EXHIBIT B

FINAL EVIRONMENTAL IMPACT REPORT (EIR)

(Provided as a separate PDF)

Armorlite Lofts Specific Plan

Final Environmental Impact Report

SCH No. 2024020372

SP-23-0001/ GPA23-0002 /R23-0001/ SDP23-0003/ CUP23-0002

Prepared for:

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April 2025

0.1 INTRODUCTION AND SUMMARY

The applicant, Las Posas Ventures LLC, is proposing to develop 165 apartment units, 5,600 square feet (s.f.) of commercial use and associated common and private open space on a 2.44 acre site located on Armorlite Drive in the City of San Marcos.

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

- **Specific Plan (SP23-0001)** – The Specific Plan establishes the development rules and regulations of all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the Specific Plan. The Specific Plan would be required to be reviewed and approved concurrently with the Multi-Family Site Development Plan application.
- **General Plan Amendment (GPA23-0002)** – A General Plan Amendment would be required to change the existing Public/Institutional (PI) designation to Specific Plan Area (SPA).
- **Rezone (R22-0001)** - A rezone would be required to change the existing Public-Institutional (P-I) zoning to Specific Plan Area (SPA).
- **Site Development Plan (SDP23-0003)** - The Site Development Plan approval would be required to construct 165 apartment units and 5,600 s.f. of commercial and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.
- **Conditional Use Permit (CUP23-0002)** - Conditional Use Permit approval would be required for potential use of a temporary rock crusher.

This Final Environmental Impact Report (EIR) (SCH No. 2024020372) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.), *CEQA Guidelines* (California Administrative Code Section 15000 et seq.), and the City of San Marcos CEQA procedures. The City of San Marcos is the Lead Agency under CEQA.

According to *CEQA Guidelines* Section 15132, the Final EIR shall consist of the following:

a) The Draft EIR or a revision of the Draft;

b) Comments and recommendations received on the Draft EIR either verbatim or in summary;

c) A list of persons, organizations, and public agencies commenting on the Draft EIR;

d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

e) Any other information added by the Lead Agency.

In accordance with these requirements, the Armorlite Lofts EIR is comprised of the following:

- Draft Environmental Impact Report, Armorlite Lofts Specific Plan (January 2025)
- This Final EIR document, April 2025, that incorporates the information required by Section 15132

Format of the Final EIR

This document is organized as follows:

Section 0.1 Introduction

This section describes CEQA requirements and content of this Final EIR.

Section 0.2 Corrections and Additions

This section provides a list of those revisions made to the Draft EIR text as a result of comments received and/or minor errors and omissions discovered subsequent to release of the Draft EIR for public review. None of these revisions would result in the need to recirculate the Draft EIR.

Section 0.3 Responses to Comment Letters Received on the Draft EIR

This section provides copies of the comment letters received and individual responses to written comments. In accordance with Public Resources Code 21092.5, copies of the written proposed responses to public agencies will be forwarded to the agencies at least 10 days prior to certifying an EIR. The responses conform to the legal standards established for response to comments on Draft EIRs.

Section 0.4 Mitigation Monitoring and Reporting Program

This section includes the Mitigation Monitoring and Reporting Program (MMRP) which identified the mitigation measures, timing and responsibility for implementation of the measures.

Section 0.5 CEQANet Posting

This section contains the proof of posting of the Draft EIR for a 45-day public review on the State Clearinghouse CEQANet portal.

0.2 CORRECTIONS AND ADDITIONS

The following Sections 0.2.1 and 0.2.2 contain a summary of revisions to information included in the Draft EIR (January 2025). These revisions were made based upon comments received on the Draft EIR, which are discussed in Section 0.3, Response to Written Comment.

Given the nature of the changes associated with the document, the information added to the EIR does not meet the requirements for recirculation pursuant to Section 15088.5 of the State CEQA Guidelines. Pursuant to Section 15088.5(a), a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review. The term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to the EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyze would clearly lessen environmental impacts of the project, by the projects' proponents decline to adopt it.

(4) The draft EIR was so fundamentally flawed and basically inadequate and conclusionary in nature that meaningful public review was precluded.

Changes to the Draft EIR include the following:

- Change to biological resources mitigation measure MM-BIO-1b and MM-BIO-2c to address comments from the California Department of Fish and Wildlife.

- Change to a cultural resources mitigation measures based upon a comment from the San Diego County Archaeological Society.

In summary, the revisions made to the Draft EIR do not meet the requirements of Section 15088.5 of the *CEQA Guidelines*. The revisions do not result in a new significant impact being identified, nor do the revisions identify a substantial increase in the severity of an environmental impact. Further, a feasible project alternative or mitigation measure considerable different from others previously analyzed was not included in the revisions. Finally, the Draft EIR has adequately disclosed the potential impacts of the project and identified mitigation measures, where feasible to reduce the impacts to below a level of significance.

0.2.1 DRAFT EIR CORRECTIONS AND ADDITIONS

Changes to the Draft EIR were made in response to comments received on the Final EIR. The new information clarifies information and refines mitigation measures that were requested by commenters on the Draft EIR. Text that has been added to the document appears in an underline format. Text that has been deleted appears with strikeout.

The table below identifies the changed EIR sections and accompanying page numbers in the Final EIR. The revised Draft EIR is included following this Final EIR Introduction.

Final EIR Section	Page/Table/Figure Change
1.0 – Executive Summary	Page 1-1 (Table 1-1) – minor revision to BIO-1 impact.
2.0 – Project Description	Page 2-13 – California Department of Fish and Wildlife (CDFW) noted as a Responsible Agency should the project require an Incidental Take Permit.
3.3 – Biological Resources	Page 3.3-5 – Statement added that site falls within an area identified as a Vernal Pool Amendment area in the City's Draft Subarea Plan. Page 3.3-8 – A discussion of Crotch's bumble bee was added based upon comments from CDFW. Section 3.3.6 (Biological Resources Mitigation Measures) • Revised mitigation measures MM-BIO-1a for clarification purposes. • Revised mitigation measure MM-BIO-1b based upon CDFW comment. • Revised mitigation measure MM-BIO-2c based upon CDFW comments. Page 3.3-22 and 3.3-23 – Minor revisions to conclusion section based upon CDFW comment.
3.4 – Cultural Resources	Section 3.4.6 (Cultural Resources Mitigation Measures) Minor revisions to mitigation measures MM-CR-1b, and MM-CR-2 for clarification purposes.
3.12 – Tribal Cultural Resources	Page 3.12-8 – Changed No Project/Reduced Footprint alternative to No Project Reduced Development Footprint alternative to be consistent with how this alternative is named in the rest of the document. The characteristics of the alternative and conclusions do not change.

Final EIR Section	Page/Table/Figure Change
	Section 3.12.6 (Tribal Cultural Resources Mitigation Measures) • Revised mitigation measure MM-TCR-1 based upon a comment from the San Diego County Archaeological Society. • Revised mitigation measure MM-TCR-9 to provide clarification on timing for Land Acknowledgement Statement. • Minor revisions to mitigation measures MM-TCR-4 and MM-TCR-10 for clarification purposes.
4.0 – Alternatives	Various pages: Changed No Project/Reduced Footprint alternative to No Project Reduced Development Footprint alternative to be consistent with how this alternative is named in the rest of the document. The characteristics of the alternative and conclusions do not change.
Appendix D – Biological Resources Report	The biological resources report was updated to reflect comments from CDFW. The updated report is included as Appendix D. References to the biology report have been updated throughout the EIR to reflect the date of the updated report (March 2025).

0.2.2 REVISED AND SUPPLEMENTAL MITIGATION MEASURES

Based upon a comment letter from CDFW on the Draft EIR as well as minor corrections and clarifications, the following mitigation measures were revised. The following represents the modified mitigation measures, with changes shown in a strike out/underline format:

Revised Mitigation Measures

MM-BIO-1a **Breeding Season Avoidance.** To the extent feasible, the applicant/developer shall only remove vegetation ~~The removal of coastal sage scrub~~ from the project impact footprint ~~shall only occur from~~ between September 1 through February 14 to avoid the bird breeding season. Further, to the maximum extent practicable, grading activities associated with construction of the project shall occur September 1 through February 14 to avoid the breeding season. If project construction must occur during the breeding season, mitigation measure MM-BIO-1b shall be implemented.

MM-BIO-1b **Nesting ~~Bird~~ Survey(s).** Take of birds protected under the Migratory Bird Treaty Act and California Fish and Game Code shall be avoided during the nesting season. To avoid any direct impacts on raptors and/or any migratory birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, removal of habitat that supports active nests on the proposed area of disturbance shall occur outside of the nesting season for these species (February 15 through August 31, annually). If construction occurs during the nesting season, pre-construction nesting bird surveys must be conducted within 72 hours of construction-related activities. If nesting birds are detected by the biologist, the following buffers shall be established: (1) no work within 300 feet of a non-listed nesting migratory bird nest, and (2) no work within 500 feet of a listed bird or raptor nest. However, the biologist may reduce these buffer widths depending on site-specific conditions (e.g., the width and type of screening vegetation between the nest and proposed activity) or the existing ambient level of activity (e.g., existing level of human activity within the buffer distance) in conjunction with consultation with the City of San Marcos. If construction must take place within the recommended buffer widths above, the project applicant shall contact the City of San Marcos and wildlife agencies (United States Fish and Wildlife Service [USFWS] and California Department of Fish and Wildlife [CDFW] to determine the appropriate buffer.

Additionally, take of a state candidate species is prohibited under the California Endangered Special Act (CESA). While Crotch's bumble bee has low potential to occur on site, the pre-construction surveys for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include focused surveys, which shall be based on recommendations described in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, released by CDFW on June 6, 2023, or the most current version at the time of construction.

The surveys shall be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week, preferably spaced two (2) to four (4) weeks apart. Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least one (1) hour following rain. Optimal surveys are when there are sunny to partly sunny skies and a temperature greater than 60°F. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 miles per hour). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to five (5) minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five (5) minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them, depending on their proximity to one (1) another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point to determine which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation, if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee-identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation is required. The mere presence of foraging Crotch's bumble bees shall not require implementation of additional mitigation measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the project construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest because the

daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report shall be submitted to the City Planning Division Director within 30 days of the last survey pass. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If Crotch's bumble bee is detected within the project site, the applicant/developer shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this document.

In the event that an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through on-site preservation of suitable habitat and/or in accordance with CDFW guidance for off-site locations. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement.

MM-BIO-2c **Biological Monitor Requirements and Duties.** A qualified biologist shall be on site per the discretion of the City during initial clearing/grubbing and during grading to ensure compliance with all project-imposed mitigation measures. The biologist shall be available during pre-construction and construction phases to review grading plans, address protection of potential biological resources, monitor ongoing work, and maintain communications with the project's engineer to ensure that any issues are appropriately and lawfully managed.

The qualified biological monitor shall also be responsible for the following duties:

1. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.

2. Halt work, if necessary, and confer with the USFWS, CDFW, ~~U.S. Fish and Wildlife Service~~, and City of San Marcos to ensure the proper implementation

of species and habitat protection measures. The biologist shall report any violation to USFWS and the City within 24 hours of its occurrence.

3. Submit a final report to the City within 60 days of project completion that includes the following:(1) as-built construction drawings for grading with an overlay of any active nests; (2) photographs of habitat areas during pre-construction and post-construction conditions; and (3) other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with the avoidance/minimization provisions were achieved.

MM-CR-1b **Unanticipated Discovery Procedures**: The Qualified Archaeologist may temporarily halt or divert ground disturbing activities if previously unknown archaeological resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be associated with Native American culture, it will be considered a tribal cultural resource and subject to mitigation measures MM-TCR-4 and MM-TCR-5. Non-Native American resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource (subject to MM-TCR-4) and a potentially significant archaeological resource that is associated with Native American culture, then the Qualified Archaeologist, Tribes, Native American monitors, and City shall coordinate on appropriate treatment.

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

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

MM-CR-2 **Human Remains**: As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby

area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 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 two (2) business ~~working days~~ of being notified if the remains are subject to their authority. If the Medical Examiner recognizes the remains to be Native American, and not under their jurisdiction, then they 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 (6) or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

MM-TCR-1 **Monitoring Agreement**: Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall extend the invitation to enter into a Monitoring Agreement with the Rincon Band of Luiseño Indians and the San Luis Rey Band of Luiseño Indians (Tribes). The purpose of the Monitoring Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the Tribes for the monitoring for Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. In the event that either or both tribes choose not to enter into an agreement or fail to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented.

Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the Tribal 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 Tribes for proper treatment and disposition per the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Monitoring Agreement. Additionally, all non-tribal artifacts collected by the archaeologist shall also be subject to curation.

MM TCR-2 **Controlled Grading.** The area illustrated on the confidential exhibit attached to the grading plans shall be subject to controlled grading. Under the observation of a tribal monitor and qualified archaeologist, the contractor shall use either a small piece of equipment or observe the removal of soil by a backhoe equipped with a flat-edge bucket to excavate soil using shallow cuts made in approximately one-foot lifts. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area and random samples may be screened to ensure adequate detection of any cultural materials that may be present. In the event that cultural materials or human remains are exposed, the procedures for unanticipated discoveries in mitigation measure MM-TCR-4 shall apply. Controlled grading shall continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits, or when restrictive layers or non-cultural formational soils are encountered that predate any human occupation of this location, as determined by the qualified professional archaeologist, in consultation with the tribal monitor. Once the identified depth has been reached, the controlled grading process will be terminated and mass grading may proceed, subject to review and approval by the City.

MM-TCR-4 **Unanticipated Discovery Procedures:** Native American monitors may temporarily halt or divert ground disturbing activities if previously unknown tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be not associated with Native American culture, it will be subject to mitigation measure MM-CR-1b. Native American tribal cultural resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource and a potentially significant archaeological resource that is associated with Native American culture (subject to mitigation measure MM-CR-1b), then the Qualified Archaeologist, Tribes, monitors, and City shall coordinate on appropriate treatment.

All unearthed tribal cultural resources will be collected, temporarily stored in a secure location, and repatriated according to the consulting tribes, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the tribal cultural resources are considered potentially significant by the Tribe and the Native American monitor, then the City

and the Tribe shall determine, in consultation with the Applicant/Owner, the culturally appropriate treatment of those resources.

