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

No impact. There are no delineated Alquist-Priolo Earthquake Fault Zones, landslide zones, or liquefaction zones identified in the project area. **No impact** would occur.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

No impact. Expansive soils are known to occur in the project area; however, they have not been identified on site. **No impact** would occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No impact. The project proposes to connect to the existing sewer system and does not include installation of any septic system or other form of on-site wastewater disposal. **No impact** would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No impact. The project area is located in the western foothills of the Peninsular ranges. The geologic units that underlie the area consist of younger sedimentary deposits that range from 11,000 years to 45 million years old. Paleontological resources are not known to occur in these geologic units. Therefore, the potential to disturb paleontological or unique geologic features is low. Accordingly, project implementation would not be expected to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. **No impact** would occur.

3.8 GREENHOUSE GAS EMISSIONS

ENV	'IRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
VII	I. Greenhouse Gas Emissions.					
Wo	Would the project:					
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					

3.8.1 Environmental Setting

Greenhouse gases (GHGs) are gases in the earth's atmosphere that trap heat through a phenomenon called the greenhouse effect. Prominent GHGs that contribute to the greenhouse effect are carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The greenhouse effect occurs when solar radiation enters the earth's atmosphere and infrared radiation is absorbed by GHGs rather than being reflected back into space. This trapping of infrared radiation results in the warming of the atmosphere and is responsible for maintaining a habitable climate on earth. However, GHG emissions from human activities have greatly increased GHG concentrations in the atmosphere and caused levels of warming far above natural levels, resulting in global climate change. It is extremely likely that more than half of the observed increase in average global temperature from 1951 to 2010 was caused by anthropogenic (i.e., human-caused) increases in GHG concentrations, along with other anthropogenic forcing (IPCC 2014:5). GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing activities, electricity generation and consumption, residential and commercial on-site fuel use, and agriculture and forestry.

Climate change is a global issue because GHGs are global pollutants and even local GHG emissions contribute to global impacts. Many GHGs have long atmospheric lifetimes, from 1 to several thousand years, and persist in the atmosphere for long enough durations to be dispersed around the globe. Although the lifetime of any particular GHG molecule is dependent on multiple variables and cannot be determined with certainty, scientists have concluded that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration, resulting in a net increase in atmospheric CO₂ (IPCC 2013:467). The quantity of GHGs in the atmosphere that ultimately result in climate change is not precisely known but is enormous; no single project alone would measurably contribute to an incremental change in the global average temperature or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

SDAPCD is the primary agency responsible for addressing air quality concerns in San Diego County but has not developed thresholds of significance or guidance for analysis of GHGs under CEQA. The San Marcos Climate Action Plan (CAP), last updated in 2020, contains a series of strategies designed to reduce greenhouse gases to 42 percent below 2012 levels by 2030. The CAP also provides a screening threshold of 500 metric tons of carbon dioxide equivalent (MTCO₂e) per year as well as a CAP consistency checklist (City of San Marcos 2020). Based on the CAP, a screening threshold of 500 MTCO₂e per year is used to determine significant GHG impacts. The CAP requires only projects that exceed the screening threshold to show consistency with the CAP through completion of the CAP consistency checklist.

FEDERAL REGULATIONS

EPA is the federal agency responsible for implementing the federal Clean Air Act and its amendments. EPA has taken steps to regulate GHG emissions and lent support for state and local agencies' efforts to reduce GHG emissions. In October 2012, EPA and the National Highway Traffic Safety Administration issued rules to reduce GHG emissions and improve corporate average fuel economy standards for light-duty vehicles for model years 2017 and beyond (77 Federal Register 62624).

STATE REGULATIONS

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, establishes total GHG emission targets for the State. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006, AB 32. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that these reductions "shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the Statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020. (c) The [Air Resources Board] shall make recommendations to the Governor and the Legislature on how to continue reductions of GHG emissions beyond 2020." [California Health and Safety Code, Division 25.5, Part 3, Section 38551]

On December 14, 2017, CARB approved the *2017 Climate Change Scoping Plan* (2017 Scoping Plan). The 2017 Scoping Plan lays out the framework for achieving the mandate of SB 32 of 2016 to reduce statewide GHG emissions to at least 40 percent below 1990 levels by the end of 2030 (CARB 2017). On July 11, 2018, CARB announced that California had met its target of reducing GHG emissions to below 1990 levels by 2020 (CARB 2018).

Executive Order B-30-15

On April 20, 2015, Governor Jerry Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011), 52 percent by 2027 (SB 100 of 2018), 60 percent by 2030 (also SB 100 of 2018), and 100 percent by 2045 (also SB 100 of 2018).

LOCAL

San Diego Air Pollution Control District

SDAPCD administers EPA's Prevention of Significant Deterioration and Title V GHG Tailoring Rule through Rule 20.3(d)(3) and Regulation XIV (Title V Operating Permits), respectively. SDAPCD has not developed thresholds of significance or guidance for analysis of GHGs under CEQA.

City of San Marcos General Plan

The City of San Marcos General Plan includes the following goal and policies that pertain to GHG emissions and are relevant to this analysis (City of San Marcos 2012a).

GOAL COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.

- ▶ Policy COS-4.3: Participate in regional efforts to reduce greenhouse gas emissions.
- Policy COS-4.4: Quantify community-wide and municipal greenhouse gas (GHG) emissions, set a reduction goal, identify, and implement measures to reduce GHG emissions as required by governing legislation.
- 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-4.7: As City facilities and services are constructed or upgraded, incorporate energy and resource conservation standards and practices by:
 - Taking a leadership role in implementing programs for energy and water conservation, waste reduction, recycling and reuse and increased reliance on renewable energy.
 - Upgrading City buildings and infrastructure facilities to comply with State of California green building standards.
 - Implementing landscaping that reduces demands on potable water; this may include the use of drought tolerant landscaping and/ or use of well water for irrigation, favoring recycling and energy-efficient products and practices when issuing City purchase agreements.
- ▶ Policy COS-4.8: Encourage and support the generation, transmission, and use of renewable energy.
- Policy COS-4.9: Encourage use and retrofitting of existing buildings under Title 24 of the California Building Energy Code.

City of San Marcos Climate Action Plan

The San Marcos Climate Action Plan (CAP) was last updated in 2020. The CAP contains a series of actions and a CAP checklist designed to reduce greenhouse gases to 42 percent below 2012 levels of 2030.

3.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant. The project would generate GHGs during construction from the use of heavy-duty off-road construction equipment and vehicle use for worker commutes. Emissions related to project operation would primarily occur from employee commutes and transportation of children to and from the project site. The project's construction and operational GHG emissions were estimated using CalEEMod Version 2016.3.2 (CAPCOA 2016). Refer to Appendix E for details. Based on the modeling, construction activity would result in total emissions of 286.5 MTCO₂e over a period of approximately 12 months, and operational activities associated with the project would emit approximately 323.3

MTCO₂e per year. Therefore, neither construction- nor operational-related GHG emissions would exceed the CAP's threshold of 500 MTCO₂e per year. This impact would be **less than significant**.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant. Plans, policies, and regulations adopted for the purpose of reducing GHG emissions are developed with the purpose of reducing cumulative emissions related, primarily, to long-term operational emissions. The San Marcos CAP is consistent with and complementary to statewide legislation and regulatory mandates, and establishes local strategies, measures, and actions to reduce GHG emissions in the City. As described previously, the project would not generate GHG emissions during operation that exceed the CAP's threshold of 500 MTCO₂e per year, which was established to support statewide GHG emission targets. Based on CAP guidance, projects that are projected to emit fewer than 500 MTCO₂e per year would not make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. The CAP checklist is included in Appendix A. Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	Hazards and Hazardous Materials.				
Wo	uld the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				

3.9.1 Environmental Setting

This section describes the environmental setting and impacts related to hazards and hazardous materials. For the purposes of this analysis, the term "hazards" refers to risk associated with such issues as fires, explosions, exposure to hazardous materials, and interference with emergency response plans. The term "hazardous material" is defined in different ways for different regulatory programs. For this analysis, "hazardous material" is defined by the California Health and Safety Code, Section 25501: "because of their quantity, concentration, or physical or chemical characteristics, (they) pose a significant present or potential hazard to human health and safety or to the environment if release into the workplace or the environment."

"Hazardous waste" is a subset of hazardous materials. For this analysis, "hazardous waste" is defined by the California Health and Safety Code, Section 25517, and in the California Code of Regulations, Title 22, Section 66261.2: "because of their quantity, concentration, or physical or chemical characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed." California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and updated specified lists of hazardous material release sites. Table 3-8 includes a summary of known hazardous materials release sites in the vicinity of the project (SWRCB 2020).

Table 3-8 Hazardous Material Release Sites in the Project Area

Site Type	Site Count	Site Status
Leaking Underground Storage Tank (LUST)	74	Case Closed
Cleanup Site	4	Open Remediation
	2	Open Site Assessment
Other Cleanup Program	125	Case Closed
	1	Open Remediation
	3	Open Site Assessment

Source: SWRCB 2020

There are no public airports or private airstrips in the project area. The nearest airport is McClellan-Palomar Airport located approximately 3 miles west of the project area (City of San Marcos 2012a). The project site is within Palomar Airport Influence Area (Review Area 2).