All sacred sites and significant tribal cultural resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency (as defined by the California Environmental Quality Act [CEQA]), then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource. The Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation. Any cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site and repatriated according to the terms of the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the Native American monitor. Any testing, taking of photos or 3D prints are prohibited, unless all monitoring tribes give prior written approval.

MM-TCR-5 **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. The procedures in mitigation measure MM-CR-2 shall apply.

MM-TCR-6 **Reburial:** Prior to the approval of grading plans, the Applicant shall designate a reburial location onsite and note the location as excluded from construction-related activity on grading plans. The reburial location shall be used to rebury any cultural materials encountered during monitoring, and to rebury existing collections from the previous data recovery effort. Following the completion of all ground disturbing activity and reburial of all materials and before the issuance of a Certificate of Occupancy, the Applicant shall file a deed restriction on the parcel that protects the reburial location from future disturbance and provide a copy to the City. The exhibit for the deed restriction and purpose of it shall be kept confidential and out of the public record.

MM-TCR-9 **Land Acknowledgement Statement:** The ~~project applicant~~ Applicant/Owner shall develop and post a Land Acknowledgement Statement inside a common area of the development. The statement shall be developed in coordination with Tribes and address the acknowledgement that the project is on the ancestral lands of culturally affiliated tribes that have been the original and ongoing stewards of the land. In the event that consulting tribes do not respond to the offer within 30 days of receipt, then the City will deem this mitigation measure satisfied provided that the offer was extended and documented in accordance with this measure. The location of the Land Acknowledgement Statement shall be noted on elevation and/or plan view drawings for the common area of the development.

MM-TCR-10 **Project-Specific Ethnographic Synthesis:** The Applicant shall fund the preparation of a project-specific ethnographic synthesis, not to exceed what is described in the confidential proposal provided by the Rincon Band of Luiseño Indians dated August

27, 2024. No later than 30 days after the final project approval, the Applicant/Owner shall extend a written offer to the Rincon Band of Luiseño Indians to enter into an agreement with their ethnographer to conduct and prepare the ethnographic synthesis in accordance with the aforementioned proposal. In the event of a dispute between the parties in entering into the agreement for the ethnographic synthesis, and after a good faith and reasonable effort, the City shall serve as the final arbiter. The City will determine the scope and content of an ethnographic synthesis in that event.

The synthesis will draw from oral histories, elder knowledge, and other sources of confidential Indigenous knowledge that relate to the tribal cultural resource affected by the proposed project. The ethnographer shall be afforded up to 90 days following funding of the ethnography to carry out any field visits with appropriate tribal representatives. After 90 days, or sooner if the ethnographer completed its field studies, the Applicant/Owner shall be permitted to proceed with ground disturbing activities and construction of the project while non-field-based data gathering, such as ethnographic interviews of informants and review of tribal documents, is being carried out. Upon completion, a public (redacted) version of the ethnographic synthesis shall be submitted to the California Historical Resources Information System and the City. The final non-redacted study shall belong to the Rincon Band of Luiseño Indians.

0.3 RESPONSE TO WRITTEN COMMENTS

Section 3.0 contains responses to all comment letters received on the January 2025 Draft Environmental Impact Report (Draft EIR). A total of four comment letters were received during the comment period, which ran from January 10, 2025 to February 24, 2025. A response to each comment letter follows this introduction. A copy of each letter with bracketed comment numbers on the right margin is followed by the response for each comment as indexed in the letter.

Letter Number	Commenter	Date
1	California Department of Fish and Wildlife	2/24/25
2	California Public Utilities Commission	2/3/25
3	San Diego County Archaeological Society	2/24/25
4	Lozeau Drury on behalf of Supporters Alliance for Environmental Responsibility (SAFER)	1/15/25

Docusign Envelope ID: E1068C41-A33B-47C2-8FE8-DB0752E7DE9F

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
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San Diego, CA 92123
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

February 24, 2025

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SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE ARMORLITE LOFTS PROJECT, SCH NO. 2024020372, SAN DIEGO COUNTY, CA

Dear Sean del Solar:

The California Department of Fish and Wildlife (CDFW) reviewed the Draft Environmental Impact Report (DEIR) from the City of San Marcos (City) for the Armorlite Lofts (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

1-1

CDFW ROLE

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

1-2

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law[2] of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The City was a local jurisdiction participant in the planning of the Subregional Multiple Habitat Conservation Program (MHCP) in the late 1990's and early 2000's. The City had prepared a draft Subarea Plan (SAP) under the Subregional MHCP, which addressed regional conservation planning across seven incorporated jurisdictions in northern San Diego County. However, the San Marcos SAP was not finalized, and state and federal permits have not been issued to the City.

1-2 Cont.

PROJECT DESCRIPTION SUMMARY

Proponent: City

Objective: The objective of the Project is to construct 165 residential apartments on a 2.44-acre site. The development will also incorporate 5,600 square feet of commercial use, parking, shared indoor space, and private open space. Project activities will include grading, use of blasting and/or a rock crusher, construction of buildings, construction of retaining walls, and landscaping.

Location: The Project site is located at 225 North Las Posas Road in the City of San Marcos. The site is located on the north side of Armorlite Drive, between North Las Posas Road to the west and Bingham Drive to the east. Primary access to the Project site will be through an unsignalized driveway on Armorlite Drive.

Biological Setting: The Project site contains 2.13 acres of Diegan coastal sage scrub and 0.12 acre of non-native grassland. Diegan coastal sage scrub provides suitable nesting and foraging habitat for special status species such as the coastal California gnatcatcher (*Polioptila californica californica*; CDFW Species of Special Concern (SSC), Federal Endangered Species Act (ESA) listed threatened). The Biological Technical Report (BTR; Dudek 2024) indicates that protocol gnatcatcher surveys were conducted in 2022-2023 and were negative. The Project site is within designated critical habitat for San Diego fairy shrimp (*Branchinecta sandiegonensis*; ESA listed-endangered); however, the BTR states that no vernal pools were detected on the Project site during

1-3

[2] "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

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wet season surveys in 2022-2023. The BTR also identifies several pocket mouse species as having a low potential to occur, including: Dulzura pocket mouse (*Chaetodipus californicus femoralis;* SSC), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*; SSC), and Pacific pocket mouse (*Perognathus longimembris pacificus;* ESA listed- endangered, SSC). The Project will develop the entire site, removing all existing vegetation. Off-site mitigation for the permanent loss of 2.13 acres of Diegan coastal sage scrub is proposed at a 1:1 ratio and mitigation for the permanent loss of 0.12 acre of non-native grassland is proposed at a 0.5:1 ratio. The DEIR indicates that mitigation will be achieved through off-site acquisition, in lieu fees, purchase of credits from an approved mitigation bank, or a combination as approved by the City's Planning Manager and the Wildlife Agencies (CDFW and the U.S. Fish and Wildlife Service).

1-3 Cont.

Project History: CDFW previously issued a comment letter in response to the Notice of Preparation (NOP) of the DEIR, on March 12, 2024 (CDFW, 2024).

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Additional comments or other suggestions may also be included to improve the document.

1-4

COMMENT # 1: Crotch's Bumble Bee

Issue: The Project may impact suitable nesting and foraging habitat for Crotch's bumble bee, a candidate species for CESA listing. The DEIR and BTR do not include any discussion of Crotch's bumble bee or propose species-specific mitigation measures.

Specific impact: The Project site contains habitat that may support nesting or foraging Crotch's bumble bee (*Bombus crotchii*; candidate CESA listing). Crotch's bumble bee often nests underground, sometimes occupying abandoned rodent burrows (Hatfield et al., 2015). The BTR indicates that the site supports small mammal burrows, which may provide suitable habitat for nesting. Crotch's bumble bee may forage in the native habitat on or adjacent to the Project site. If Crotch's bumble bee are using burrows on the Project site for nesting, direct impacts could result from ground-disturbing activities, which could lead to death or injury of adults, eggs, and larva, burrow collapse, nest abandonment, and reduced nest success. Indirect impacts may occur from loss of foraging resources.

1-5

Why impact would occur: Crotch's bumble bee is not identified in the DEIR as a sensitive species with the potential to occur in the survey area, and there is no assessment of suitable habitat included in the BTR. The final DEIR should incorporate a Crotch's bumble-bee specific mitigation measure that includes focused surveys where habitat is present, as well as a cumulative impact analysis. Absent inclusion of Crotch's

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bumble bee in the DEIR, the document may not adequately assess potential impacts to a CESA candidate species, resulting in unpermitted take. If Crotch's bumble bee is detected during focused surveys, the Project may require a CESA Incidental Take Permit, given that the whole site will be developed and avoidance is not feasible. Proposed mitigation for take of a CESA candidate species and loss of habitat must be of sufficient detail to meet the 'fully mitigated standard' pursuant to CESA.

Evidence impact may be significant: The California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining on September 30, 2022 that the listing "may be warranted" and advancing the species to the candidacy stage of the CESA-listing process. Pursuant to Fish and Game Code section 2085, CESA candidate species enjoy the same protections as CESA-listed threatened and endangered species. Therefore, take of Crotch's bumble bee is prohibited, except as authorized by State law through the issuance of an Incidental Take Permit or other authorization (Fish & G. Code, §§ 2080, 2085). Crotch's bumble bee has a State ranking of S1/S2. This means that the Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often 5 or fewer populations). Lastly, Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority (CDFW 2017).

1-5 Cont.

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends that the City incorporate the below Crotch's bumble bee-specific mitigation measure into the Final EIR:

Mitigation Measure #1: Crotch's Bumble Bee.

To mitigate potential impacts to Crotch's bumble bee:

a. A qualified entomologist familiar with the species' behavior and life history shall conduct a species-specific survey of suitable habitat within the Project area and surrounding buffer. Surveys shall occur between February and October, within one year prior to vegetation removal and/or ground disturbance to determine the presence/absence of Crotch's bumble bee. Surveys should focus on both nesting and foraging habitat. CDFW has published a Survey Considerations document for CESA Candidate Bumble Bees, which can be found at the following link: https://wildlife.ca.gov/Conservation/CESA. This document describes factors such as evaluating potential for presence, habitat assessment, and survey methods.

b. If nesting or foraging bees are detected, the site shall be considered occupied, and the Project biologist will notify CDFW. An Incidental Take Permit will be needed for take of Crotch's bumble bee, and mitigation will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. If foraging individuals are detected and an Incidental

Take Permit will not be pursued, compensatory mitigation for loss of foraging habitat will be provided at a 1:1 replacement ratio.

d. The qualified entomologist or monitoring biologist shall submit a report to the City and CDFW, documenting the methods and results of the surveys prior to clearing/grubbing activities.

1-5 Cont.

COMMENT # 2: Pocket Mouse

Issue: The Project may impact habitat for pocket mouse species, including the Dulzura pocket mouse and northwestern San Diego pocket mouse, both SSC.

Specific impact: The Project site contains coastal sage scrub habitat that may support northwestern San Diego pocket mouse and/or Dulzura pocket mouse. Though pocket mice were not observed during biological reconnaissance surveys, small mammal trapping was not conducted. Pocket mice are cryptic, and their presence is unlikely to be detected through general reconnaissance surveys. Their small size, nocturnal activity, and burrowing behavior necessitate species-specific survey methods, such as live trapping using Sherman traps and use of track tubes (Kelt, 1996; Brehme et. al, 2019). If pocket mice occupy the site, direct impacts from ground disturbance, grading, and vegetation removal could result in mortality, burrow collapse, and displacement. Indirect impacts, including increased edge effects, predation, and habitat fragmentation, may further jeopardize local populations.

Why impact would occur: The DEIR does not include trapping surveys specific to pocket mice, making it possible that potential impacts are underestimated. Without focused surveys, the Project risks unmitigated impacts to SSC. The BTR indicates that, while there is suitable coastal scrub habitat for Dulzura pocket mouse, the site is relatively small and surrounded by development, so the species was identified as having a low potential to occur. Similarly, the BTR indicates that there is suitable coastal scrub habitat for northwestern San Diego pocket mouse, though the site lacks gravelly or sandy soil typically used for burrows. The BTR reiterates that the site is relatively small and isolated from larger undeveloped lands northeast of the Project site, which are more likely to be utilized, and indicates that the species has a low potential to occur. However, the BTR for the neighboring Palomar Station Specific Plan (City of San Marcos, 2004) indicated that northwestern San Diego Pocket mouse is potentially present in the Project area and is known to be in the region in substantial numbers. Though habitat fragment size plays a role in species richness and diversity, a smaller fragment of several acres does not necessarily preclude occupation by pocket mice (Johnson, 2016). The MHCP indicates that northwestern San Diego pocket mouse does not likely disperse well through developed areas or over roads, so some populations may be isolated. Given that both species of pocket mice have been documented within 5 miles of the Project site (CNDDB, 2025) and may occur in fragmented habitat remnants, CDFW recommends small mammal trapping surveys and species-specific mitigation for Dulzura pocket mouse and northwestern San Diego pocket mouse.

1-6

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Evidence impact would be significant: The northwestern San Diego pocket mouse and Dulzura pocket mouse are designated as California SSC due to habitat loss and fragmentation. As per CEQA Section 15380, impacts to species identified as California SSC are considered significant due to their designation as species requiring special attention and protection. These species are recognized by CDFW as being at risk or vulnerable. Impacts to species listed as endangered, threatened, or rare by federal or state agencies, such as those designated as California SSC, are presumed to be significant impacts under CEQA (CEQA §§ 15063 & 15065). Any adverse effects on these species would be presumed to have significant environmental impacts and would require thorough analysis and mitigation measures implemented within the EIR to minimize or avoid such impacts.

Recommended Potentially Feasible Mitigation Measure(s)

CDFW recommends that the City incorporate the below pocket mouse-specific mitigation measure into the Final EIR:

1-6 Cont.