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped Fire Hazard Severity Zones (FHSZs) for the entire state. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as Moderate, High, and Very High. According to CAL FIRE's Fire Resource Assessment Program FHSZ Geographic Information System data, the City of San Marcos is located in a Very High FHSZ (ArcGIS 2019).

3.9.2 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant. Implementation of the proposed project would involve the use of hazardous materials during construction and routine maintenance. However, the proposed project is required to comply with relevant federal, state, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials as well as ensuring the reduction of the potential for humans or the environment to be affected by an accidental release of hazardous materials. Regulations that would be required of those transporting, using, or disposing of hazardous materials include the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Transportation Act; Title 22; California Code of Regulations Title 27; and the California Fire Code, adopted by reference in SMMC Chapter 17.64.

For all the foregoing reasons, implementation of the proposed project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials. Impacts would be **less than significant**.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than significant. As discussed in criterion (a) above, the proposed project would be required to comply with relevant federal, state, and local regulations that require strict adherence to guidelines regarding the safe use,

transportation, and disposal of hazardous materials as well as ensuring the reduction of the potential for humans or the environment to be affected by an accidental release of hazardous materials. Enforcement of these regulatory standards would ensure that project implementation would not create a significant hazard through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment. Impacts would be **less than significant**.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than significant. The proposed project is required to comply with relevant federal, state, and local regulations that require strict adherence to guidelines regarding the safe use, transportation, and disposal of hazardous materials as well as ensuring the reduction of the potential for humans or the environment to be affected by an accidental release of hazardous materials. Because such laws are established to be protective of human health and the environment, compliance with applicable regulations is sufficient to ensure that any hazardous materials used during project implementation would not result in hazardous emissions within one-quarter mile of an existing or proposed school. Enforcement of General Plan policies would also prevent hazardous emissions within a quarter mile of an existing school. For example, General Plan Policy S-4.3 directs the City to require land uses using hazardous materials to be located and designed to ensure that sensitive uses, including schools, are protected. Impacts would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than significant. Sites with the potential to contain soil and/or groundwater contamination are located throughout the project area. The project site is not on a hazardous materials site list. Project implementation would involve ground-disturbing activities, including grading and excavation, and the project could potentially be located on a hazardous materials site. Enforcement of General Plan policies would prevent siting the project on a hazardous materials site. For example, General Plan Policy S-4.1 directs the City to require the assessment of known contaminated sites before reuse or development. For this reason, the proposed project would not create a significant hazard to the public or the environment. Impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact. Implementation of the proposed project would not result in new or relocated residential land uses, other types of noise-sensitive receptors, or new places of permanent employment where residents or workers could be exposed to a safety hazard or excessive noise. The nearest airport, McClellan-Palomar Airport, is located approximately 3 miles west of the project area. Therefore, the proposed project would not expose residents or workers to a safety hazard or excessive noise levels. **No impact** would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant. Implementation of the proposed project would result in construction of a new facility. However, all future driveway improvements would be required to comply with the California Fire Code, adopted by reference in SMMC Chapter 17.64, and SMMC Section 17.64.120, which requires the width of an unobstructed driveway to measure no less than 24 feet to provide adequate access for fire and emergency responders. Therefore, implementation of the proposed project would not physically interfere with an adopted emergency response plan or evacuation plan. The impact would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Less-than-significant impact. The project site is located in a High Fire Hazard Severity Zone (FHSZ) and adjacent to a Very High FHSZ. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation. In addition, enforcement of the SMMC would avoid exposing people or structures to wildland fires. For example, the Community Wildfire Protection Plan (CWPP) prepared by the San Marcos Fire Department and SMMC Section 20.260.060 require all new development in identified community hazard areas to prepare a Fuel Management Plan. The San Marcos Fire Department has determined that a Fuel Management Plan is not required. Further, spark arresters are required on all portable gasoline-powered equipment in wildland areas (SMFD 2020). For all the foregoing reasons, implementation of the proposed project with project design features (setbacks) would not exacerbate wildfire risks. Impacts would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTALISSUES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	Hydrology and Water Quality.				
Wo	uld the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	i) Result in substantial on- or off-site erosion or siltation;				
	ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) Impede or redirect flood flows?				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

3.10.1 Environmental Setting

A hydrology report and Water Quality Management Plan (WQMP) has been prepared by San Dieguito Engineering and is included in Appendix F. The project site is located in the Carlsbad watershed, which covers approximately 210 square miles and contains seven hydrologic areas: Twin Oaks, San Marcos, Agua Hedionda, Loma Alta, Encinas, Buena Vista Creek, and Escondido Creek. Major surface water bodies in the project area include Lake San Marcos, South Lake Reservoir, Discovery Lake, and Jack's Pond (City of San Marcos 2012b). According to the California Department of Water Resources, there is one ground water basin located beneath San Marcos. Basin 9-32 is the only formally recognized basin in the project area (DWR 2003:147).

Flooding hazards in the project area are due to the potential for surface water bodies to overflow. In addition, the Federal Emergency Management Agency has identified 100-year floodplains along San Marcos Creek, the Twin Oaks Valley drainage, and San Marcos Lake (FEMA 2020).

3.10.2 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less-than-significant impact. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could cause soil erosion and contaminate nearby surface water. The WQMP identified specific project design features to control and treat surface water, including water quality basins. Further, the proposed project is required to comply with SMMC Chapter 17.32, which contains design standards and performance requirements to avoid or reduce excessive erosion. Construction and post-construction activities would be required to adhere to various federal, state, and regional water quality standards, such as the Municipal Permit and Construction General Permit. As such, runoff volumes and pollutants leaving the project site during construction and post-construction operations would be substantially reduced through source control, site design, and/or treatment-control best management practices (BMPs) mandated by these permits. Erosion and sediment controls identified in the storm water pollution prevention plan (SWPPP) would substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters, and pollutants in site runoff during construction. For all of the foregoing reasons, implementation of the proposed project would not result in substantial soil erosion that could degrade surface or groundwater quality. The impact would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less-than-significant impact. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and would require the use of water for dust abatement as needed via a water truck. These activities would be temporary and intermittent and would not involve the substantial use of groundwater or otherwise affect recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Furthermore, the proposed project would not involve development of residential communities or other similar types of development or induce population growth in an area that would increase water demand. Therefore, implementation of the proposed project would not decrease groundwater supplies or interfere with groundwater recharge. The impact would be less than significant.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- i) Result in substantial on- or offsite erosion or siltation;

Less than significant. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could cause soil erosion. The project building pad area is proposed to be elevated above the Twin Oaks Creek 100-year floodplain/floodway. Further, the project is required to comply with the SMMC Chapter 17.32, which contains design standards and performance requirements to avoid or reduce excessive erosion. For all of the foregoing reasons, implementation of the proposed project would not result in substantial soil erosion. The impact would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less-than-significant impact. A project drainage study has been completed by Tory Walker Engineering and is included in Appendix F. Project implementation would involve construction activities that would increase the amount of impervious surface that could result in an increase of surface runoff. Further, the project is required to comply with General Plan Policy COS-8.4, which directs the City to require development to protect natural drainage systems through site design, runoff reduction measures, and BMPs consistent with the San Diego Regional Water Quality Control Board Municipal Stormwater National Pollutant Discharge Elimination System Permit. Construction and post-construction

activities would be required to adhere to various federal, state, and regional water quality standards, such as the Municipal Permit and Construction General Permit. As such, runoff volumes and pollutants leaving the site during construction and post-construction operations would be substantially reduced through source control, site design, and/or treatment-control BMPs mandated by these permits. Erosion and sediment controls identified in the project-specific SWPPP would substantially reduce the amount of soil disturbance, erosion, and sediment transport into receiving waters, and pollutants in site runoff during construction. For all of the foregoing reasons, implementation of the proposed project would not increase the rate or amount of surface runoff. The impact would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

Less-than-significant impact. Implementation of the proposed project would result in ground-disturbing activities, including grading and excavation, and could require the use of water for dust abatement as needed via a water truck. These activities would be temporary and intermittent and would not generate permanent water drainage flows. Therefore, implementation of the proposed project could not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No impact would occur.

iv) Impede or redirect flood flows?

Less-than-significant impact. Flooding hazards in the project area are associated with Twin Oaks Creek. Implementation of the proposed project would not place any structures in or adjacent to the creek. Further, the project is required to comply with SMMC Section 17.32.150, which directs the City to deny grading permits in flood hazard areas. Therefore, implementation of the proposed project would not impede or redirect flood flows. The impact would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. Flooding hazards in the project area are associated with Twin Oaks Creek. Implementation of the proposed project would not place any structures in or immediately adjacent to the creek. In addition, implementation of the proposed project would not result in construction of buildings or other facilities or store materials on site where they could be inundated by tsunami, floodwater, or seiche. Further, the proposed project would be required to comply with SMMC Section 17.32.150, which directs the City to deny grading permits in flood hazard areas. Therefore, implementation of the proposed project would not impede or redirect flood flows. **No impact** would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less-than-significant impact. As discussed in criterion (a) above, the proposed project is required to comply with SMMC Chapter 17.32, which contains design standards and performance requirements to avoid or reduce excessive erosion that could impact water quality. In addition, construction projects that disturb 1 acre are required to prepare a SWPPP that demonstrates conformance with applicable best management practices that would be implemented to reduce the amount of surface runoff. Further, the proposed project would not involve development of residential communities or other similar types of development or induce population growth in an area that would increase water demand. Therefore, implementation of the proposed project would not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The impact would be less than significant.

3.11 LAND USE AND PLANNING

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?				\boxtimes
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

3.11.1 Environmental Setting

Land uses in the project area primarily consist of residential, light industrial, commercial, office uses, and recreational and open space. The project site is located in the Richmar neighborhood and has a General Plan designation of Commercial (C). Project site zoning is Light Industrial (L-I). The proposed project is consistent with the existing General Plan designation and conditionally allowed by the zoning, requiring a Conditional Use Permit (CUP).

3.11.2 Discussion

a) Physically divide an established community?

No impact. The proposed project would not result in development that would physically divide a community. Typically, division of an established community could result from the construction of a physical feature, such as a wall, interstate highway, airport, roadway, or railroad tracks, or the removal of a means of access, such as a local road or bridge that could impair mobility or constrain travel in an existing community or between a community and outlying areas. Further, all improvements to roadways would be required to comply with the City's Street Design Standards, which require streets to be designed to current City standards and final pavement approval by the Public Works Director before installation (City of San Marcos 2020). Therefore, implementation of the proposed project would not result in construction of physical barriers that would change the connectivity between developed areas or physically divide an established community. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No impact. The proposed project is consistent with the existing General Plan land use designation and conditionally consistent with the existing zoning. Therefore, the proposed project is consistent with the General Plan and project implementation would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There would be **no impact**.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources.				
Would the project:				
a) 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?				
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				

3.12.1 Environmental Setting

There are no designated MRZ-2 locations in the vicinity of the project site, or areas where there are known mineral resources. MRZ-2 areas are limited to small portions between Double Peak, Mount Whitney, and Franks Peak. In addition, no known mineral resource recovery sites of local importance are discussed in the General Plan or in any other specific land use plan associated with the project area (City of San Marcos 2012b).

3.12.2 Discussion

a) 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?

No Impact. The project site does not contain land designated as MRZ-2 and as a result, project implementation would not result in the loss of a known mineral resource. The proposed project would be required to comply with General Plan Policy COS-2.4, which directs the City to protect known mineral resources, prevent the unnecessary loss of mineral resources, and comply with State of California requirements for mineral resources contained in the State Surface Mining and Reclamation Act. For all these foregoing reasons, implementation of the proposed project would not result in the loss of availability of a known mineral resource and would have **no impact**.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The project site does not contain land designated as MRZ-2 and as a result, project implementation would not result in the loss of availability of a known mineral resource recovery site. The proposed project would be required to comply with General Plan Policy COS-2.4, which directs the City to protect known mineral resources, prevent the unnecessary loss of mineral resources, and comply with State of California requirements for mineral resources contained in the State Surface Mining and Reclamation Act. For all these foregoing reasons, implementation of the proposed project would not result in the loss of availability of a known mineral resource and would have **no impact**.

3.13 NOISE

ENVIRONMENTALISSUES	Sig	otentially gnificant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.Noise.					
Would the project result in?					
a) Generation of a substantial tempora increase in ambient noise levels in t project in excess of standards establ general plan or noise ordinance, or in local, state, or federal standards?	ne vicinity of the shed in the local				
b) Generation of excessive groundbogroundborne noise levels?	rne vibration or			\boxtimes	
c) For a project located within the vic- airstrip or an airport land use plan plan has not been adopted, within public airport or public use airport, v expose people residing or working in to excessive noise levels?	or, where such a two miles of a yould the project				

3.13.1 Environmental Setting

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. Sound is the mechanical energy of vibrations, transmitted by a pressure wave through a solid, liquid, or gaseous medium (e.g., air). Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise. Noise is typically expressed in decibels (dB) because this logarithmic unit best corresponds to the way the human ear interprets sound pressures. However, the decibel scale does not adequately characterize how humans perceive noise because the human ear is not equally sensitive to loudness at all frequencies (i.e., pitch) in the audible spectrum. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels or dBA) can be computed based on this information. Definitions of acoustical terms used in this section are provided in Table 3-9.

Noise can be generated by many sources, including mobile sources such as automobiles, trucks, and airplanes and stationary sources such as activity at construction sites, machinery, and commercial and industrial operations. As sound travels through the atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on a variety of factors, including geometric spreading (i.e., spherical, or cylindrical spreading), ground absorption (i.e., hard versus soft sites), atmospheric conditions (e.g., wind direction and speed, air temperature, humidity, turbulence), and shielding by natural or human-made features.

Because decibels are logarithmic units, they cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) corresponds to a 3-dB increase in sound. In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013a:2-10).

Table 3-9 Acoustic Term Definitions

Term	Definition
Noise	Sound that is loud, disagreeable, unexpected, or unwanted.
Decibel (dB)	The unit used to measure the intensity of a sound or noise by comparing it with a given level on a logarithmic scale.
A-weighted decibel (dBA)	A-weighted decibels are an expression of the relative loudness of sound or noise as perceived by the human ear. In the A-weighted system, decibel values are weighted to consider human sensitivity to different frequencies. The human ear is more sensitive to high audio frequencies.
Equivalent Noise Level (L _{eq})	The Equivalent Noise Level represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period. For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq} , is the energy average of sound levels occurring during a 1-hour period.
Maximum Noise Level (L _{max})	The highest instantaneous noise level during a specified time period.
Community Noise Equivalent Level (CNEL)	The 24-hour L_{eq} with a 10-dB penalty applied during the noise-sensitive hours from 10 p.m. to 7 a.m., which are typically reserved for sleeping, and an additional 5-dB penalty applied during the noise-sensitive hours from 7 p.m. to 10 p.m., which are typically reserved for evening relaxation activities.

Sources: Caltrans 2013a; FTA 2018

The predominant noise source in the project vicinity is vehicle traffic along local roadways, including Twin Oaks Valley Road, Borden Road, and Woodward Street. Other noise sources include rail traffic along the North County Transit District Sprinter rail line, noise associated with operations of the commercial/light industrial land uses to the west and south of the project site (e.g., parking lot activity, delivery trucks), and noises common in urban environments such as construction, police, and fire department sirens, landscaping equipment, barking dogs, high altitude aircraft, and car alarms (City of San Marcos 2012a). Average daytime ambient noise levels in the City of San Marcos range from 57 dB to 72 dB L_{eq}, with maximum noise levels ranging from 71 dB to 90 dB L_{max} (City of San Marcos 2012b).

GROUND VIBRATION

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., operating factory machinery) or transient in nature (e.g., explosions).

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2018; Caltrans 2013b). PPV and RMS vibration velocity are normally described in inches per second (in/sec). Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB) to evaluate human response to vibration by compressing the range of numbers required to describe vibration (FTA 2018).

The typical background vibration-velocity level in residential areas such as the project area is approximately 50 VdB. Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration is rarely perceptible. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2018).

SENSITIVE RECEPTORS

Noise-sensitive land uses are generally considered to include those uses for which noise exposure could result in health-related risks to individuals, as well as uses for which quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both

interior and exterior noise levels. Vibration-sensitive receptors include buildings that could experience structural damage, as well as land uses where vibration could cause human annoyance (e.g., residences).

The nearest noise-sensitive receptors to the project site are single-family residences on the west side of Twin Oaks Valley Road, located approximately 165 feet northwest of the nearest project site boundary. Additional residential land uses are located east of the project site: single-family residences on the west side of Golf Glen Drive and multifamily residences on the west side of Woodward Street. These residences are located approximately 315 and 255 feet east of the nearest project site boundary, respectively. All of these residences are also considered vibration-sensitive receptors with regard to human annoyance and structural damage. Other buildings surrounding the project site, the closest of which is the commercial building located approximately 40 feet south of the project site, are considered vibration-sensitive receptors with regard to structural damage but not human annoyance due to their intended use.

AIRPORTS AND PRIVATE AIRSTRIPS

McClellan-Palomar Airport is roughly 6.5 miles west of the project site. The project site is located entirely outside of the present and future 60 dBA CNEL noise contour for McClellan-Palomar Airport; therefore, airport operations do not substantially affect the ambient noise environment of San Marcos (City of San Marcos 2012a).

3.13.2 Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less-than-significant impact. Noise would be generated by the project during construction and operation, which are discussed separately below.