Mitigation Measure #2: Dulzura Pocket Mouse and Northwestern San Diego Pocket Mouse

To mitigate potential impacts to Dulzura pocket mouse and northwestern San Diego pocket mouse:

a. A qualified biologist with experience in small mammal trapping shall conduct focused small mammal surveys across the Project site, with the target species being Dulzura pocket mouse and northwestern San Diego pocket mouse. Focused surveys shall include at least three consecutive nights of small mammal trapping, using Sherman live traps. Surveys shall be timed to the appropriate season when the species are most active, typically between March and September.

b. Any biologists conducting trapping surveys shall possess a Scientific Collecting Permit. Pursuant to the California Code of Regulations, title 14, section 650, qualified biologist(s) must obtain appropriate handling permits to capture, temporarily possess, and relocated wildlife to avoid harm or mortality in connection with Project-related activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). For more information, please see CDFW's Scientific Collecting Permit webpage[3].

c. Target species, along with incidentally captured species shall be documented, and the results of the survey shall be shared with the Wildlife Agencies.

d. If Dulzura pocket mouse, northwestern San Diego pocket mouse, or other special-status small mammals are detected during focused small mammal surveys, compensatory mitigation will be established for impacts to the species. Mitigation shall

[3] https://wildlife.ca.gov/Licensing/Scientific-Collecting

be developed in coordination with the Wildlife Agencies, which may include a higher mitigation ratio for coastal sage scrub, and additional measures such as trapping and relocation of pocket mice to occupied habitat.

ADDITIONAL COMMENTS

COMMENT # 3: Compensatory Mitigation. The City proposes mitigation ratios of 1:1 for Diegan coastal sage scrub and 0.5:1 for non-native grassland, which are consistent with the ratios established in the City's Draft SAP; however, those ratios may not fully account for the ecological value and functional loss of these habitats. The Draft SAP included development of a City-wide preserve system to meet MHCP biological conservation goals. Given that the SAP was not formally adopted, and the preserve system is not in place, the City should consider mitigation ratios that better align with regional conservation objectives and the sensitivity of these habitat types. Diegan coastal sage scrub is a high-priority habitat under the MHCP's regional conservation efforts due to its limited distribution and the species it supports, including federally listed species such as the coastal California gnatcatcher. Absent a City-wide preserve system, a higher mitigation ratio for individual project impacts would better support long-term conservation goals and contribute to regional habitat connectivity in the City. CDFW suggests a mitigation ratio of at least 2:1 for Diegan coastal sage scrub impacts, to ensure no net loss of habitat function within the City. Though non-native grassland is a lower-priority habitat, it still provides important foraging habitat for raptors and other wildlife. CDFW suggests at least a 1:1 mitigation ratio for non-native grassland to maintain ecological functions. 1-7

COMMENT # 4: Cumulative Impact Analysis. The Cumulative Impact Analysis in the DEIR is incomplete. Table 2-3 provides an inventory of past, present, and reasonably foreseeable future projects within the vicinity of the Project site; however, the development immediately adjacent to the Project site is not included. Furthermore, the DEIR does not disclose that the Project site falls in the northwestern corner of a polygon that is identified as a Vernal Pool Major Amendment Area in table 2.3-5 of the City's Draft SAP (circled in Attachment B). The remainder of the polygon was developed in 2013, under the Project name Palomar Station Specific Plan (City of San Marcos, 2004). That Project included development of 14.32 acres into condominiums and was required to mitigate for impacts to vernal pools, wetlands, and native habitat. Though the DEIR mentions the Palomar Station condominiums in the site history, the development is not included in the cumulative impact analysis. CDFW recommends that the Final EIR include both a discussion of the Project's location within a Vernal Pool Major Amendment Area, as well as analysis of the Palomar Station Specific Plan within the Cumulative Impact Analysis section. Based on the inclusion the Palomar Station Specific Plan in the Cumulative Impact Analysis, the EIR may need to reevaluate cumulative impacts to Crotch's bumble bee, pocket mice, and Diegan coastal sage scrub. A higher 1-8

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mitigation ratio for Diegan coastal sage scrub may be warranted, particularly if sensitive species are present.

COMMENT # 5: Coastal California Gnatcatcher. The DEIR indicates that Dudek conducted focused coastal California gnatcatcher surveys between 2022-2023, which were negative. The U.S. Fish and Wildlife Service typically requires updated surveys every two years for coastal California gnatcatcher. Depending on Project timing, updated surveys may be needed. CDFW recommends further coordination with U.S. Fish and Wildlife Service regarding coastal California gnatcatcher surveys. 1-9

COMMENT # 6: Editorial Comments.

a. Mitigation measure BIO-2c (MM BIO-2c; DEIR p. 102). MM BIO-2c incorporates biological monitor requirements and duties, to ensure compliance with mitigation measures. The second bullet point indicates that work will be halted if necessary, to ensure the proper implementation of species and habitat protection measures. The measure states that the biologist will confer with the City and U.S. Fish and Wildlife Service if work is halted. CDFW requests to be added as well. 1-10

b. 3.3.7 Conclusion (DEIR p. 103). The first sentence of the Biological Resources Conclusion in the DEIR states, "[b]ased on the presence of suitable avian nesting habitat, pre-construction clearance surveys for nesting birds would be conducted to ensure that no impacts on nesting birds that are afforded protection under the MBTA occur (see mitigation measures MM-BIO-1a and MM-BIO-1b)." The sentence should be edited to remove the word 'clearance', as that suggests that nesting birds may be flushed, which would violate Fish and Game Code. Additionally, Fish and Game Code should be referenced along with the MBTA. We suggest the following edit: "[b]ased on the presence of suitable avian nesting habitat, pre-construction ~~clearance~~ surveys for nesting birds ~~would~~ **will** be conducted to ensure that no impacts on nesting birds that are afforded protection under the MBTA **or Fish and Game Code** occur (see mitigation measures MM-BIO-1a and MM-BIO-1b)." 1-11

c. Mitigation Measure BIO-3 (MM BIO-3; DEIR p. 103). MM BIO-3 indicates that mitigation for impacts to Diegan coastal sage scrub and non-native grassland will be achieved through off-site acquisition, in lieu fees, or purchase of credits through a mitigation bank, as approved by the City's Planning Manager and the Wildlife Agencies. We look forward to coordination with the City regarding habitat mitigation. 1-12

Mitigation and Monitoring Reporting Plan. CDFW recommends the Project's environmental document include mitigation measures recommended in this letter. CDFW has provided comments via a mitigation monitoring and reporting plan to assist in the development of feasible, specific, detailed (i.e., responsible party, timing, specific actions, location), and fully enforceable mitigation measures (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The Lead Agency is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided a summary of our 1-13

suggested mitigation measures and recommendations in the form of an attached Draft Mitigation Monitoring and Reporting Plan (Attachment A).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB website[4] provides direction regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the Combined Rapid Assessment and Relevé Form[5].

The City should ensure data collected for the preparation of the DEIR is properly submitted.

1-14

FILING FEES

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

1-15

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the City in identifying and mitigating Project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that the City has to our comments and to receive notification of any forthcoming hearing date(s) for the Project (CEQA Guidelines, § 15073(e)).

1-16

[4] https://wildlife.ca.gov/Data/CNDDB
[5] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit

Questions regarding this letter or further coordination should be directed to Jessie Lane[6], Environmental Scientist.

1-16 Cont.

Sincerely,

DocuSigned by:
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Victoria Tang
Environmental Program Manager
South Coast Region

ATTACHMENTS

Attachment A: Draft Mitigation, Monitoring, and Reporting Program

ec: California Department of Fish and Wildlife
Victoria Tang, Environmental Program Manager
Jennifer Turner, Senior Environmental Scientist (Supervisor)
Steve Gibson, Senior Environmental Scientist (Supervisor)
Jessie Lane, Environmental Scientist
Meredith Osborne, Environmental Scientist

U.S. Fish and Wildlife Service
David Zoutendyk, david_zoutendyk@fws.gov
Katie Raffaini, katelyn_raffaini@fws.gov

Office of Planning and Research
State.Clearinghouse@opr.ca.gov

1-17

REFERENCES

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[6] Phone: 858-354-4105; Email: jessie.lane@wildlife.ca.gov

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1-17
Cont.

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ATTACHMENT A: DRAFT MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Mitigation Measure	Timing	Responsible Party
Mitigation Measure #1: Crotch's Bumble Bee. To mitigate potential impacts to Crotch's bumble bee: a. A qualified entomologist familiar with the species' behavior and life history shall conduct a species-specific survey of suitable habitat within the Project area and surrounding buffer. Surveys shall occur between February and October, within one year prior to vegetation removal and/or ground disturbance to determine the presence/absence of Crotch's bumble bee. Surveys should focus on both nesting and foraging habitat. CDFW has published a Survey Considerations document for CESA Candidate Bumble Bees, which can be found at the following link: https://wildlife.ca.gov/Conservation/CESA. This document describes factors such as evaluating potential for presence, habitat assessment, and survey methods. b. If nesting or foraging bees are detected, the site shall be considered occupied, and the Project biologist will notify CDFW. An Incidental Take Permit will be needed for direct impacts to Crotch's bumble bee and mitigation will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. If foraging individuals are detected and an Incidental Take Permit will not be pursued, compensatory mitigation for loss of foraging habitat will be provided at a 1:1 replacement ratio. d. The qualified entomologist or monitoring biologist shall submit a report to the City and CDFW, documenting the methods and results of the surveys prior to clearing/grubbing activities.	Prior to Project Initiation	City

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Mitigation Measure	Timing	Responsible Party
Mitigation Measure #2: Dulzura Pocket Mouse and Northwestern San Diego Pocket Mouse To mitigate potential impacts to Dulzura pocket mouse and northwestern San Diego pocket mouse: a. A qualified biologist with experience in small mammal trapping shall conduct focused small mammal surveys across the Project site, with the target species being Dulzura pocket mouse and northwestern San Diego pocket mouse. Focused surveys shall include at least three consecutive nights of small mammal trapping, using Sherman live traps. Surveys shall be timed to the appropriate season when the species are most active, typically between March and September. b. Any biologists conducting trapping surveys shall possess a Scientific Collecting Permit. Pursuant to the California Code of Regulations, title 14, section 650, qualified biologist(s) must obtain appropriate handling permits to capture, temporarily possess, and relocated wildlife to avoid harm or mortality in connection with Project-related activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). For more information, please see CDFW's Scientific Collecting Permit webpage[7]. c. Target species, along with incidentally captured species shall be documented, and the results of the survey shall be shared with the Wildlife Agencies. d. If Dulzura pocket mouse, northwestern San Diego pocket mouse, or other special-status small mammals are detected during focused small mammal surveys,	Prior to Project Initiation	Lead Agency

[7] https://wildlife.ca.gov/Licensing/Scientific-Collecting

1-18 Cont.

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Mitigation Measure	Timing	Responsible Party
compensatory mitigation will be established for impacts to the species. Mitigation shall be developed in coordination with the Wildlife Agencies, which may include a higher mitigation ratio for coastal sage scrub, and additional measures such as trapping and relocation of pocket mice to occupied habitat.		
Recommendation #1. Compensatory Mitigation. CDFW recommends that Diegan coastal sage scrub impacts be mitigated at a ratio of at least 2:1, and that non-native grassland be mitigated at a 1:1 ratio.	Prior to Project Initiation	Lead Agency
Recommendation #2. Cumulative Impact Analysis. CDFW recommends that the Final EIR include both a discussion of the Project's location within a Vernal Pool Major Amendment Area, as well as analysis of the Palomar Station Specific Plan within the Cumulative Impact Analysis section. Based on the inclusion the Palomar Station Specific Plan in the Cumulative Impact Analysis, the EIR may need to reevaluate cumulative impacts to Crotch's bumble bee, pocket mice, and Diegan coastal sage scrub. A higher mitigation ratio for Diegan coastal sage scrub may be warranted, particularly if sensitive species are present.	Prior to Project Initiation	Lead Agency
Recommendation #3. Coastal California Gnatcatcher. CDFW recommends further coordination with U.S. Fish and Wildlife Service to ensure that protocol coastal California gnatcatcher surveys are up to date.	Prior to Project Initiation	Lead Agency

1-18 Cont.

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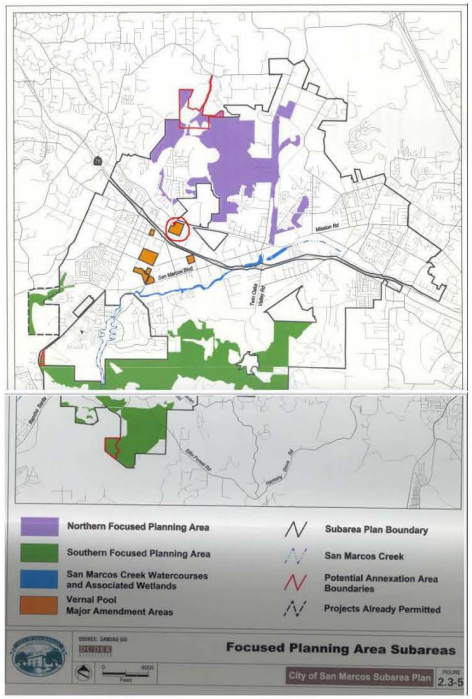
ATTACHMENT B: CITY OF SAN MARCOS DRAFT SAP: FIGURE 2.3-5 – FOCUSED PLANNING AREA SUBAREAS



Letter 1
California Department of Fish and Wildlife

1-1 This comment provides opening remarks. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted. (Los Angeles Conservancy v. City of W. Hollywood (2017) 18 Cal.App5th 1031; Browning-Ferris Indus. v. City Council (1986) 181 Cal.App.3d 852.).

1-2 This comment identifies California Department of Fish and Wildlife's (CDFW) role as both a Trustee Agency and a Responsible Agency (as defined by the California Environmental Quality Act [CEQA]) for the project. Page 2-13 of the draft environmental impacts report (Draft EIR) notes CDFW as a Trustee Agency. If an Incidental Take Permit is required, CDFW would also be a Responsible Agency for the project. This has been noted on page 2-13 of the EIR.

1-3 This comment provides a summary of the project's objective, location, biological setting and project history. It does not raise any specific environmental issues.

1-4 This comment provides an introduction to specific recommendations and comments for the project.

1-5 The comment states that the project may impact suitable nesting and foraging habitat for Crotch's bumble bee, a candidate species for California Endangered Species Act (CESA) listing. The Draft EIR and biological technical report (BTR) do not include any discussion of Crotch's bumble bee or propose species-specific mitigation measure.