Temporary Construction Noise

The operation of heavy equipment during project construction would generate noise, resulting in a temporary increase in noise levels at nearby sensitive receptors. Project construction is anticipated to begin in 2022 and would occur over approximately 12 months. Construction activities would include site preparation and grading, utility trenching, paving, building construction, and landscaping. No pile driving or demolition would occur, and all construction staging areas would be located on site.

Noise levels would fluctuate throughout the duration of project construction at individual receptors, depending on the type, number, and duration of usage of construction equipment operated, as well as the distances from construction activity to noise-sensitive receptors and existing ambient noise levels. The types of heavy equipment used throughout various stages of construction would include graders, scrapers, excavators, pavers, rollers, front loaders, lifts, welders, and haul trucks, which generate noise levels ranging from 73 to 85 dBA at 50 feet (FHWA 2006:3). Noise modeling assumed simultaneous operation of three pieces of heavy construction equipment (a grader, an excavator, and a front loader) operating at the boundary of the project site. Table 3-10 shows the level of construction noise exposure at the nearest noise-sensitive receptors based on the conservative modeling scenario. See Appendix G for detailed calculations.

As shown above in Table 3-10, outdoor noise levels at various residential receptors would range from 63.6 to 69.3 dBA L_{eq} , and indoor noise levels would range from 39.6 to 45.3 dBA L_{eq} . SMMC Section 10.24.020.b.9 prohibits construction activity that occurs outside the allowed hours of 7 a.m. to 6 p.m., Monday through Friday, and 8 a.m. to 5 p.m. on Saturdays. However, the San Marcos Municipal Code does not include specific standards for construction noise. In lieu of specific City standards, the County of San Diego's construction noise standard of 75 dBA, specified in Section 36.409 of the San Diego County Code, was applied.

Table 3-10 Construction Noise Levels at Sensitive Receptors

Receptor	Exterior Noise Level (dBA L _{eq}) ¹	Indoor Noise Level (dBA L _{eq}) ²
Single-family residences west of Twin Oaks Valley Road	69.3	45.3
Single-family residences west of Golf Glen Drive	63.6	39.6
Multifamily residences west of Woodward Street	66.0	42

Notes: dBA = A-weighted decibel; Leq = noise equivalent level

- Modeling for each construction activity assumed simultaneous operation of three pieces of heavy construction equipment: a grader, an excavator, and a front loader. It was assumed that the sound wall surrounding the single-family residences west of Twin Oaks Valley Road would provide an additional 5-dBA decrease in noise level at these receptors. See Appendix G for detailed calculations and assumptions.
- ² Indoor noise level calculations assumed an exterior-to-interior noise level reduction of 24 dBA provided by buildings with the windows closed (EPA 1978:11).

Sources: modeled by Ascent Environmental in 2021

Noise generated by construction activities would be temporary and periodic in nature and would only occur during daytime hours when people are less sensitive to noise. Construction activities would only occur between 7:00 a.m. and 6:00 p.m., Monday through Friday, and from 8:00 a.m. to 5:00 p.m. on Saturdays, pursuant to SMMC Section 10.24.020.b.9. As shown above in Table 3-10, during these hours of construction, the noise level generated by construction equipment would not exceed the applicable construction noise standard of 75 dBA at nearby sensitive receptors.

Long-Term Operational Noise

Vehicle trips generated by parents, employees, and other visitors to the project site would result in an increase in average daily traffic volumes and associated increases in traffic noise levels along affected roadway segments near the project site. The project would generate approximately 835 average daily trips, with 71 inbound and outbound trips during the morning peak hour and 75 inbound and outbound trips during the afternoon peak hour (Linscott, Law & Greenspan 2021). To analyze the impact of project-generated transportation noise sources, traffic volumes and their correlating noise levels under existing and existing-plus-project conditions were modeled for all nearby affected roadway segments. Refer to Appendix G for detailed traffic noise modeling input parameters. The City's exterior standard for transportation noise sources is 60 dBA CNEL for single-family residences (City of San Marcos 2012a). Based on traffic noise modeling, single-family receptors along Twin Oaks Valley Road and Borden Road would be exposed to noise levels greater than 60 dBA CNEL. However, the existing noise level along these roadways currently exceeds the standard. Therefore, an incremental noise increase analysis is most applicable to determine the effect of roadway noise on these receptors. It is generally accepted that a change of 3 dBA is barely perceptible, a change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as twice or half as loud to the average human ear (Caltrans 2013a:6-5). Based on the modeling conducted, the addition of project-generated traffic to the surrounding roadway network would not result in any of the roadway study segments experiencing noise increases greater than 0.7 dBA, an increase that would be imperceptible to any person.

The project would provide surface parking throughout the project site with a total of 44 parking spaces available. Noise sources associated with parking lots are generally short-term and can include car engines revving or idling, tires squeaking, car alarms, car horns, doors slamming, and people talking. Parking lot activity would be greatest during children's pick-up and drop-off times at the beginning and end of the day. Operational hours would be five days per week from 7 a.m. to 6 p.m., with occasional on-site activities occurring on select weekends. The parking lots would be set back approximately 150 feet from the nearest noise-sensitive receptors (single-family residences west of Twin Oaks Valley Road) and be used during daytime operating hours. At this distance, the parking lot would generate a noise level of 39 dBA L_{eq} at the nearest sensitive receptors, which would not exceed the City's daytime (7 a.m. to 10 p.m.) noise standard of 60 dBA L_{eq} for single-family residences. The noise level at more distant receptors would be lower because noise attenuates with distance. See Appendix G for detailed calculations, which are based on Federal Transit Administration (FTA) guidance. Therefore, noise generated by parking lot activity would not expose any off-site receptors to excessive noise levels that could exceed the applicable noise standard or disturb people during the sensitive times of the day.

The project would include two large outdoor play areas, one on the northern side of the proposed building (identify approx. size) and one on the southern portion of the project site (identify approx. size). Children playing outside would generate

noise, but such noise would be periodic in nature, and use of the facility would be limited to the less noise-sensitive daytime hours. The proposed onsite playground would be located approximately 190 feet from the nearest residential building (single-family residence west of Twin Oaks Valley Road). Children playing generate a noise level of approximately 67.8 dBA L_{eq} at 36 feet from the source (Ascent Environmental 2015). At 190 feet from the edge of the playground, the noise level would attenuate to 53 dBA L_{eq}, which would not exceed the City's daytime (7 a.m. to 10 p.m.) noise standard of 60 dBA L_{eq} for single-family residences. The project will also be meeting the 64 dBA noise threshold for the industrial properties to the south of the site. The noise level at more distant receptors would be lower because noise attenuates with distance. See Appendix G for detailed calculations. Therefore, this noise source would not expose any off-site receptors to excessive noise levels that would exceed the applicable standard or disturb people during the sensitive times of the day.

Impact Summary

Construction activities associated with the project would occur during the less sensitive daytime hours, as required in the San Marcos Municipal Code, and would not expose nearby receptors to noise levels that exceed the applicable construction noise standard. Project operation would not expose off-site sensitive receptors to excessive traffic or other operational noise that would exceed City standards or disturb residents during the sensitive evening and nighttime hours. Therefore, this impact would be **less than significant**.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant. Project construction would not involve the use of ground vibration-intensive activities, such as pile driving and blasting. Activities involving pile driving and blasting typically generate the highest vibration levels compared to other construction methods and are therefore of greatest concern when evaluating construction-related vibration impacts. Pieces of equipment that generate lower levels of ground vibration, such as graders, would be used during construction. Operation of a small bulldozer, which is similar to a grader, generates a vibration level of 0.003 in/sec PPV and 58 VdB at 25 feet (FTA 2018:184). The standard recommended by the California Department of Transportation (Caltrans) with respect to the prevention of structural damage to buildings is 0.5 in/sec PPV for new residential buildings and modern industrial/commercial buildings (Caltrans 2013b:38). The FTA's vibration impact criteria with respect to human response is 80 VdB for residential uses (FTA 2018:126). Grading activities occurring as close as 5 feet to a building would not cause structural damage (i.e., would not exceed the threshold of significance of 0.5 in/sec PPV for structural damage). In addition, human annoyance due to vibration generated by grading activities would only occur at extremely close distances (i.e., within 5 feet). Refer to Appendix G for detailed vibration modeling calculations. The nearest vibration-sensitive receptor with respect to structural damage (commercial building south of the project site) is located approximately 40 feet away from the project site. The nearest vibration-sensitive receptor with respect to human annoyance (single-family residence west of Twin Oaks Valley Road) is located approximately 150 feet away from the project site. Thus, project construction would not result in vibration levels at sensitive receptors exceeding Caltrans- or FTA-recommended standards with respect to the prevention of structural damage and human annoyance, respectively. Therefore, there would be no adverse vibration effects to off-site receptors. This impact would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. The project is not located in an airport land use plan area or within 2 miles of a public airport or public use airport. Additionally, the project is not located within 2 miles of a private airstrip. The closest airport to the project site is McClellan-Palomar Airport, which is roughly 6.5 miles west of the project site. The project site is located entirely outside of the present and future 60 dBA CNEL noise contour for McClellan-Palomar Airport, and thus, airport operations do not substantially affect the ambient noise environment of San Marcos (City of San Marcos 2012a). Therefore, implementation of the proposed project would not expose people residing or working in the project area to excessive airport-related noise levels. **No impact** would occur.

3.14 POPULATION AND HOUSING

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing.				
Would the project:				
a) 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)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

3.14.1 Environmental Setting

The City of San Marcos and surrounding San Diego County unincorporated areas have a total population of approximately 89,933. Between 2000 and 2010, the City's population increased from 54,977 to 83,781, or by approximately 52 percent. Population growth in the City between 1980 and has significantly outpaced San Diego County as a whole. Growth occurred primarily due to the availability of vacant land, land constraints in other areas of the county, and the establishment of Palomar Community College and California State University San Marcos (City of San Marcos 2012b). The 2010 Census reported a total of 27,202 households, with an average household size of approximately 3 people and an average family size of approximately 3.5 people. Approximately 73 percent (19,811) of households were family households.

In 2010 the U.S. Census Bureau reported that the City of San Marcos had a total of 28,641 housing units with an occupancy rate of 27,202 housing units, or 95 percent. Approximately 17,094 or 63 percent of the occupied units were owner-occupied housing units, 607 housing units or approximately 2 percent were rented, and 361 or approximately 1 percent were for sale. Sold, not occupied housing units, seasonal, recreational, or occasional users, and miscellaneous vacancies accounted for the remaining approximately 2 percent of vacant housing units (U.S. Census Bureau 2011).

3.14.2 Discussion

a) 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)?

Less-than-significant impact. Implementation of the proposed project would not induce population growth directly or indirectly, because the project does not propose new housing or changes to policies or regulations related to land use or residential zoning. This type of project is a small construction project, which would not require a large construction crew. Furthermore, construction workers would likely be from the San Diego or southwest Riverside County regions, and a permanent, substantial relocation of workers would not be required. See the project description for a discussion of project staffing. Therefore, implementation of the proposed project would not result in substantial population growth or employment growth in the project area. The impact would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. The project site is currently vacant. Implementation of the proposed project would not displace people or housing because the project does not propose new housing or changes to policies or regulations related to land use or residential zoning. Therefore, implementation of the proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **No impact** would occur.

3.15 PUBLIC SERVICES

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) 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?			\boxtimes	
Police protection?			\boxtimes	
Schools?			\boxtimes	
Parks?			\boxtimes	
Other public facilities?			\boxtimes	

3.15.1 Environmental Setting

The San Marcos Fire Department (SMFD) is the agency responsible for providing emergency services in the event of a fire emergency. SMFD is a full-service department, operating four stations and one regional emergency services training facility. Fire facility locations are as follows: Fire Station #1, 180 West Mission Road; Fire Station #2, at 1250 South Rancho Santa Fe Road Fire Station #3, 404 Woodland Parkway; Fire Station #4, 204 San Elijo Road; training facility, 184 Santar Place. Fire Station #1 is the most proximal to the project site. The fire department is classified as an Insurance Office Services ISO Class 1 rating and provides services to the City of San Marcos and the San Marcos Fire Protection District, which covers an area of 33 square miles and a population of approximately 95,000 residents. The department provides a variety of services to the community, including fire suppression; rescue; emergency medical services, including Advanced Life Support 911 response and transport services; fire prevention; vegetation management; public education; emergency preparedness; and trauma support. In addition, SMFD protects and manages several thousand acres of wildland and wildland-urban interface areas. The fire department maintains the following: four primary fire engines, three brush engines, one primary Tiller truck, five primary ambulances, one trail rescue vehicle, four reserve fire engines, six command vehicles, one reserve truck, and three reserve ambulances. The department also cross-staffs three wildland fire engines and a state of California Office of Emergency Services wildland fire engine (City of San Marcos 2012b; SMFD 2019).

The City of San Marcos contracts with the San Diego County Sheriff's Department for law enforcement services, including patrol, traffic, and investigative services. The San Diego County Sheriff's San Marcos Station is located at 182 Santar Place in San Marcos and serves approximately 100 square miles of territory, including the City of San Marcos and the unincorporated areas around San Marcos and Escondido. The patrol deputies are responsible for all general law enforcement calls for services in the contract area, 24 hours per day, 365 days per year. The County of San Diego's Child Protective Services, Adult Protective Services, and Juvenile Probation personnel also operate out of the San Marcos Sheriff's Station. The Sheriff's Station also has access to specialized detective units to handle specific crimes such as homicides, bomb/arson, financial crimes, child abuse, and narcotics. The San Marcos Sheriff's Station is staffed with 80 sworn officers,

10 professional staff, and approximately 30 retired senior volunteer patrol members. There are approximately 0.84 sworn officers per 1,000 residents in the project area (City of San Marcos 2012b; SANDAG 2019; Brown 2019).

Primary education (grades kindergarten through 12) in the City is served by the San Marcos Unified School District. The award-winning district includes 10 elementary schools, three middle schools, four high schools, two schools that provide transitional kindergarten through eighth grade, and one adult education school. Three charter schools are located in San Marcos, separate from the public school system, including Bayshore Prep, High Tech High, and High Tech Middle School(?) North County (SMUSD 2019, 2020).

The City operates a number of other facilities which include various government buildings, a library, and parks and recreational facilities. The San Marcos Library is operated by the County of San Diego. It is located at 2 Civic Center Drive, on the campus with City Hall and the Community Center. The library operates Monday through Thursday from 9:30 a.m. to 8 p.m., Friday and Saturday from 9:30 a.m. to 5 p.m., and Sunday from 12 p.m. to 5 p.m. See Section 3.16, "Recreation," for a description of the City of San Marcos existing parks and recreational facilities.

3.15.2 Discussion

a) 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?

Impacts to fire protection are less that significant with mitigation (annexation to CFD 2001-01 and CFD 98-011A#1.

Police protection?

Less than significant with Mitigation. Impacts to police protection are less that significant with mitigation (annexation to CFD 2001-01.

Schools

Less than significant with mitigation. Impacts to schools are less than significant with payment of established school impact fees.

Parks?

Less than significant with mitigation. Impacts to schools are less than significant with the payment of established park fees.

Other public facilities?

Less-than-significant impact. Implementation of the proposed project includes development of a childcare facility that could require fire and/or police services. As discussed in Section 3.14, "Population and Housing," the proposed project would not induce population growth that would generate new students in the community or new residents who would require school services, new or expanded park facilities, or other public facilities. Therefore, impacts would be less than significant.

3.16 RECREATION

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation.				
Would the project:				
a) 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?				
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				

3.16.1 Environmental Setting

The City of San Marcos maintains several types of parks: community parks, which serve the entire City; neighborhood parks, which are located near schools; and mini-parks, which are small public spaces. San Marcos has 340.05 acres of developed parkland, recreational facilities, and trails located within the City's corporate limits. This acreage includes approximately 149 acres of neighborhood parks, 98 acres of community parks, 20 acres of mini-parks, and 3 acres of other recreational facilities. In addition to parks, the City maintains 14 recreational facilities and an extensive 72-mile-long trail network with urban trails, multi-use trails, and soft-surface trails used for walking, hiking, biking, running, and horseback riding. Approximately 12 percent of the City's acreage, or 2,499 acres, are designated as open space or preserves (City of San Marcos 2012a). The City has a parkland minimum standard of 5 acres of public parks and recreational facilities per 1,000 residents. In 2010, San Marcos had an existing parkland ratio of approximately 4 acres per 1,000 residents and the planning area had a ratio of approximately 3.8 acres per 1,000 residents (City of San Marcos 2012b).

3.16.2 Discussion

a) 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?

No impact. Implementation of the proposed project would not increase the use of recreational facilities to the extent that substantial deterioration would occur. Typically, this impact occurs when a project induces population growth, such as new development or a business that would necessitate a large number of new employees. Implementation of the proposed project would not include the construction of new housing or commercial development. In addition, the number of construction workers needed to construct the project would be minimal and would not substantially increase the use of existing recreational facilities. Therefore, **no impact** would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No impact. The proposed project would not include development of residential communities or other similar types of development or induce population growth that would require construction or expansion of recreational facilities. Therefore, **no impact** would occur.

3.17 TRANSPORTATION

ENVIRONMENTALISSUES	Potentially Significant Impact	Significant with	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinand addressing the circulation system, inclu roadway, bicycle, and pedestrian facilities	ding transit,			
b) Conflict or be inconsistent with CEQA section 15064.3, subdivision (b)?	Guidelines			
c) Substantially increase hazards due to design feature (e.g., sharp curves or intersections) or incompatible uses equipment)?	dangerous			
d) Result in inadequate emergency access?			\boxtimes	

3.17.1 Environmental Setting

A Traffic Impact Assessment was prepared by Linscott, Law & Greenspan and is included in Appendix H. The transportation system in the City consists of highways, streets, pedestrian pathways, transit routes, and bikeways. The circulation system is connected to the larger regional network which includes SR 78, I-5, and I-15. SR 78 carries west-and eastbound travel lanes to I-5 and I-15 and provides access to Southern California destinations. SR 78 can be accessed throughout the project area via South Rancho Santa Fe Road, Las Posas/Via Vera Cruz, San Marcos Boulevard, Twin Oaks Valley Road, East Barham Drive/Woodland Parkway, and Nordahl Road (City of San Marcos 2012b).