As identified by CDFW, the Crotch's bumble bee is a state of California candidate for listing as an endangered species (CDFW 2023). This species prefers open grassland and shrub habitats that support populations of nectar plants such as snapdragon (*Antirrhinum* spp.), phacelia (*Phacelia* sp.), clarkia (*Clarkia* spp.), bush poppy (*Dendromecon* rigida), California poppy (*Eschscholzia californica*), and buckwheat (*Eriogonum* spp.). In California, its distribution is exclusive to coastal areas from San Diego to Redding.

As it relates to the project, Crotch's bumble bee has a low potential to occur within the approximately 2 acres of coastal sage scrub habitat within the project site (as described in Appendix D to the BTR). The project site is located within an urbanized setting and is surrounded by commercial and residential developments on all sides. Additionally, although the site does contain coastal sage scrub habitat, this habitat is largely depauperate, shows evidence of anthropogenic disturbance and historic grading activities, and lacks many of the diverse floral resources that this species prefers such as milkweeds, lupines, medics, phacelias, clarkias, poppies, and larkspurs. Furthermore, the closest known records of this species occur in the Lake Calavera area, approximately 5.5 miles northwest from the site (CDFW 2025). Therefore, the project site is not likely to support foraging or nesting of this species.

Despite the low potential for occurrence, to ensure that the project does not result in take of Crotch's bumble bee, mitigation measure MM-BIO-6 has been updated to include pre-construction surveys that shall be conducted within the project's construction footprint prior to the start of ground-disturbing construction activities occurring during the Crotch's bumble

bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the project's construction area. The pre-construction surveys shall include three focused surveys, which shall be based on recommendations described in the Survey Considerations for CESA Candidate Bumble Bee Species, released by the CDFW on June 6, 2023, or the most current version of the same at the time of construction. Focused surveys are not necessary prior to finalizing the CEQA document at this time.

Appendix D (Biological Resources Report) and Section 3.3, Biological Resources of the Draft EIR, have been updated to acknowledge that an Incidental Take Permit could be required if take of Crotch's bumble bee cannot feasibly be avoided. The appropriate consultation and other steps described will be taken if Crotch's bumble bee is detected during the preconstruction survey(s) to ensure avoidance and minimization of impacts to the species to the satisfaction of CDFW. In addition, it should be noted that per MM-BIO-6 of the Final EIR, the project will make every effort to avoid clearing vegetation from the site during the nesting bird season (defined as February 15 to August 31), which overlaps with Crotch's bumble bee nesting period (February 1 through October 31). Although the potential for the species to occur onsite is low, the Biological Resources Report has been updated to include measures to minimize and/or mitigate potential impacts to Crotch's bumble bee as described herein.

1-6 The comment states that the project may impact habitat for pocket mouse species, including the Dulzura pocket mouse and/or northwestern San Diego pocket mouse, both "Special Species of Concern" (SSC).

The Dulzura pocket mouse (*Chaetodipus californicus femoralis*) and northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) have a low potential to occur within the project site, as it is relatively small, isolated from larger undeveloped lands, and there was a notable lack of small mammal burrows observed over the course of numerous site visits conducted between 2021-2023. The project site is located within an urbanized setting surrounded by commercial and residential development and has likely been long subject to adverse edge effects, predation, and habitat fragmentation. Additionally, the site is bounded by North Las Posas Road, West Mission Road, Armorlite Drive, and the Inland Rail Trail, which are busy, well-traveled thoroughfares that can act as significant barriers to wildlife movement including ingress and egress of the project site.

Additionally, although the site contains coastal sage scrub vegetation, the available habitat is largely depauperate and shows evidence of anthropogenic disturbance and historic grading activities. Furthermore, the closest CNDDB record of the Dulzura pocket mouse to the project site is from 1961 in the present-day downtown Escondido area, approximately 6.75 miles to the southeast. The closest record of the northwestern San Diego pocket mouse to the site occurred in 1992 in the city of Carlsbad, approximately 4 miles to the southwest (CDFW 2025, Tremor et al. 2017). Therefore, there is a low potential for either species to occur as the project site is not likely to support them, and therefore the project is not expected to impact either species.

1-7 The comment states that the City proposes mitigation ratios of 1:1 for Diegan coastal sage scrub and 0.5:1 for non-native grassland, which are consistent with the ratios established in the City's Draft SAP; however, those ratios may not fully account for the ecological value and functional loss of these habitats.

The project will implement the mitigation ratio of 1:1 for Diegan coastal sage scrub and 0.5:1 for non-native grassland as proposed by the Draft SAP (which was never formally adopted by the City). There are no other additional mitigation ratios applicable to the project for these species. Compliance with regulations is a common and reasonable mitigation measure. (See e.g., *Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884; T*racy First v. City of Tracy* (2009) 177 Cal.App.4th 912.) Therefore, ratios in compliance with the City's SAP is sufficient mitigation.

Considering the depauperate condition of the habitat on project site, the lack of sensitive species on site, its location in an urbanized setting surrounded by commercial and residential development, and the fact that the site has likely been long subject to adverse edge effects, predation, and habitat fragmentation, the relatively limited ecological value and function of the habitat on site does not warrant higher mitigation ratios than currently proposed. Higher mitigation ratios, as proposed by CDFW, are unlikely to result in the desired effects to ecological functions as identified in Comment 1-7.

1-8 The comment states that the Cumulative Impact Analysis in the Draft EIR is incomplete because the Draft EIR does not disclose the project site it within a Vernal Pool Amendment Area of the City's Draft Subarea Plan, the EIR does not include Palomar Station as a cumulative project.

Site-specific studies determined that the project site does not support vernal pool resources, despite the area being located within a polygon that is identified as a Vernal Pool Major Amendment Area identified in Table 2.3-5 of the City's Draft Subarea Plan. Section 6.2 of the project's BTR (Dudek 2025) notes that the project site is identified as a Vernal Pool Major Amendment Area. Additionally, this disclosure was also added to the Final EIR on page 3.3-5 of the Biological Resources section as a text edit to fully address the comment.

The Palomar Station project referenced in this comment is a mixed-use residential development located adjacent to and south of the project site. The EIR for the project was certified in 2007 (SCH No. 2003081116) and has been fully built out. Merkel & Associates prepared a biological technical report for the Palomar Station project (dated December 23, 2005). The analysis concluded that the Palomar Station project would result in impacts to sensitive habitats (Diegan coastal sage scrub, valley needlegrass grasslands, nonnative grassland and Orcutt's brodiaea) and could potentially impact sensitive species including Migratory Bird Treaty Act protected species and San Diego Fairy Shrimp. Potential indirect impacts and impacts to avian linkages were also identified. Mitigation was identified for all impacts and appropriate permits were secured from the regulatory agencies.

CEQA Guidelines refer to a cumulative impact as the combination of the project's impacts with those of other projects causing "related impacts." (CEQA Guidelines § 15130(a)(1).) The key question in considering whether other projects should have been included in the EIR's

list of projects "is whether it was reasonable and practical to include the projects and whether, without their inclusion, the severity and significance of the cumulative impacts were reflected adequately." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) The Palomar Station project, while in close proximity, does not result in impacts that are related to the project. (*Citizens to Preserve the Ojai v County of Ventura* (1985) 176 Cal.App.3d 421; *Concerned Citizens of S. Cent. L.A. v. Los Angeles Unified Sch. Dist.* (1994) 24 Cal.App.4th 826 [cumulative analysis is complete if it excludes projects that are only *de minimis* contributor to related impacts].)

As discussed in response to comments 1-5 and 1-6, in terms of biological resources, the potential for Crotch's bumble bee and both pocket mouse species to occur on site is low due to the site being located within an urbanized setting, surrounded by commercial and residential development, and the fact that it has likely been long subject to adverse edge effects, predation, and habitat fragmentation. Furthermore, the coastal sage scrub habitat is depauperate, does not support sensitive species, and provides a relatively low ecological value and function. The cumulative impact analysis for the project was complete.

1-9 The comment states that the Draft EIR indicates that Dudek conducted focused coastal California gnatcatcher surveys between 2022-2023, which were negative. The U.S. Fish and Wildlife Service (USFWS) typically requires updated surveys every two years for coastal California gnatcatcher. Depending on project timing, updated surveys may be needed. CDFW recommends further coordination with USFWS regarding coastal California gnatcatcher surveys.

Mitigation measure MM-BIO-5 states that the removal of coastal sage scrub, a habitat for the California gnatcatcher, from the project impact footprint shall only occur from September 1 through February 14 to avoid the gnatcatcher nesting season. Furthermore, MM-BIO-6 states that if construction occurs during the nesting season, pre-construction surveys must be conducted within 72 hours of construction-related activities. If nesting birds are detected by the biologist, the following buffers shall be established: (1) no work within 300 feet of a non-listed nesting migratory bird nest, and (2) no work within 500 feet of a listed bird or raptor nest.

Because no coastal California gnatcatchers were detected during the protocol surveys conducted in 2022/2023, combined with the implementation of MM-BIO-5 and MM-BIO-6, no impacts are expected to occur to coastal California gnatcatchers.

1-10 This comment addresses mitigation measures MM-BIO-2c, which addresses biological monitoring. The City has incorporated the edit requested in this comment, as shown in track changes on page 3.3-22 of the Final EIR. The revised mitigation measure, in a track changes format, is also provided below:

> MM-BIO-2c **Biological Monitor Requirements and Duties.** A qualified biologist shall be on site per the discretion of the City during initial clearing/grubbing and during grading to ensure compliance with all project-imposed mitigation measures. The biologist shall be available during pre-construction and construction phases to review grading plans, address

protection of potential biological resources, monitor ongoing work, and maintain communications with the Project's engineer to ensure that any issues are appropriately and lawfully managed.

The qualified biological monitor shall also be responsible for the following duties:

1. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.

2. Halt work, if necessary, and confer with the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and City of San Marcos to ensure the proper implementation of species and habitat protection measures. The biologist shall report any violation to USFWS and the City within 24 hours of its occurrence.

3. Submit a final report to the City within 60 days of Project completion that includes the following:(1) as-built construction drawings for grading with an overlay of any active nests; (2) photographs of habitat areas during pre-construction and post-construction conditions; and (3) other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with the avoidance/minimization provisions were achieved.

1-11 This comment addresses the biological resources conclusion of the Draft EIR and proposes revisions. The City has incorporated the edits requested in this comment, as shown in track changes on page 3.3-22 of the Final EIR. The revised text, in a track changes format, is also provided below:

> Based on the presence of suitable avian nesting habitat, pre-construction ~~clearance~~ surveys for nesting birds will ~~would~~ be conducted to ensure that no impacts on nesting birds that are afforded protection under the MBTA or the Fish and Game Code occur (see mitigation measures MM-BIO-1a and MM-BIO-1b). Mitigation measures MM-BIO-1a and MM-BIO-1b require a preconstruction survey if construction is proposed during the nesting season. If nesting birds are found, avoidance measures would be implemented to minimize impacts. With the implementation of mitigation measures MM-BIO-1a and MM-BIO-1b, direct impacts on nesting birds would be less than significant.

1-12 This comment indicates CDFW and USFWS's (Wildlife Agencies) interest in participating in the implementation of mitigation measure MM-BIO-3. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-13 This comment addresses the CDFW recommended mitigation identified in the letter and the preparation of a mitigation monitoring and reporting program (MMRP). The MMRP is included in the Final EIR in Section 0.4. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-14 This comment addresses contribution of environmental data to the California Natural Diversity Database (CNDDB). The project biologist will be responsible for submitting any required field

survey results to the CNDDB. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-15 This comment addresses the CDFW filing fees. The project applicant will pay the applicable filing fee at the time the Notice of Determination is filed with the County of San Diego Recorder's Office. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-16 This comment provides closing remarks. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-17 This comment provides a list of references. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-18 This comment provides a sample MMRP. The projects' MMRP is included in Section 0.4 of this document. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

1-19 This comment provides a map from the City of San Marcos Draft Subarea Plan, including Vernal Pool Major Amendment areas. Please see response to comment 1-8, above.

STATE OF CALIFORNIA GAVIN NEWSOM, Governor

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

February 3, 2025 ENVR 20250100007

Sean del Solar
City of San Marcos
4601 Civic Center Drive
San Marcos, CA 92069

Re:
Armorlite Lofts SCH 2024020372 — *Notice of Preparation of a Draft EIR*

Dear Sean del Solar:

The California Public Utilities Commission (Commission/CPUC) has jurisdiction over rail crossings (crossings) in California. CPUC ensures that crossings are safely designed, constructed, and maintained. The Commission's Rail Crossings Engineering Branch (RCEB) is in receipt of the *Notice of Preparation of a Draft EIR (NOP)* for the proposed Armorlite Lofts projects. The City of San Marcos (City) is the lead agency.

The Project Applicant proposes to construct a 5 story (4 stories over podium parking) mixed-use building consisting of 165 residential units with 5,600 square feet of ground floor commercial. The project is located adjacent to the N Las Posas Road (CPUC No. 106E-114.78, DOT No. 027576G) at-grade crossing and Palomar College Station Ped West (CPUC No. 106E-114.99-D, DOT No. 967087R) at-grade pedestrian crossing. 2-1

The proposed project lies in the vicinity of active railroad tracks. In August of 2002, RCEB authorized a General Order 88-B (GO88-B) request from the City to widen the road at the N Los Posas Road crossing (XREQ20020800018). At the time, it was not known that the neighboring parcel was planned for future residential/commercial development. Now, with a future residential/commercial development being planned for the neighboring parcel, pedestrian and traffic improvements may be needed at N Los Posas Road to provide greater safety benefits for future increases in pedestrian and vehicular activity. As such, RCEB recommends that the City review the existing conditions and implement any needed improvements either through a capital project led by the City or a condition of approval for the developments adjacent to the crossing. 2-2

RCEB is available to discuss any potential safety impacts or concerns regarding the crossing and address any questions from the City.

If you have any questions, please contact Howard Huie at (415) 308-0533, or howard.huie@cpuc.ca.gov.