Public transportation services include the public bus service and SPRINTER light rail service operated by the North County Transit District. Bicycle facilities in the project area are concentrated along major arterials such as Rancho Santa Fe Road, San Marcos Boulevard, Twin Oaks Valley Road, Mission Road, and Barham Drive and along the SPRINTER corridor. Pedestrian facilities are primarily developed as part of the existing roadway system in the project area and are located along major transit routes (City of San Marcos 2012b).

The project site is located on North Twin Oaks Valley Road, north of Windy Way. North Twin Oaks Valley Road transitions to a two-lane median-divided street north of the project site.

3.17.2 Discussion

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than significant. Implementation of the proposed project would not result in long-term operational increases in vehicular traffic along roadways in the project area.

Although not required by CEQA, a summary of the intersection and street segment operational characteristics are included here for informational purposes. The proposed project would generate 835 average daily trips with 71 trips in the AM peak hour and 75 in the PM peak hour. None of the evaluated intersections or street segments would operate at unacceptable levels of service in the interim and horizon years with project implementation.

The City of San Marcos strives to maintain intersection and roadway segment operations based on level of service (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 preproject conditions under each scenario:

- Triggers an intersection operating at acceptable LOS to operate at unacceptable LOS and increases the delay by more than 2.0 seconds.
- ▶ Increases the delay for a study intersection that is already operating at unacceptable LOS by more than 2.0 seconds.
- ► Triggers a roadway segment operating at acceptable LOS to operate at unacceptable LOS and increases the volume-to-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 by more than 0.02.

Existing intersection operations are shown in Table 3-11, with existing street segment operations shown in Table 3-12.

Table 3-11 Existing Intersection Operations

Intersection	Control Time	Peak Hour	Existing		
intersection	Control Type	Peak nour	Delay ^a	LOS b	
1. Twin Oaks Valley Road / Future Project Driveway (North)	c	AM PM	_ _	_ _	
2. Twin Oaks Valley Road / Windy Way / Future Project Driveway (South)	Signal	AM PM	9.1 7.3	А	
3. Windy Point Drive / Borden Road	Signal	AM PM	13.4 13.8	В	
4. Twin Oaks Valley Road / Borden Road	Signal	AM PM	48.8 47.8	D	
5. Woodward Street / Borden Road	Signal	AM PM	28.6 30.2	С	

^a Source: LLG. Average delay expressed in seconds per vehicle

Table 3-12 Existing Street Segment Operations

Street Segment	Classification Capacity (LOS E) a		ADT b	LOS¢	V/C ^d
Borden Road					
Windy Point Drive to Twin Oaks Valley Road	4-Lane Secondary Arterial	30,000	13,880	В	0.463
Twin Oaks Valley Road to Woodward Street	4-Lane Secondary Arterial	30,000	11,820	В	0.394
Twin Oaks Valley Road					•
Windy Way to Borden Road	4-Lane Major Arterial	40,000	19,290	В	0.482
Borden Road to Richmar Avenue	4-Lane Major Arterial	40,000	26,500	С	0.663

^a Source: LLG. Capacities based on based on the City of San Marcos's Roadway Classification, Level of Service, and ADT Table (see Appendix B)

b Level of service

^c Intersection does not exist under Existing conditions

^b Average Daily Traffic Volumes

^c Level of service

^d Volume to capacity

Interim year intersection and street segment operations are shown in Tables 3-13 and 3-14, respectively.

Table 3-13 Interim Year Intersection Operations

ludana at'an	Control	Peak	Interim Year V	Vithout Project	Interim Year	With Project	A C	Substantial
Intersection	Туре	Hour	Delay ^a	LOS b	Delay	LOS	Δ°	Effect?
1. Twin Oaks Valley Road / Future Project	MSSC d	AM	_	_	12.9	В	1	No
Dwy (N)		PM	_	_	13.8	В	1	No
2. Twin Oaks Valley Road / Windy Way /	Signal	AM	9.4	А	22.9	С	13.5	No
Future Project Dwy (S)		PM	7.6	А	22.5	С	14.9	No
3. Windy Point Drive / Borden Road	Signal	AM	13.6	В	13.6	В	0.0	No
		PM	14.2	В	14.2	В	0.0	No
4. Twin Oaks Valley Road / Borden Road	Signal	AM	53.7	D	55.3	E	1.6	No
		PM	51.4	D	53.0	D	1.6	No
5. Woodward Street / Borden Road	Signal	AM	29.6	С	29.8	С	0.2	No
		PM	31.5	С	31.9	С	0.4	No

^a Source: LLG. Average delay expressed in seconds per vehicle

Table 3-14 Interim Year Street Segment Operations

Church Commont	Capacity	Capacity Interim Year WithoutProject		Interim Year WithProject			Λ.	Substantial	
Street Segment	(LOS E)a	ADT ^b	LOSc	V/C ^d	ADT	LOS	V/C	Δe	Effect?
Borden Road									
Windy Point Drive to Twin OaksValley Road	30,000	14,880	С	0.496	14,960	С	0.499	0.003	No
Twin Oaks Valley Road toWoodward Street	30,000	12,590	В	0.420	12,720	В	0.424	0.004	No
Twin Oaks Valley Road									
Windy Way to Borden Road	40,000	22,310	С	0.558	22,850	С	0.571	0.014	No
Borden Road to Richmar Avenue	40,000	28,810	С	0.720	29,140	С	0.729	0.008	No

^a Source: LLG. Capacities based on City of San Marcos's Roadway Classification Table

b Level of service

^c Δ denotes the increase in delay due to project

^d Intersection does not exist under without Project conditions. Minor-Street Stop-Control assumed under with Project conditions. Worst-case movement delay reported.

^b Average Daily Traffic Volumes

^c Level of service

d Volume to capacity

 $^{^{\}rm e}~\Delta$ denotes a project-induced increase in the V/C ratio

Horizon year intersection and street segment operations are shown in Tables 3-15 and 3-16 respectively.

Table 3-15 Horizon Year Intersection Operations

lada una adda u	Control	Peak	Horizo	n Year	Horizon Year	With Project	٨٥	Substantial
Intersection	Туре	Hour	Delay ^a	LOS b	Delay	LOS	Δ ^c	Effect?
1. Twin Oaks Valley Road / Future Project	MSSC ^d	AM			12.0	В	ı	No
Driveway (N)		PM			12.7	В	ı	No
2. Twin Oaks Valley Road / Windy Way /	Signal	AM	10.6	В	22.7	С	12.1	No
Future Project Driveway (S)		PM	8.3	Α	21.4	С	13.1	No
3. Windy Point Drive / Borden Road	Signal	AM	14.9	В	14.9	В	0.0	No
		PM	15.8	В	15.8	В	0.0	No
4. Twin Oaks Valley Road / Borden Road	Signal	AM	59.9	E	60.9	E	1.0	No
		PM	60.1	E	61.6	E	1.5	No
5. Woodward Street / Borden Road	Signal	AM	32.7	С	33.2	С	0.5	No
		PM	34.9	С	35.1	D	0.2	No

^a Source: LLG. Average delay expressed in seconds per vehicle

Table 3-16 Horizon Year Street Segment Operations

Church Commont	Capacity	Horizon Year			Horizo	n Year With	٨٥	Substantial	
Street Segment	(LOS E) a	ADT b	LOSc	V/C ^d	ADT	LOS	V/C	Δe	Effect?
Borden Road Windy Point Drive to Twin Oaks Valley Road	30,000	16,020	С	0.534	16,100	С	0.537	0.003	No
Twin Oaks Valley Road to Woodward Street	30,000	12,320	В	0.411	12,450	В	0.415	0.004	No
Twin Oaks Valley Road Windy Way to Borden Road	40,000	24,850	С	0.621	25,390	С	0.635	0.014	No
Borden Road to Richmar Avenue	40,000	32,880	D	0.822	33,210	D	0.830	0.008	No

^a Source: LLG. Capacity based on roadway classification operating at LOS E

The proposed project would not result in a substantial effect to any of the above intersections and street segments.

Project construction activities could result in temporary lane closures on Twin Oaks Valley Road, which could temporarily disrupt traffic operations; however, any lane closures would be accompanied by traffic control signage and flaggers. Therefore, implementation of the proposed project would not adversely affect the performance of the circulation system and would not conflict with any applicable transportation plans, ordinances, or policies. This impact would be **less than significant**.

b Level of service

^c Δ denotes the increase in delay due to Project

^d Intersection does not exist under without Project conditions. Minor-Street Stop-Control assumed under with Project conditions. Worst-case movementdelay reported.