Sincerely,

Anh Truong
Senior Utilities Engineer (Supervisor)
Rail Crossings Engineering Branch
Rail Safety Division

CC: State Clearinghouse, state.clearinghouse@opr.ca.gov
Scott Shroyer, NCTD, sshroyer@nctd.org
April Maguigad, NCTD, amaguigad@nctd.org

Letter 2
California Public Utilities Commission

2-1 This comment provides opening remarks and describes the project and its location near an at grade railroad and pedestrian crossing. This comment incorrectly described the notice received as a Notice of Preparation (NOP). The most recent notice sent to the California Public Utilities Commission (CPUC) was the Notice of Availability for the Draft EIR. The CPUC did not provide a response during the NOP comment period. As this comment does not identify a specific environmental concern, this comment is noted and no additional response is warranted.

2-2 This comment states that improvements at North Los Posas Road crossing may be required for safety due to the development adjacent to an active rail line. The project site would be fully fenced and there would not be direct access to the rail corridor directly from the project site.

As discussed on page 2-4 and depicted in Figure 2-5 of the Draft EIR, fencing for the project includes a mix of split face block and tubular steel fencing. Along the northern project boundary (which is adjacent to the SPRINTER rail line) would be a 5-foot split face block wall. Along the western and eastern project boundary 5-foot tubular steel fencing would be used. Pedestrians wishing to access the Palomar College SPRINTER station would travel via Armorlite Drive, Las Posas Road and then take the sidewalk from Las Posas Road to the station.

The Draft EIR did not identify any issues related to pedestrian safety and the rail line (see Section 3.11, Transportation, of the EIR).

San Diego County Archaeological Society, Inc.

Environmental Review Committee

February 24, 2025

To: Mr. Sean del Solar, Senior Planner
Planning Division
City of San Marcos
1 Civic Center Drive
San Marcos, California 92069

Subject: Draft Environmental Impact Report
Armorlite Lofts
SP23-0001, GPA23-0002, R22-0001, SDP23-0003, CUP23-0002, EIR24-003

Dear Mr. del Solar:

I have reviewed the cultural resources aspects of the subject DEIR on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the DEIR, we have the following comments:

1. Since the 1938 aerial photos which were inspected showed the parcel undeveloped, the failure to inspect the 1928 aerial photos is likely of no consequence. 3-1
2. We agree with the cultural resources mitigation measures as specified. However, though the possibility of encountering non-tribal cultural resources is remote, the mitigation measures should be expanded to provide for them. 3-2

Thank you for this opportunity to respond as part of the City's environmental process.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: ASM Affiliates
SDCAS President
File

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

Letter 3
San Diego County Archaeological Society

3-1 This comment addresses the historic aerial photographs that were reviewed for the project. As this comment does not identify a specific environmental concern, this comment is noted, and no additional response is warranted.

3-2 This comment addresses the potential for the project to encounter non-tribal cultural resources and requests that the mitigation measures be expanded to included non-tribal cultural resources. Mitigation measure MM-CR-1b details procedures for non-Native American resources. However, based upon this comment, mitigation measure MM-TCR-1 has been revised to note that all non-tribal artifacts collected by the archaeologist shall also be subject to curation. The revised text, in a track changes format, is also provided below.

MM-TCR-1 **Monitoring Agreement**: Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall extend the invitation to enter into a Monitoring Agreement with the Rincon Band of Luiseño Indians and the San Luis Rey Band of Luiseño Indians (Tribes). The purpose of the Monitoring Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the Tribes for the monitoring for Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. In the event that either or both tribes choose not to enter into an agreement or fail to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented.

Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the Tribal 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 Tribes for proper treatment and disposition per the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Monitoring Agreement. Additionally, all non-tribal artifacts collected by the archaeologist shall also be subject to curation.

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RECEIVED
01/15/2025
CITY OF SAN MARCOS
PLANNING DIVISION

Via Email

January 15, 2025

Sean del Solar, Senior Planner
Planning Division
Development Services Department
City of San Marcos
1 Civic Center Drive
San Marcos, CA 92069
sdelsolar@san-marcos.net

Re: Comment on Draft Environmental Impact Report, Armorlite Lofts Project (SCH 2024020372)

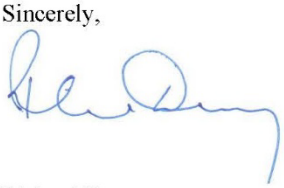
Dear Mr. Del Solar:

This comment is submitted on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the Armorlite Lofts Project, which proposes the construction of a mixed-use development consisting of 165 residential units, 5,600 square feet of ground-floor commercial space, and a five-story podium parking structure, located at the cross streets of Armorlite Drive and Las Posas Road on Assessor Parcel Numbers 219-162-62-00 in the City of San Marcos ("Project"). 4-1

SAFER is concerned that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Development Services Department address these shortcomings in a revised draft environmental impact report ("RDEIR") and recirculate the RDEIR prior to considering approvals for the Project. 4-2

SAFER reserves the right to supplement these comments during the administrative process. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997). 4-3

Sincerely,



Richard Drury
Lozeau Drury LLP

Letter 4
Lozeau Drury on behalf of Supporters Alliance for Environmental Responsibility (SAFER)

4-1 The comment provides an introduction to comments that follow and a summary of the project description. The comment does not raise any specific issues related to the adequacy of the Draft EIR.

4-2 The comment states that the Draft EIR fails as an informational document and fails to implement all feasible mitigation measures to reduce the project's impacts. The comment does not raise any specific issues related to specific topics or mitigation measures in the Draft EIR that they believe are not adequately addressed. As discussed in the Draft EIR, all potentially significant impacts are mitigated to less-than-significant levels, and no further mitigation is required. No further response is required because the comment does not raise an issue related to the adequacy of any specific section or analysis of physical environmental impacts in the Draft EIR. CEQA only requires an EIR be recirculated in a narrowly defined set of circumstances; none of which have been triggered here. (Pub. Res. Code § 21092.1; CEQA Guidelines § 15088.5.) Recirculation is not required if the new information merely clarifies, amplifies, or makes insignificant modifications to an adequate EIR. (CEQA Guidelines § 15088.5(b); Southwest Reg'l Council of Carpenters v. City of Los Angeles (2022) 76 Cal.App.5th 1154, 1184.) The changes made to the Final EIR do not trigger recirculation under CEQA.

4-3 The comment states that they reserve the right to supplement their comment during the review of the Final EIR and at public hearings for the project. As this comment does not identify a specific environmental concern, this commented is noted and no additional response is warranted.

0.4 MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION AND SUMMARY

Pursuant to Section 21081.6 of the Public Resources Code and the *California Environmental Quality Act (CEQA) Guidelines* Section 15097, public agencies are required to adopt a monitoring or reporting program to assure that mitigation measures and revisions identified in Final Environmental Impact Report (FEIR) are implemented. As stated in Section 21081.6 of the Public Resources Code:

> *"… the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment."*

Pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision makers coincidental to certification of the FEIR. The Mitigation Monitoring and Reporting Program (MMRP) must be adopted when making the findings (at the time of approval of the project).

As defined in the CEQA Guidelines, Section 15097, "reporting" is suited to projects that have readily measurable or quantitative measures or which already involve regular review. "Monitoring" is suited to projects with complex mitigation measures, such as wetland restoration or archaeological protection, which may exceed the expertise of the local agency to oversee, are expected to be implemented over a period of time or require careful implementation to assure compliance. Both reporting and monitoring would be applicable to the proposed project.

MITIGATION MATRIX

To sufficiently track and document the status of mitigation measures, a mitigation matrix has been prepared and includes the following components:

- Impact
- Mitigation Measure
- Action
- Timing
- Responsibility

The mitigation matrix is included in Table 0.4-1. Additionally, the project will be required to adhere to the design features presented in Table 0.4-2.

Table 0.4-1. Mitigation Measures

Armorlite Lofts Specific Plan Mitigation Monitoring and Reporting Program

Impact	Mitigation Measure	Action	Timing	Responsibility
BIOLOGICAL RESOURCES				
BIO-1 Potential to impact avian species and wildlife protected under the Migratory Bird Treaty Act and California Fish and Game Code if tree removal, vegetation removal, or other construction activities occur during the nesting season.	**MM-BIO-1a Breeding Season Avoidance.** To the extent feasible, the applicant/developer shall only remove vegetation from the project impact footprint between September 1 through February 14 to avoid the bird breeding season. Further, to the maximum extent practicable, grading activities associated with construction of the project shall occur September 1 through February 14 to avoid the breeding season. If project construction must occur during the breeding season, mitigation measure MM-BIO-1b shall be implemented. **MM-BIO-1b Nesting Survey(s).** Take of birds protected under the Migratory Bird Treaty Act and California Fish and Game Code shall be avoided during the nesting season. To avoid any direct impacts on raptors and/or any migratory birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, removal of habitat that supports active nests on the proposed area of disturbance shall occur outside of the nesting season for these species (February 15 through August 31, annually). If construction occurs during the nesting season, pre-construction nesting bird surveys must be conducted within 72 hours of construction-related activities. If nesting birds are detected by the biologist, the following buffers shall be established: (1) no work within 300 feet of a non-listed nesting migratory bird nest, and (2) no work within 500 feet of a listed bird or raptor nest. However, the biologist may reduce these buffer widths depending on site-specific conditions (e.g., the width and type of screening vegetation between the nest and proposed activity) or the existing ambient level of activity (e.g., existing level of human activity within the buffer distance) in conjunction with consultation with the City of San Marcos. If construction must take place within the recommended buffer widths above, the project applicant shall contact the City of San Marcos and	Avoid construction during bird breeding season but If construction is proposed during the breeding season, conduct a pre-construction survey. If nesting birds are present, implement buffer zone and avoidance measures. If nesting birds are not detected during the preconstruction survey, no further mitigation is required. Avoid ground-disturbing activities during the Crotch's bumble bee nesting period. If ground-disturbing activities are proposed during the Crotch's bumble bee nesting period,	For construction activities proposed for the period of February 15 through August 31, conduct bird surveys within seven days prior to the start of construction activities. For ground-disturbing activities between February 1 through October 31, conduct Crotch's bumble bee surveys.	Applicant/ Landowner, Project Biologist, Contractor.

Impact	Mitigation Measure	Action	Timing	Responsibility
	wildlife agencies (United States Fish and Wildlife Service [USFWS] and California Department of Fish and Wildlife [CDFW]) to determine the appropriate buffer. Additionally, take of a state candidate species is prohibited under the California Endangered Special Act (CESA). While Crotch's bumble bee has low potential to occur on site, the pre-construction surveys for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include focused surveys, which shall be based on recommendations described in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, released by CDFW on June 6, 2023, or the most current version of such guidelines at the time of construction. The surveys shall be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week, preferably spaced two (2) to four (4) weeks apart. Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least one (1) hour following rain. Optimal surveys are when there are sunny to partly sunny skies and a temperature greater than 60°F. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 miles per hour). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to five (5) minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five (5) minutes of	conduct surveys, per the requirements of the mitigation measure.		

Impact	Mitigation Measure	Action	Timing	Responsibility
	observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one (1) time to sufficiently determine if bees are entering/exiting them, depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point to determine which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation, if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee-identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly. If Crotch's bumble bee nests are not detected, no further mitigation is required. The mere presence of foraging Crotch's bumble bees shall not require implementation of additional mitigation measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the project			

Impact	Mitigation Measure	Action	Timing	Responsibility
	construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest because the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources. A written survey report shall be submitted to the City Planning Division Director within 30 days of the last survey pass. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. If Crotch's bumble bee is detected within the project site, the project applicant/developer shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this document. In the event that an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to			

Impact	Mitigation Measure	Action	Timing	Responsibility
	those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through on-site preservation of suitable habitat and/or in accordance with CDFW guidance for off-site locations. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement.			
BIO-2: The proposed project has the potential to result in indirect impacts to sensitive species due to dust, trash, and accidental transport of non-native plant species into the project site, and invasive plant species, and noise and lighting effects.	**MM-BIO-2a Construction Best Management Practices.** The project applicant shall ensure that the following conditions are implemented during project construction to minimize potential environmental impacts due to project implementation: 1. Impacts from fugitive dust shall be avoided and minimized through watering and other appropriate measures consistent with the Construction General Permit Order 2009-009-DWQ. 2. Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the project site. 3. To avoid attracting predators, the project site shall be kept clean of debris. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site. 4. Pets of project personnel shall not be allowed on the project site.	Biological monitoring and implementation of BMPs during construction. Review/approve landscape plans.	Prior to and during construction.	Applicant/ Landowner, Project Biologist, Contractor.

Impact	Mitigation Measure	Action	Timing	Responsibility
	MM-BIO-2b Landscaping. The applicant shall ensure that development landscaping habitat does not include exotic plant species that may be invasive to native habitats in the region. Exotic plant species not to be used include any species listed on the California Invasive Plant Council's "Invasive Plant Inventory" List. In addition, landscaping should not use plants that require intensive irrigation, fertilizers, or pesticides. **MM-BIO-2c Biological Monitor Requirements and Duties.** A qualified biologist shall be on site per the discretion of the City during initial clearing/grubbing and during grading to ensure compliance with all project-imposed mitigation measures. The biologist shall be available during pre-construction and construction phases to review grading plans, address protection of potential biological resources, monitor ongoing work, and maintain communications with the Project's engineer to ensure that any issues are appropriately and lawfully managed. The qualified biological monitor shall also be responsible for the following duties: 1. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust. 2. Halt work, if necessary, and confer with the USFWS, CDFW, and City of San Marcos to ensure the proper implementation of species and habitat protection measures. The biologist shall report any violation to USFWS and the City within 24 hours of its occurrence. 3. Submit a final report to the City within 60 days of project completion that includes the following:(1) as-built construction drawings for grading with an overlay of any active nests; (2) photographs of habitat areas during pre-construction and post-construction conditions; and (3) other relevant summary information documenting that authorized impacts were not exceeded and that			

Impact	Mitigation Measure	Action	Timing	Responsibility
	general compliance with the avoidance/minimization provisions were achieved.			
BIO-3 The proposed project would impact 2.13 acres of Diegan coastal sage scrub and 0.12 acres of non-native grassland-broadleaf dominated for a total of 2.25 acres of impact.	**MM-BIO-3 Off-Site Mitigation.** The permanent loss of 2.13 acres of Diegan Coastal Sage Scrub will be mitigated at a minimum 1:1 ratio and the permanent loss of 0.12 acres of non-native grassland will be mitigated at a minimum 0.5:1 ratio. The amount of mitigation acreage required for non-native grassland may be reduced if up-tiered (i.e., coastal sage scrub) habitat is available for purchase. Section 5.2.1 of the Draft Subarea Plan for San Marcos references the preferred order of mitigation to be on-site mitigation, off-site acquisition, in-lieu fees, and mitigation credits. Since on-site mitigation is not an option due to the project design, the impacted 2.13 acres of Diegan coastal sage scrub and 0.06 acres of non-native grassland will be mitigated by the project applicant through off-site acquisition, in lieu fees, a purchase of credits from Buena Creek Mitigation Bank or another approved mitigation bank, or a combination thereof as approved by the City's Planning Division Director and wildlife agencies prior to issuance of the grading permit.	Proof of off-site acquisition, in-lieu fees, purchase of credits from mitigation bank, or combination thereof submitted to the Planning Division Director.	Prior to issuance of Grading Permit.	Applicant/ Landowner, Project Biologist.
CULTURAL RESOURCES				
CR-1 Due to grading and ground disturbing activities, the proposed project may uncover previously unidentified archeological resources associated with SDI-5633 or may result in previously unknown archaeological resources associated with other time periods or cultures.	**MM-CR-1a Archaeological 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 has been retained at the Applicant/Owner or Grading Contractor's expense to monitor ground disturbing activities associated with project construction. The Qualified Archaeologist 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 shall be present on-site during grubbing, grading, trenching, and/or other ground disturbing activities that occur in areas of	Provide documentation that a qualified archaeologist has been retained. Archaeologist to attend pre-construction meetings and conduct monitoring as described.	Prior to issuance of Grading Permit and/or during all earth moving and ground disturbing activity. Archaeologist monitoring report to be provided prior to	Applicant/ Landowner, Archaeologist, Tribal Monitor(s), Contractor.

Impact	Mitigation Measure	Action	Timing	Responsibility
	native soil or other permeable natural surfaces that have the potential to unearth any evidence of potential archaeological resources. In areas of artificial paving, the Qualified Archaeologist shall be present on-site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb more than six (6) inches below the original pre-project ground surface to identify any evidence of potential archaeological 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 archaeological resources by the Qualified Archaeologist. The Qualified Archaeologist shall maintain ongoing collaborative coordination with the Native American monitor(s) (mitigation measure MM-TCR-1) 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, 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 Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Director 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 consulting Tribes. A final copy of the report, with all confidential site records and appendices, will also be	Provide archaeologist monitoring report.	the release of any grading bonds, or prior to the issuance of any project Certificate of Occupancy.	

Impact	Mitigation Measure	Action	Timing	Responsibility
	submitted to the South Coastal Information Center after approval by the City.			
	MM-CR-1b Unanticipated Discovery Procedures: The Qualified Archaeologist may temporarily halt or divert ground disturbing activities if previously unknown archaeological resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be associated with Native American culture, it will be considered a tribal cultural resource and subject to mitigation measures MM-TCR-4 and MM-TCR-5. Non-Native American resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource (subject to MM-TCR-4) and a potentially significant archaeological resource that is associated with Native American culture, then the Qualified Archaeologist, Tribes, Native American monitors, and City shall coordinate on appropriate treatment. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist) will be minimally documented in the field. All unearthed archaeological resources will be collected, temporarily stored in a secure location until analysis and documentation are complete. If a determination is made that the archaeological resources are considered potentially significant by the Qualified Archaeologist, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. In the event that curation of archaeological resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility within San Diego County and the curation shall be guided by California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections. The City shall provide the Applicant/Owner final	If potential cultural resources are found, halt ground disturbance and follow procedures listed for discovery.	During all earth moving and ground disturbing activity.	Archaeologist, Tribal Monitor(s), Contractor, City (Planning Division Director).

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	curation language and guidance on the project grading plans prior to issuance of the grading permit, if applicable, during project construction. The Applicant/Owner shall be responsible for all repatriation and curation costs and provide to the City written documentation from the curation facility that the curation has been completed.			
CR-2 There is a potential for Project construction activities to disturb previously unidentified human remains on the Project site.	**MM-CR-2 Human Remains**: As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 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 two (2) business days of being notified if the remains are subject to their authority. If the Medical Examiner recognizes the remains to be Native American, and not under their jurisdiction, then they 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 human remains are found, halt ground disturbance and follow procedures listed for discovery.	During all earth moving and ground disturbing activity.	Archaeologist, Tribal Monitor(s).

Impact	Mitigation Measure	Action	Timing	Responsibility
	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 (6) 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 Sections 5097.98(e) and 5097.94(k)).			
NOISE				
N-1 Due to temporary rock drilling and blasting activities during construction, the proposed project has the potential to create noise levels in excess of the 75 dBA standard if rock drilling equipment is staged closer than 160 feet to an occupied noise sensitive land use's property line	**MM-N-1** Prior to issuance of a blasting permit, the project applicant or contractor shall provide the final location of the construction equipment, topography, and construction schedule to the Planning Division. If the rock drill is shown to be located within 160 feet from a sensitive land use's property line, an acoustical engineer shall prepare a noise assessment to determine whether noise levels in excess of the 75 dBA standard would occur during construction. If the rock drilling and blasting noise assessment determines noise levels at the affected property lines would exceed 75 dBA, the acoustical engineer shall develop a mitigation plan to ensure during rock drilling and blasting would be below 75 dBA at the property line. Potential measures to reduce drilling and blasting noise levels could include: 1) construction of a temporary noise barrier of solid non-gaping material ranging from 8 to 12 feet in	Depending on final location of rock drill, prepare noise assessment and if necessary, mitigation plan. Implement identified measures including construction of temporary noise barriers as necessary.	Prior to issuance of a blasting permit and during rock drilling.	Applicant/ Landowner, Acoustical Engineer, Contractor, City (Planning Division Director).

Impact	Mitigation Measure	Action	Timing	Responsibility
	height along any property line where the impacts could occur; 2) limits on usage of the equipment (amount of time used and/or the location in respect to the property line) or other measures to ensure the levels would be below 75 dBA. The mitigation plan shall be submitted to the Planning Division and implemented by the contractor.			
N-2 Due to temporary rock crushing activities, the proposed project has the potential to create noise levels in excess of the applied operational noise standards for multi-family residential (65 dBA Leq) and commercial use (70 dBA Leq) if the rock crusher is staged within 210 feet of a multi-family residential use or within 160 feet of a commercial use.	**MM-N-2** Prior to issuance of a Conditional Use Permit for a rock crusher, the project applicant or contractor shall provide the final location and rock crusher type to the Planning Division. If the rock crusher is shown to be located within 210 feet of a multi-family residential use or within 160 feet of a commercials use without shielding, an acoustical engineer shall prepare a noise assessment to determine whether noise levels would be above the applied threshold of 65 dBA Leq for multi-family residential use and 70 dBA Leq for commercial use. If the rock crushing noise assessment determines noise levels at the affected property lines would exceed the standards, the acoustical engineer shall develop a mitigation plan to reduced noise levels to 65 dBA at any existing multi-family use and 70 dBA at an existing commercial use. Mitigation may include sound barriers, sound absorbing materials and/or operational limits on the crusher equipment's usage. The mitigation plan shall be submitted to the Planning Division and implemented by the contractor.	Depending on final location of rock crusher, prepare noise assessment and if necessary, mitigation plan. Implement identified measures including construction of temporary noise barriers as necessary.	Prior to issuance of a Conditional Use Permit for a rock crusher and during rock crushing activities.	Applicant/ Landowner, Acoustical Engineer, Contractor, City (Planning Division Director).
Tribal Cultural Resources				
TCR-1 As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural	**MM-TCR-1 Monitoring Agreement:** Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall extend the invitation to enter into a Monitoring Agreement with the Rincon Band of Luiseño Indians and the San Luis Rey Band of Luiseño Indians (Tribes). The purpose of the Monitoring Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the Tribes for the monitoring for Native American human remains,	Extend invitation and if accepted, enter into a Monitoring Agreement between Applicant/Owner and Tribes.	Prior to issuance of a Grading Permit or commencement of ground disturbing	Applicant/ Landowner, Tribal Representative(s), Tribal Monitor(s), Archaeologist,

Impact	Mitigation Measure	Action	Timing	Responsibility
resource that is eligible for inclusion in the California Register of Historical Resources.	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. In the event that either or both tribes choose not to enter into an agreement or fail to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented. Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the Tribal 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 Tribes for proper treatment and disposition per the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Monitoring Agreement. Additionally, all non-tribal artifacts collected by the archaeologist shall also be subject to curation.		activities and during all earth moving and ground disturbing activities.	
	MM-TCR-2 Controlled Grading. The area illustrated on the confidential exhibit attached to the grading plans shall be subject to controlled grading. Under the observation of a tribal monitor and qualified archaeologist, the contractor shall use either a small piece of equipment or observe the removal of soil by a backhoe equipped with a flat-edge bucket to excavate soil using shallow cuts made in approximately one-foot lifts. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area and random samples may be screened to ensure adequate detection of any cultural materials	Controlled grading under observation of tribal monitor(s) and archaeologist.	During grading/earth disturbing activities in area illustrated on confidential exhibit attached to grading plans.	Applicant/ Landowner, Tribal Monitor(s), Archaeologist, Contractor.

Impact	Mitigation Measure	Action	Timing	Responsibility
	that may be present. In the event that cultural materials or human remains are exposed, the procedures for unanticipated discoveries in mitigation measure MM-TCR-4 shall apply. Controlled grading shall continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits, or when restrictive layers or non-cultural formational soils are encountered that predate any human occupation of this location, as determined by the qualified professional archaeologist, in consultation with the tribal monitor. Once the identified depth has been reached, the controlled grading process will be terminated and mass grading may proceed, subject to review and approval by the City.			
	MM-TCR-3 Construction Monitoring: Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City's Planning Division stating that the Rincon Band and San Luis Rey Band have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Monitoring Agreement. Native American monitoring shall include one (1) monitor from the Rincon Band of Luiseño Indians and one (1) monitor from the San Luis Rey Band of Luiseño Indians simultaneously. In the event that either tribe chooses not to enter into an agreement or fails to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented. The monitors shall be provided at least 72 hours' notice of the initiation of construction and be kept reasonably apprised of changes to the construction schedule. In the event that a monitor is not present at the scheduled time, work can continue without the monitor present, as long as the notice was given and documented. Native American monitors shall be invited to attend all applicable pre-construction meetings with the General Contractor and/or	Provide documentation that Tribal Monitor(s) have been retained. Tribal Monitor(s) to attend pre-construction meetings and conduct monitoring as described.	Prior to issuance of Grading Permit and/or during all earth moving and ground disturbing activity.	Applicant/ Landowner, Tribal Monitor(s), Archaeologist, Contractor.

Impact	Mitigation Measure	Action	Timing	Responsibility
	associated subcontractors to present the construction monitoring program. The Native American monitors 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 Native American monitors shall be present on-site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb the original pre-project ground surface to identify any evidence of potential tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either: 1) from existing commercial (previously permitted) sources of materials; or 2) are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the Native American monitors. The Qualified Archaeologist (mitigation measure MM-CR-1a) and Native American monitors 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 Tribes, preferably through e-mail, of the start and end of all ground disturbing activities.			
	MM-TCR-4 Unanticipated Discovery Procedures: Native American monitors may temporarily halt or divert ground disturbing activities if previously unknown tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be not associated with Native	If potential tribal cultural resources are found, halt ground disturbance and follow procedures listed for discovery.	During all earth moving and ground disturbing activity.	Tribal Monitor(s), Archaeologist, Contractor, City (Planning Division Director).

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	American culture, it will be subject to mitigation measure MM-CR-1b. Native American tribal cultural resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource and a potentially significant archaeological resource that is associated with Native American culture (subject to mitigation measure MM-CR-1b), then the Qualified Archaeologist, Tribes, monitors, and City shall coordinate on appropriate treatment. All unearthed tribal cultural resources will be collected, temporarily stored in a secure location, and repatriated according to the consulting tribes, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. If a determination is made that the tribal cultural resources are considered potentially significant by the Tribe and the Native American monitor, then the City and the Tribe shall determine, in consultation with the Applicant/Owner, the culturally appropriate treatment of those resources. All sacred sites and significant tribal cultural resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency (as defined by the California Environmental Quality Act [CEQA]), then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource. The Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation. Any cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site and repatriated according to the terms of the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the Native			

Impact	Mitigation Measure	Action	Timing	Responsibility
	American monitor. Any testing, taking of photos or 3D prints are prohibited, unless all monitoring tribes give prior written approval.			
	MM-TCR-5 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. The procedures in mitigation measure MM-CR-2 shall apply.	If human remains are found, halt ground disturbance and follow procedures listed for discovery.	During all earth moving and ground disturbing activity.	Native American Monitor(s), Archaeologist,
	MM-TCR-6 Reburial: Prior to the approval of grading plans, the Applicant shall designate a reburial location onsite and note the location as excluded from construction-related activity on grading plans. The reburial location shall be used to rebury any cultural materials encountered during monitoring, and to rebury existing collections from the previous data recovery effort. Following the completion of all ground disturbing activity and reburial of all materials and before the issuance of a Certificate of Occupancy, the Applicant shall file a deed restriction on the parcel that protects the reburial location from future disturbance and provide a copy to the City. The exhibit for the deed restriction and purpose of it shall be kept confidential and out of the public record.	Designate a reburial location on grading plan to be excluded from construction-related activities. Bury new and/or existing cultural resources in this location. File deed restriction on parcel to protect reburial location from future disturbance.	Prior to approval of grading plans, and prior to issuance of Certificate of Occupancy.	Applicant/Land Owner, Tribal Monitor(s), Archaeologist, City (Planning Division Director).
	MM-TCR-7 Access Agreement and Management Policy: Prior to the issuance of a Certificate of Occupancy, the Applicant/Owner shall extend a written offer to each consulting tribe to enter into an access agreement, which is binding on successors and heirs	Extend offer to Tribe(s) and if accepted prepare access agreement	Prior to the issuance of a	Applicant/ Land Owner, Tribal Representative(s), Tribal Monitor(s),