^b Average Daily Traffic

^c Level of service

^d Volume to capacity

^e Δ denotes a project-induced increase in the V/C ratio

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles traveled?

Less-than-significant impact. SB 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. The Office of Administrative Law approved (on December 28, 2018) comprehensive updates to the CEQA Guidelines (including at Section 15064.3[b]) that included removing level of service as a measure of transportation impacts under CEQA and replacing it with VMT. A "vehicle mile traveled" is defined as one vehicle traveling on a roadway for 1 mile. Pursuant to State CEQA Guidelines Section 15064.3(c), this change in analysis is required beginning July 1, 2020. According to OPR's Technical Advisory on evaluated transportation impacts in CEQA, projects that generate or attract fewer than 110 vehicle trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018). This section of the IS/MND relies on the City of San Marcos VMT Guidelines and OPR's Technical Advisory for VMT threshold.

As described in Section 3.14, "Population and Housing," implementation of the proposed project would not induce substantial population or employment growth in the project area; therefore, it would not generate substantial additional VMT over the long term. The proposed project meets the VMT screening criteria of "local serving neighborhood public facility/school" less than 50,000 square feet. As a result, a VMT analysis is not required.

Therefore, project implementation would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) and the impact would be **less than significant**.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less-than-significant impact. Implementation of the proposed project would result in ground-disturbing activities, including grading and excavation, and could result in minor alteration to North Twin Oaks Valley Road. Site access is proposed via two private driveways off Twin Oaks Valley Road, requiring minor reconfiguration of the new intersection and traffic signals with Windy Way and All future roadway improvements would be required to comply with the City's Street Design Standards, which require streets to be designed to current City standards and final pavement approval by the Public Works Director before installation (City of San Marcos 2020). Therefore, implementation of the proposed project would not substantially increase hazards due to a geometric design feature. The impact would be less than significant.

d) Result in inadequate emergency access?

Less-than-significant impact. The project proposes to provide two ingress/egress points via North Twin Oaks Valley Road. All future roadway improvements would be required to comply with the California Fire Code, adopted by reference in SMMC Chapter 17.64, and SMMC Section 17.64.120, which requires the width of an unobstructed roadway to measure no less than 24 feet to provide adequate access for fire and emergency responders. Therefore, the proposed project would not result in inadequate emergency access. The impact would be less than significant.

3.18 TRIBAL CULTURAL RESOURCES

ENV	RONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact			
ΧV	II. Tribal Cultural Resources.							
con	a California Native American tribe requested sultation in accordance with Public Resources Code tion 21080.3.1(b)?		Yes		No			
Pub in t	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:							
a)	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)?							
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.							

3.18.1 Environmental Setting

A cultural resources assessment was prepared for the proposed project by ASM Affiliates and is included in Appendix C. Lands in the project area were historically inhabited by Takic-speaking native groups, who were linguistically related to inhabitants of the Los Angeles Basin. The Luiseño, also known as the Juaneño, inhabited territory along the coast from Agua Hedionda to approximately Aliso Creek, which extended inland to Palomar Mountain. The Luiseño moved seasonally between mountain and seashore camps to hunt, collect shellfish, and harvest plant items such as acorns and hard seeds (City of San Marcos 2012b).

AB 52, signed into law in September of 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in PRC Section 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, where one or more California Native American tribes has requested formal written notification of proposed projects from a lead agency, the lead agency shall begin consultation with those tribes by providing them with formal written notification of proposed projects before the release of an environmental impact report, negative declaration, or mitigated negative declaration.

Four California Native American tribes have requested to be informed of proposed projects by the City. In compliance with PRC Section 21080.3.1, the City provided formal written notification of the proposed project to each of the four Native American tribes in April 2021. In response to this notification, the City received formal consultation requests from the Rincon Band of Luiseño Indians (Rincon) and the Temecula Band of Luiseño Mission Indians (Pechanga) (see Appendix C). The San Luis Rey Band of Mission Indians requested additional project information that City staff provided, but they did not submit a formal request for AB 52 consultation. At the request of Rincon and Pechanga, the City

provided project information in April 2021. In response, consultation with Rincon concluded on April 29, 2021. No tribal cultural resources were identified as part of the consultation. During implementation of the proposed project, the City will comply with AB 52 tribal consultation requirements as applicable during project-level CEQA review.

3.18.2 Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) 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)?
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than significant with mitigation incorporated. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, which could cause a substantial adverse change in the significance of a tribal cultural resource. PRC Section 21074 defines a tribal cultural resource as a site, feature, place, or cultural landscape that is geographically defined in terms of size and scope, sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register of Historical Resources or a local register of historical resources. Given that Native American tribes inhabited the area, there is a potential that unidentified resources may be discovered during construction activities. The potential for disturbance may be reduced by surveying a site to determine the likelihood that tribal cultural resources are present, review of records to determine if tribal cultural resources are known to occur in the area, and then designing projects to avoid areas where resources may be present.

The proposed project is required to comply with General Plan Policy COS-2.5, which directs the City to review 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, and Policy COS-11.1, which directs the City to identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA. In addition, enforcement of General Plan mitigation measures would reduce impacts to tribal cultural resources. Although the General Plan does not address "tribal cultural resources" as specifically defined under PRC Section 21074 (the General Plan was approved in 2012, before AB 52 was signed into law in September 2014), the measures were developed to protect tribal resources. The intent behind the General Plan mitigation measures mirrors the provisions under PRC Section 21084.3(b), which describe mitigation measures that may avoid or minimize significant adverse impacts on tribal cultural resources defined under PRC Section 21074, including:

- (1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - (A) Protecting the cultural character and integrity of the resource

- (B) Protecting the traditional use of the resource
- (C) Protecting the confidentiality of the resource.
- (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- (4) Protecting the resource.

Specifically, General Plan Mitigation Measure CR-1 directs the City to request a search of the NAHC Sacred Lands Inventory to identify potential places of tribal and/or religious importance. General Plan Mitigation Measure CR-2 directs the City to require the project implementer to avoid or preserve cultural resource sites that have been identified as significant; site avoidance and preservation can include capping the site. General Plan Mitigation Measure CR-2 further requires that capping methods should be communicated to interested tribes for their review and that tribal recommendations be considered to the maximum extent feasible as capping plans are finalized. General Plan Mitigation Measure CR-3 directs the City to require monitoring of grading, ground-disturbing, and other major earth-moving activities in previously undisturbed areas or in areas with known archaeological resources by a qualified archeologist and tribal monitor during activities in areas with cultural resources of interest to local Native American tribes. General Plan Mitigation Measure CR-4 directs the City to require a qualified archaeologist to evaluate any cultural resources discovered during site construction activities, and the tribal monitor to accompany a qualified archeologist to identify, and determine the significance of, cultural resources and/or sacred lands. In addition, local Native American tribes shall be consulted in the identification of provisions to address inadvertent discoveries; in the event of a find, an Archaeological Data Recovery Program shall be prepared and implemented after consultation between interested Native American tribes and the qualified archaeologist. Further, General Plan Mitigation Measure CR-6 directs the City to require consultation with the appropriate organizations and individuals (e.g., Information Centers of the California Historical Resources Information System, NAHC, and Native American groups and individuals) to minimize potential impacts to historic and cultural resources. For all the foregoing reasons, implementation of the proposed project would not result in substantial adverse change in the significance of a tribal cultural resource. Therefore, the impact would be less than significant with mitigation incorporated.

Mitigation Measure TCR-1: Pre-Excavation Agreement

Before the issuance of a grading permit or ground-disturbing activities, the Applicant/Owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the protection, treatment, and repatriation of 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 Pre-Excavation 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 Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

Mitigation Measure TCR-2: Construction Monitoring

Before 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 a Qualified Archaeologist and Traditionally and Culturally Affiliated Native American monitor (TCA Native American

monitor) have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Pre-Excavation Agreement.

The Qualified Archaeologist and 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 Qualified Archaeologist and 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 Qualified Archaeologist and 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 more than six inches below the original pre-project ground surface to identify any evidence of potential archaeological or 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 noncommercial sources that have been determined to be absent of tribal cultural resources by the Qualified Archaeologist and TCA Native American monitor.

The Qualified Archaeologist 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 Tribe, preferably through e-mail, of the start and end of all ground disturbing activities.

Before the release of any grading bonds, or before the issuance of any project Certificate of Occupancy, an archaeological monitoring report, which describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the Qualified Archaeologist, along with any TCA Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of AB 52 consultation, to [INSERT TRIBE] or any parties involved in the project specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City.

Mitigation Measure TCR-3: Unanticipated Discovery Procedures

Both the Qualified Archaeologist and the TCA Native American monitor may temporarily halt or divert ground disturbing activities if potential archaeological resources or 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. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the Qualified Archaeologist and the TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the Applicant/Owner and the Qualified Archaeologist, the culturally appropriate treatment of those resources.