Impact	Mitigation Measure	Action	Timing	Responsibility
	to the property, that allows for legal access to visit the reburial location after construction is completed. If more than one tribe elects to enter into an access agreement, each tribe shall have its own agreement. In the event that one (1) or more consulting tribe does not respond to the offer within 30 days of receipt, then the City will deem this mitigation measure satisfied provided that the offer was extended and documented in accordance with this measure. Management of the reburial area is to include the development of a revegetation plan in consultation with the consulting tribes, including notification process for proposed maintenance of the reburial area.	(s) for future visits to the site's reburial location after construction. Develop and include revegetation plan.	Certificate of Occupancy.	City (Planning Division Director).
	MM-TCR-8 Native Vegetation: Prior to clearing and grubbing of vegetation in the project area, a qualified professional botanist shall flag the presence of white sage for transplanting into the landscaping or offsite. In the event that transplanting is determined infeasible by the botanist, in their professional judgement, the Applicant/Owner shall ensure that native white sage is included in the landscaping plan for the project.	Flag presence of white sage for transplanting into landscaping; Include white sage in Landscaping Plan.	Prior to clearing and grubbing of vegetation in the project area and prior to final approval of landscape plan.	Qualified botanist, Tribal Monitor(s), Applicant/ Land Owner, Contractor.
	MM-TCR-9 Land Acknowledgement Statement: The Applicant/Owner shall develop and post a Land Acknowledgement Statement inside a common area of the development. The statement shall be developed in coordination with Tribes and address the acknowledgement that the project is on the ancestral lands of culturally affiliated tribes that have been the original and ongoing stewards of the land. In the event that consulting tribes do not respond to the offer within 30 days of receipt, then the City will deem this mitigation measure satisfied provided that the offer was extended and documented in accordance with this measure. The location of the Land Acknowledgement Statement shall be noted on elevation and/or plan view drawings for the common area of the development.	Develop and post Land Acknowledgement Statement inside common area of development. Note statement on elevation and/or plan view drawings.	Prior to approval of elevation and/or plan view drawings.	Applicant/ Land Owner, City (Planning Division Director).
	MM-TCR-10 Project-Specific Ethnographic Synthesis: The Applicant/Owner shall fund the preparation of a project-specific ethnographic synthesis, not to exceed what is described in the	Extend written offer and if accepted prepare	No later than 30 days after the	Applicant/ Land Owner, Tribal Representative(s).

Impact	Mitigation Measure	Action	Timing	Responsibility
	confidential proposal provided by the Rincon Band of Luiseño Indians dated August 27, 2024. No later than 30 days after the final project approval, the Applicant/Owner shall extend a written offer to the Rincon Band of Luiseño Indians to enter into an agreement with their ethnographer to conduct and prepare the ethnographic synthesis in accordance with the aforementioned proposal. In the event of a dispute between the parties in entering into the agreement for the ethnographic synthesis, and after a good faith and reasonable effort, the City shall serve as the final arbiter. The City will determine the scope and content of an ethnographic synthesis in that event. The synthesis will draw from oral histories, elder knowledge, and other sources of confidential Indigenous knowledge that relate to the tribal cultural resource affected by the proposed project. The ethnographer shall be afforded up to 90 days following funding of the ethnography to carry out any field visits with appropriate tribal representatives. After 90 days, or sooner if the ethnographer completed its field studies, the Applicant/Owner shall be permitted to proceed with ground disturbing activities and construction of the project while non-field-based data gathering, such as ethnographic interviews of informants and review of tribal documents, is being carried out. Upon completion, a public (redacted) version of the ethnographic synthesis shall be submitted to the California Historical Resources Information System and the City. The final non-redacted study shall belong to the Rincon Band of Luiseño Indians.	ethnographic synthesis. Submit public (redacted) version of the ethnographic synthesis to the California Historical Resources Information System and the City.	final Project approval	City (Planning Division Director).

Table 0.4-2. Design Considerations for the Project

Aesthetics • Implementation of the Landscape Plan to provide a cohesive and visually appealing planting scheme. • Compliance with the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards.
Air Quality • Compliance with San Diego Air Pollution Control District (SDACPD) Rule 55 – Fugitive Dust. • In accordance with SDAPCD Rule 67.0 (Architectural Coatings), the project would utilize low-volatile organic compound (VOC) paint that does not exceed 100 grams of VOC per liter for interior surfaces and 150 grams of VOC per liter for exterior surfaces. • Heavy diesel construction equipment shall be rated Tier IV or better. • Blasting activities would be limited as follows: 1) blasts would be limited to once per day; blasts are limited to six tons of ammonium nitrate for any given blast operation; and the blast area would be limited to 20,000 s.f. (100-foot X 200-foot area).
Biological Resources • The applicant/developer/property owner shall pay Public Facility Fees, a portion of which go towards City-wide habitat conservation efforts.
Energy • Ensure proper maintenance of all construction equipment per manufacturer recommendations. • Comply with the California Air Resources Board (CARB)'s Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. • Installation of rooftop solar photovoltaic consistent with Title 24.
Greenhouse Gas Emissions • Provision of 13 Level 2 EV charging stations. • Provision of 25 EV capable and 62 EV ready parking spaces in the community parking area. • To meet the requirements of Reduced Parking Near Transit (Measure T-12) in the City's CAP: the project would provide 247 spaces for residential use (69 garage standard spaces, 102 garage tandem spaces, 18 tuck under spaces and 58 open spaces) and 17 spaces for the commercial uses. Commercial parking requirements would be met by providing 7 open parking spaces, and 10 of the residential open spaces would be available for commercial use from 9:00 AM to 5:00 PM to meet the required 17 spaces. • Installation of rooftop solar photovoltaic consistent with Title 24 and the CAP compliance checklist. • Provision of bicycle racks. • Provision of pedestrian connection between the proposed building to Armorlite Drive. • The property manager shall provide transit information to the owners and make a good faith effort in offering transit fare subsidies to residents and businesses. • Designated parking for EV, carpool, vanpool, and/or park-and-ride spaces on site. • Provision of a workspace in the community room for telecommuting employees.

- Compliance with the City's Model Water Efficient Landscape Ordinance and Municipal Code, Title 20.
- Installation of electric (rather than natural gas) tank water heaters.
- None of the units shall have fireplaces.
- Planting of shade trees.

Hazards

- Future residents shall be notified of potential annoyances commonly associated with proximity to airports (e.g., noise, vibrations, and overflights) through the recording of overflight notification documents as outlined in the McClellan-Palomar Airport Land Use Compatibility Plan and Chapter 20.265 of the City's Municipal Code.

Noise

- Grading, excavation, and other earth moving activities shall occur between 7:00 AM and 6:00 PM, Monday through Friday and between 8:00 AM and 5:00 PM on Saturdays. No grading, excavation and other earth moving activities shall occur on Sunday or City holidays in accordance with the City's Municipal Code, Sections 10.24.200 and 17.080.00.
- Compliance with Municipal Code Section 17.60.060 (Blasting Operations Procedures).
- All equipment shall be properly fitted with mufflers and all staging and maintenance shall be conducted as far away from the existing residences as possible to reduce construction noise.
- The residential units with direct line-of-site to W. Mission Road and Las Posas Road shall have enhanced balcony and patio shielding consisting of 3.5-foot barriers. The barriers shall be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials.
- Parapet walls shall be constructed to shield rooftop HVAC units.
- To ensure compliance with California Code of Regulations (CCR) Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Public Services – Fire Protection, Police Protection and Schools

- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic).
- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 98-01 (Police).
- The applicant shall pay the San Marcos Unified School District developer fees that are in effect at the time of building permit issuance. The current residential fee is $5.17 per square foot and the current commercial fee is $0.84 per square foot.

Transportation (Vehicle Miles Traveled)

- The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2011-01 (Congestion Management).

Utilities and Service Systems

- The applicant shall pay applicable Water and Wastewater Capital Facility Fees to Vallecitos Water District per Ordinances Nos. 175 and 176.

0.5 CEQANET POSTING

Armorlite Lofts

Summary

SCH Number
2024020372

Lead Agency
City of San Marcos

Document Title
Armorlite Lofts

Document Type
EIR - Draft EIR

Received
1/8/2025

Present Land Use
The project site is undeveloped. The project site has a General Plan Designation of PI (Public Institutional) and the Zoning on the project site is Public-Institutional (P-I).

Document Description
The project involves the development of an approximately 2.44-acre vacant parcel on Armorlite Drive with a mixed-use development comprising 165 residential units and 5,600 square feet of ground-floor commercial space. The project includes 15% affordable units designated for very low-income households (30% to 50% of the Area Median Income or AMI) and approximately 20,200 square feet of common open space. Recreational amenities will include a dog park, game and yoga areas, and an indoor/outdoor lounge that connects to a pool area and rooftop deck. The proposed building will be a five-story structure (four stories over podium parking) featuring a contemporary architectural style consistent with other recent mixed-use developments in the vicinity.

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Location

Coordinates
33°8'48.89"N 117°11'17.67"W

Cities
San Marcos

Counties
San Diego

Regions
Southern California

Cross Streets
Armorlite Drive/Las Posas Road

Zip
92069

Total Acres
2.44

Parcel #
219-162-62-00

State Highways
SR-78

Railways
NCTD SPRINTER

Airports
n/a

Schools
La Mirada Academy, Leichtag Elementary

Waterways
San Marcos Creek

Township
12S

Range
3W

Section
unsect

Base
San Bern

Notice of Completion

State Review Period Start
1/10/2025

State Review Period End
2/24/2025

State Reviewing Agencies
California Air Resources Board (ARB), California Department of Conservation (DOC), California Department of Fish and Wildlife, South Coast Region 5 (CDFW), California Department of Housing and Community Development (HCD), California Department of Parks and Recreation, California Department of Toxic Substances Control (DTSC), California Department of Transportation, District 11 (DOT), California Department of Water Resources (DWR), California Highway Patrol (CHP), California Native American Heritage Commission (NAHC), California Natural Resources Agency, California Regional Water Quality Control Board, San Diego Region 9 (RWQCB), Office of Historic Preservation, State Water Resources Control Board, Division of Drinking Water, State Water Resources Control Board, Division of Drinking Water, District 14, State Water Resources Control Board, Division of Drinking Water, District 26, California Public Utilities Commission (CPUC)

State Reviewing Agency Comments
California Public Utilities Commission (CPUC)

Development Types
Residential (Units 165, Acres 2.44), Commercial (Sq. Ft. 5600, Acres .2, Employees 4)

Local Actions
General Plan Amendment, Specific Plan, Site Plan, Rezone, Use Permit

Project Issues
Aesthetics, Air Quality, Biological Resources, Cultural Resources, Cumulative Effects, Geology/Soils, Growth Inducement, Hazards & Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Population/Housing, Public Services, Recreation, Schools/Universities, Sewer Capacity, Transportation, Vegetation

Public Review Period Start
1/10/2025

Public Review Period End
2/24/2025

Attachments

Draft Environmental Document [Draft IS, NOI_NOA_Public notices, OPR Summary Form, Appx,]

Appendix-A1-Specific-Plan PDF 7741 K
Appendix-A2-Project-Plans PDF 25519 K
Appendix-A3-Landscape-Plan PDF 16369 K
Appendix-B1-Intial-Study PDF 1353 K
Appendix-B2-NOP PDF 305 K
Appendix-B3-NOP-Comment-Letters PDF 4156 K
Appendix-C-Air-Quality PDF 2477 K
Appendix-D-Biology-Report PDF 7436 K
Appendix-E-GHG PDF 3265 K
Appendix-F-CAP-Checklist PDF 1539 K
Appendix-G-Energy PDF 659 K
Appendix-H-Geotech PDF 4020 K
Appendix-I-Phase1-ESA PDF 17209 K
Appendix-J-Phase2-ESA PDF 2220 K
Appendix-K-Due-Diligence-Memo PDF 172 K

Appendix-L-Statement-of-Clarification-UST PDF 255 K
Appendix-M-Drainage-Study PDF 5832 K
Appendix-N-SWQMP PDF 72056 K
Appendix-O-LTA PDF 8869 K
Appendix-P-Noise PDF 996 K
Appendix-Q-SMUSD-Response PDF 739 K
Appendix-R-VMT PDF 5711 K
Appendix-S-VWD-Water-Sewer PDF 3484 K
Armorlite Lofts-DraftEIR PDF 14157 K
NOA-Armorlite-Lofts PDF 328 K
Summary-Form-Armorlite PDF 515 K
SummaryForm-AttachmentA-ArmorliteLofts PDF 135 K

Notice of Completion [NOC] Transmittal form

NOC-Armorlite-Lofts PDF 208 K

State Comment Letters [Comments from State Reviewing Agency(ies)]

2024020372_CPUC Comments PDF 217 K

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Acronyms

µg/m^3	Micrograms per Cubic Meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AC	Acre
ADT	Average Daily Traffic
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMI	Area Median Income
AMSL	Above Mean Sea Level
ANFO	Ammonia Nitrate and Fuel Oil
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
AQIA	Air Quality Impact Assessment
ASTM	American Society for Testing and Materials
ATP	Active Transportation Plan
BAU	Business-as-Usual
BMP	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal/OES	California Office of Emergency Services
CalRecycle	Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CaRFG	California Reformulated Gasoline
CAS	California Approved Samplers
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFD	Community Facilities District
CFS	Cubic Feet Per Second
CH_4	Methane
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Program
CLTL	Continuous Left-Turn Lane
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide

CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COPPS	Community Oriented Policing and Problem Solving
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CRHR	California Register of Historic Resources
CSUSM	California State University San Marcos
CUP	Conditional Use Permit
CWA	Clean Water Act
CWC	California Water Code
CY	Cubic Yard
dB	Decibel
dBA	A-Weighted Decibel
dc	Direct Current
DDE	Dichlorodiphenyldichloroethylene
DEIR	Draft Environmental Impact Report
DOF	Department of Finance
DOT	Department of Transportation
DPM	Diesel Particulate Matter
DU	Dwelling Unit
DU/AC	Dwelling Unit/Acre
EDCO	EDCO Waste and Recycling
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EV	Electric Vehicle
EWPCF	Encina Water Pollution Control Facilities
FAR	Floor Area Ratio
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FPA	Focused Planning Area
FT	Feet
FT/S	Feet per Second
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GIS	Geographic Information System
GPA	General Plan Amendment
GPD	Gallons per Day
GPNE	General Plan Noise Element
GPR	Ground Penetrating Radar
GW	Gigawatt
GWP	Global Warming Potential
H_2S	Hydrogen Sulfide