If the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based upon the provisions of CEQA and California Public Resources Code Section 21083.2(b) with respect to archaeological resources and California Public Resources Section 21704 and 21084.3 with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological 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, such as, but not limited to, the funding of an ethnographic study and/or a data recovery plan, as determined by the City in consultation with the Qualified Archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan, and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the Qualified Archaeologist and TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by 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.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the Qualified Archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural 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 before 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 TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

Mitigation Measure TCR-4: 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)).

3.19 UTILITIES AND SERVICE SYSTEMS

ENV	IRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ΧIX	C. Utilities and Service Systems.				
Wo	uld the project:				
a)	Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

3.19.1 Environmental Setting

Several agencies supply water and wastewater services to the City of San Marcos, including the Vallecitos Water District, Olivenhain Municipal Water District, Vista Irrigation District, and Rincon del Diablo Municipal Water District. Solid waste disposal is provided by EDCO Waste and Recycling, a private franchise hauler. Waste collected by EDCO is hauled to the Escondido Resource Recovery Transfer Station where it is sorted before being transported to the Sycamore Sanitary Landfill. The City of San Marcos maintains the public roadway network and sidewalks, right-of-way electrical facilities, and the public storm drain conveyance system in the project area. The primary purpose of the public storm drain conveyance system is to facilitate the conveyance of drainage water from rainfall events away from urban areas (City of San Marcos 2012b).

SDG&E, a regulated public utility, supplies electricity and natural gas to the City of San Marcos. SDG&E procures electricity generated from a variety of energy sources including coal, natural gas, nuclear, hydroelectric, and a mix of renewable resources.

3.19.2 Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less-than-significant impact. Implementation of the proposed project would not involve development of residential communities or other similar types of development or induce population growth in an area that would require the expansion or construction of water infrastructure, wastewater treatment facilities, storm drainage facilities, electric power, natural gas, or telecommunications facilities. The proposed project will connect to existing water, wastewater, and storm drain facilities with existing capacity to serve the proposed project. Therefore, the impact would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less-than-significant impact. Implementation of the proposed project would not involve development of residential communities or other similar types of development or induce population growth in an area that would increase demand for water. A minimal amount of water would be required for dust control during construction and grading activities and would not contribute to an exceedance of available water supplies. Therefore, the proposed project would not result in a physical impact associated with provision of sufficient water supplies, including related infrastructure needs. The impact would be less than significant.

c) Result in a determination by the wastewater treatment provider that 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 impact. Implementation of the proposed project would not involve development of residential communities or other similar types of development or induce population growth in an area that would substantially increase demand for wastewater treatment. The proposed project will generate 4,650 gallons per day of wastewater (25 gallons/occupant). Therefore, implementation of the proposed project would not exceed the capacity of any wastewater treatment provider. The impact would be less than significant.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-than-significant impact The City is working with the franchise waste hauler and preparing a waste diversion plan that identifies interim steps toward achieving an 85 percent citywide waste diversion rate by 2030, consistent with General Plan Policies COS 10-1 and COS 10-2, that would divert solid waste from the Sycamore Sanitary Landfill. Further, the City's waste diversion goal would be consistent with AB 939, which requires a citywide 50 percent waste diversion goal, and AB 341, which requires a statewide 75 percent waste diversion for businesses. Therefore, implementation of the proposed project would not result in an increase in solid waste requiring disposal in a landfill and would not impair the attainment of solid waste reduction goals. Impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No impact. As discussed in criterion (d), the project applicant will comply with City mandates to achieve an 85 percent citywide waste diversion rate by 2030. Overall, implementation of S-1 would reduce the amount of solid waste that is transported to the Sycamore Sanitary Landfill. Implementation of the proposed project would not conflict with federal, state, and local statutes or regulations related to solid waste. **No impact** would occur.

3.20 WILDFIRE

ENV	RONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX.	Wildfire.				
or	ne project located in or near state responsibility areas lands classified as high fire hazard severity zones SZ)?		Yes		No
	ocated in or near state responsibility areas or lands classi ject:	fied as very	high fire hazard	severity zone	es, would the
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

3.20.1 Environmental Setting

CAL FIRE has mapped high fire hazard severity zones (FHSZ's) for the entire state. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as Moderate, High, and Very High. According to CAL FIRE's Fire Resource Assessment Program FHSZ Geographic Information System data, the project site is classified as high fire hazard and is adjacent to a Very High FHSZ (ArcGIS 2019). In addition, the project site is located adjacent to riparian woodland associated with Twin Oaks Valley Creek.

SMFD prepared a CWPP for the City of San Marcos and unincorporated communities. The CWPP identifies 19 wildland-urban interface areas in the city and surrounding unincorporated communities. The communities are located along the periphery of the City and have steep slopes, limited precipitation, and plenty of available fuel/combustible plant material (City of San Marcos 2007).

3.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-than-significant impact. The proposed project would result in construction of a new structure that would not impair an emergency response plan or an emergency evacuation plan. All future roadway improvements would be required to comply with the California Fire Code, adopted by reference in SMMC Chapter 17.64, and SMMC Section 17.64.120, which requires the width of an unobstructed roadway to measure no less than 24 feet to provide adequate access for fire and emergency responders. Therefore, implementation of the proposed project would not result in any reduction in the adequacy of emergency access. Impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less-than-significant impact The project site is located in a High FHSZ. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation. However, construction activities associated with the proposed project would occur in already disturbed, developed areas such as roadways and parking lots where wildfire risk is low. In addition, enforcement of the SMMC would avoid exposing people or structures to wildland fires. For example, the CWPP and SMMC Section 20.260.060 require all new development in identified community hazard areas to prepare a Fuel Management Plan. Further, spark arresters are required on all portable gasoline-powered equipment in wildland areas (SMFD 2020). For all the foregoing reasons, implementation of the proposed project would not exacerbate wildfire risks. The impact would be less than significant.

c) Require the installation 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?

Less-than-significant impact. Implementation of the proposed project would result in minor alterations of the project site and public roadways. No other infrastructure (such as roads, 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 are proposed. Although the use of vehicles and construction equipment could increase the risk of accidental wildfire ignition, the City has determined that a Fuel Management Plan is not required for the proposed project. Enforcement of the SMMC would avoid exposing people or structures to wildland fires. In addition, spark arresters are required on all portable gasoline-powered equipment in wildland areas (SMFD 2020). For all the foregoing reasons, implementation of the proposed project would not substantially increase hazards due to a geometric design feature. The impact would be less than significant.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less-than-significant impact. There are no landslide zones or steep slopes identified in the project area. Implementation of the proposed project would involve ground-disturbing activities, including grading and excavation, and could result in post-wildfire runoff or drainage changes. The proposed project would be required to comply with SMMC Chapter 17.32, which contains design standards and performance requirements and requires engineering analysis of slope stability, erosion control, and drainage. Enforcement of this City regulatory standard would ensure that the proposed project would not result in flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The impact would be less than significant.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

EN\	/IRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX	Mandatory Findings of Significance.				
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				

3.21.1 Environmental Setting

Environmental settings in Sections 3.1 through 3.20 were used in preparing the impact discussion for this section.

3.21.2 Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less-than-significant impact. The proposed project will reduce all potentially significant impacts to less than significant through the use of project design features and mitigation measures where applicable. Furthermore, as discussed in this IS/MND, the proposed project is consistent with the City of San Marcos General Plan (City of San Marcos 2012a) and Zoning Ordinance, which contain policies and provisions that are protective of environmental resources and environmental quality.

As discussed in Section 3.4, "Biological Resources," although the proposed project would result in ground-disturbing activities, most would occur in previously disturbed areas. Furthermore, the proposed mitigation measures and

adherence to the City's General Plan policies and to local, state, and federal regulatory standards would ensure a less-than-significant impact to wildlife habitat and special-status species.

As discussed in Section 3.5, "Cultural Resources," the proposed project would not cause a substantial adverse change in the significance of a historical resource. In addition, adherence to proposed mitigation measures and the City's General Plan policies and previously adopted General Plan mitigation measures would ensure a less than significant impact to archaeological resources. Similarly, as discussed in Section 3.18, "Tribal Cultural Resources," enforcement of General Plan policies and previously adopted General Plan mitigation measures would ensure a less than significant impact to a tribal cultural resource. Therefore, impacts would be **less than significant**.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than significant. Impact Implementation of the proposed project would not result in cumulatively considerable impacts to air quality, GHG, and traffic (VMT) and any development that would make a considerable contribution to any significant cumulative impacts. Additionally, as discussed throughout this IS/MND, implementation of the proposed project's mitigation measures would be consistent with many General Plan policies that are protective of environmental resources and environmental quality. Therefore, the proposed project would not result in any adverse environmental impacts that are cumulatively considerable. Impacts would be less than significant.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant. As identified in this IS/MND, the proposed project would have either no impact or a less-than-significant impact on human beings. Therefore, implementation of the proposed project would not result in substantial adverse effects on human beings, either directly or indirectly. This impact would be **less than significant**.

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No references were used.

2 Project Description

No references were used.

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