HAP	Hazardous Air Pollutant
HCFC	Hydrochlorofluorocarbon
HERO	Human and Ecological Risk Office
HFC	Hydrofluorocarbon
HVAC	Heating, Ventilation, and Air Conditioning
IEPR	Integrated Energy Policy Report
IIRP	Individual Integrated Resource Plan
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
IS	Initial Study
KBtu	One Thousand British Thermal Units
kWh	Kilowatt-Hour
Lbs	Pounds
LCFS	Low Carbon Fuel Standard
LED	Light Emitting Diode
Leq	Equivalent Sound Level
LLG	Linscott, Law & Greenspan
LOS	Level of Service
LTA	Local Transportation Analysis
LTS	Less than Significant
LTSM	Less than Significant with Mitigation
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MFR	Multi-Family Residential
MG	Million Gallon
MG/M^3	Milligrams per Cubic Meter
MGD	Million Gallons per Day
MHCP	Multiple Habitat Conservation Plan
MM	Mitigation Measure
MMT	Million Metric Tons
MPH	Miles per Hour
MRF	Meadowlark Reclamation Facility
MRZ	Mineral Resource Zone
MT	Metric Ton
MW	Megawatt
MWD	Metropolitan Water District
MWdc	Megawatt direct current
MWH	Megawatt Hour
N_2	Nitrogen
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NCTD	North County Transit District
NEV	Neighborhood Electric Vehicle
N.	North
NO_2	Nitrogen Dioxide
NOP	Notice of Preparation
NOx	Nitrogen Oxides

NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSLU	Noise Sensitive Land Use
NTA	Northern Tributary Area
O_2	Oxygen
O_3	Ozone
OCP	Organochlorine Pesticide
OHWM	Ordinary High Water Mark
OPR	Office of Planning and Research
Pb	Lead
PFC	Perfluorocarbon
PFF	Public Facility Fee
PG&E	Pacific Gas & Electric
PI	Public/Institutional
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns in Diameter
PM_{10}	Particulate Matter Less than 10 Microns in Diameter
POC	Point of Confluence
PPB	Parts per Billion
PPHM	Parts per Hundred Million
PPM	Parts per Million
PPV	Peak Particle Velocity
PRC	Public Resources Code
PV	Photovoltaic
PVC	Polyvinyl Chloride
RAQS	Regional Air Quality Strategies
REC	Recognized Environmental Condition
REL	Reference Exposure Levels
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RMS	Root Mean Square
ROG	Reactive Organic Gas
ROW	Right-of-Way
ROZ	Ridgeline Overlay Zone
RPS	Renewable Portfolio Standard
RSL	Regional Screening Level
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S.F.	Square Feet
SF_6	Sulfur Hexafluoride
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SDNR	San Diego Northern Railroad

SDP	Site Development Plan
SFR	Single Family Residential
SIP	State Implementation Plans
SLCP	Short-Lived Climate Pollutants
SMFD	San Marcos Fire Department
SMFPD	San Marcos Fire Protection District
SMUSD	San Marcos Unified School District
SO_2	Sulfur Dioxide
SPA	Specific Plan Area
SR-78	State Route 78
SRTS	Safe Route to School
SSC	Species of Special Concern
STP	Shovel Test Pit
SVFC	Specific Volumetric Fuel Consumption
SWPPP	Stormwater Pollution Prevention Plan
SWQMP	Stormwater Quality Management Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
T-BACT	Toxics Best Available Control Technology
TCA	Traditionally and Culturally Affiliated
TDM	Transportation Demand Management
TIA	Transportation Impact Analysis
TIAG	Transportation Impact Analysis Guidelines
TPHv	Total Petroleum Hydrocarbons as Vapor
USACE	U.S. Army Corps of Engineers
USCB	U.S. Census Bureau
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
V/C	Volume-to-Capacity
VdB	Vibration Velocity
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VPHPL	Vehicles per Hour per Lane
VWD	Vallecitos Water District
WELO	Water Efficiency Landscape Ordinance
WQIP	Water Quality Improvement Plan
ZEB	Zero Emission Bus
ZEV	Zero Emission Vehicle

1.0 Summary

1.0 Project Summary

The applicant, Las Posas Ventures LLC, is proposing to develop 165 apartment units, 5,600 square feet (s.f.) of commercial use and associated common and private open space on a 2.44 acre site located on Armorlite Drive in the City of San Marcos.

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

- **Specific Plan (SP23-0001)** – The Specific Plan establishes the development rules and regulations of all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the Specific Plan. The Specific Plan would be required to be reviewed and approved concurrently with the Multi-Family Site Development Plan application.
- **General Plan Amendment (GPA23-0002)** – A General Plan Amendment would be required to change the existing Public/Institutional (PI) designation to Specific Plan Area (SPA).
- **Rezone (R22-0001)** - A rezone would be required to change the existing Public-Institutional (P-I) zoning to Specific Plan Area (SPA).
- **Site Development Plan (SDP23-0003)** - The Site Development Plan approval would be required to construct 165 apartment units and 5,600 s.f. of commercial and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.
- **Conditional Use Permit (CUP23-0002)** - Conditional Use Permit approval would be required for potential use of a temporary rock crusher.

1.1 Summary of Significant Effects/Mitigation

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

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

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

Table 1-1. Summary of Potentially Significant Environmental Impacts

Impact	Mitigation Measures	Level of Significance After Mitigation
Biological Resources		
BIO-1: Potential to impact avian species protected under the Migratory Bird Treaty Act and California Fish and Game Code 3503.5 and other wildlife if tree removal, vegetation removal, or other construction activities occur during the nesting season.	Implementation of MM-BIO-1a and MM-BIO-1b, refer to Section 3.3.6	Less than significant
BIO-2: The proposed project has the potential to result in indirect impacts to sensitive species due to dust, trash, and accidental transport of non-native plant species into the project site, and invasive plant species, and noise and lighting effects.	Implementation of MM-BIO-2a, MM-BIO-2b and MM-BIO-2c, refer to Section 3.3.6	Less than significant
BIO-3: The proposed project would impact 2.13 acres of Diegan coastal sage scrub and 0.12 acres of non-native grassland-broadleaf dominated for a total of 2.25 acres of impact.	Implementation of MM-BIO-3, refer to Section 3.3.6	Less than significant
Cultural Resources		
CR-1: Due to grading and ground disturbing activities, the proposed project may uncover previously unidentified archeological resources associated with SDI-5633 or may result in previously unknown archaeological resources associated with other time periods or cultures.	Implementation of MM-CR-1a and CR-1b, refer to Section 3.4.6	Less than significant
CR:2 There is a potential for project construction activities to disturb previously unidentified human remains on the project site.	Implementation of MM-CR-2, refer to Section 3.4.6	Less than significant
Noise		
N-1: Due to temporary rock drilling and blasting activities during construction, the proposed project has the potential to create noise levels in excess of the 75 dBA standard if rock drilling equipment is staged closer than 160 feet to an occupied noise sensitive land use's property line.	Implementation of MM-N-1, refer to Section 3.8.6	Less than significant
N-2: Due to temporary rock crushing activities, the proposed project has the potential to create noise levels in excess of the applied operational noise standards for multi- family residential	Implementation of MM-N-2, refer to Section 3.8.6	Less than significant

Impact	Mitigation Measures	Level of Significance After Mitigation
(65 dBA Leq) and commercial use (70 dBA Leq) if the rock crusher is staged within 210 feet of a multi-family residential use or within 160 feet of a commercial use.		
Tribal Cultural Resources		
TCR-1: As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources.	Implementation of MM-TCR-1 through MM-TRC-10, refer to Section 3.12.6	Less than significant

Note: MM = Mitigation Measure

1.2 Areas of Controversy

A Notice of Preparation (NOP) was distributed on February 12, 2024, for a 30-day public review and comment period. Additionally, a public scoping meeting was held on February 15, 2024.

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

- Biological Resources: focused surveys, mitigation measures, biological resources report preparation, analysis of direct and indirect impacts, alternatives, and cumulative analysis;
- Cultural Resources: San Diego County Archaeological Society will review the Draft EIR when available;
- Transportation: prepare a traffic impact study and CEQA analysis;
- Utilities and Service Systems: water and sewer study provided by VWD.

These concerns are addressed in Chapter 3 of this EIR.

1.3 Issues to be Resolved

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

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

Issues to be resolved that are directly related to the proposed project include the choice among the alternatives and whether or how to mitigate the significant effects. In particular, the decision makers

must decide if the significant impacts to biological resources, cultural resources, noise, and tribal cultural resources have been mitigated to less than significant. Lastly, the decision makers must determine whether any of the project alternatives would substantially reduce significant effects while still meeting key objectives of the project.

1.4 Project Alternatives

Four alternatives are proposed to provide an understanding of how environmental effects could be reduced by varying the design and scope of the project. **Table 1-2** provides a comparison of the impacts of project alternatives to the impacts of the proposed project. **Table 1-3** identifies each of the project objectives and the ability of each alternative to meet those objectives. Tables 1-2 and 1-3 are included at the end of this section.

1.4.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the proposed project would not be implemented, and the project site would remain undeveloped and in its current condition. No grading or construction would occur on the project site under this alternative. The project site is currently undeveloped and supports Diegan coastal sage scrub, non-native grassland, and disturbed habitat.

Since the No Project/No Development Alternative would not develop any residential or commercial uses on the project site, overall impacts would be less than those of the proposed project or eliminated entirely. There are some benefits of the project that would not be realized under this alternative, including providing additional housing units, including affordable units, which helps the City meet its Regional Housing Need Allocation numbers. Under this alternative, off-site water, sewer, and stormwater infrastructure improvements would not be realized. Also, under this alternative there would not be any payment of the City's public facility fees (PFF), which goes toward supporting a variety of services and improvements in the City, including but not limited to Circulation Streets, State Route78 Interchanges, National Pollutant Discharge Elimination System, Tech Improvements, Parks, and Habitat Conservation. Payment of these fees provides improvements that benefit all residents of the city. Similarly, this alternative would not contribute any school fees. Finally, there would not be any protection or repatriation afforded to the existing cultural resources and tribal cultural resources on the site and they could be subject to future disturbance from those who may access the site without authorization. The No Project/ No Development Alternative would not meet any of the project objectives.

1.4.2 No Project/Existing Plan Alternative

Under the No Project/Existing Plan Alternative, the project site would be developed consistent with the site's existing land use designation. The project site has an existing General Plan Land Use designation of Public/Institutional (PI) which has a maximum floor area ratio (FAR) of 3.0. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation is for "facilities built and maintained for public use such as academic facilities, institutional uses, community service facilities, water and sewer facilities, detention and drainage facilities, cemeteries, police and fire stations, and other government buildings and properties. This designation may include privately owned facilities built and maintained for public use" (City of San Marcos 2012).

One development scenario that would meet the P-I (Public/Institutional) zoning requirements would be a three story, 160,000 s.f. telecommunications building that would be used as a data center. This is similar to the existing use of the adjacent AT&T facility and since AT&T was the previous owner of

the project site, a data center would be a logical alternative use. Overall, the development footprint would stay the same as the proposed project.

The No Project/Existing Plan Alternative would result in fewer average daily trips (ADT) but would require 285 times more electricity than the proposed project which results in a corresponding proportional increase in air pollutant and greenhouse gas (GHG) emissions.

Footprint-specific impacts, such as those related to biological resources, cultural, and tribal cultural resources, would be similar as the proposed project, as the same amount of site area would be disturbed.

This alternative would not generate any students for San Marcos Unified School District (SMUSD) and would reduce demand for parks, libraries, natural gas, solid waste, water, and sewer services compared to the proposed project. This alternative would result in a vehicle miles traveled (VMT) impact and would require mitigation to reduce VMT to 85% of the regional mean for employees. Finally, this alternative does not meet any of the project objectives.

1.4.3 Reduced Development Footprint Alternative

Under the Reduced Development Footprint Alternative, the project site would be developed with 14 live/work rowhomes and associated infrastructure. The units would be three stories high and would be a for-sale product. No affordable housing would be proposed under this alternative. Two-car garages would be included on the ground level of each unit and five additional open parking spaces would be provided for a total of 33 spaces. This alternative would have a density of 5.83 du/acre and would include seven 3 bed/2.5 bath units (1,600 s.f.) and seven 4 bed/2.5 bath units (1,800 s.f.). Access would be via Armorlite Drive and a drive aisle adjacent to the western project boundary would provide access to some of the townhomes. Private and common open space would be provided consistent with the City's Outdoor Space Standards (Section 20.255.120 of the San Marcos Municipal Code). Architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development.

Overall, the development footprint and area of disturbance would be reduced compared to the proposed project, as only 41% of the project site would be disturbed. This results in a corresponding decrease in the amount of grading that would be required for the project.

The Reduced Development Footprint Alternative would reduce the number of residential units constructed on the project site (14 compared to 165). This results in a corresponding decrease in vehicular trips by approximately 90% and a corresponding decrease in air pollutant emissions, GHG emissions and noise from offsite traffic compared to the proposed project. Public services, utilities and service systems, and energy demands would also be proportionally decreased. Footprint specific impacts, such as those related to biological resources, cultural resources, and tribal cultural resources, would also be reduced as this alternative would only impact 41 percent of the project site. This alternative would contribute less PFF and school fees since fewer residential units would be constructed. This alternative could be designed in a manner that would meet the majority of the project objectives.

1.4.4 Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the project site would be developed under a Specific Plan with 80 residential apartments and 5,600 s.f. of commercial use for a density of approximately 32 du/acre. The project proposes a density of 67 du/acre. A General Plan Amendment and Rezone would

be required for this alternative to change the site from PI (Public Institutional) to Specific Plan. Overall, the development footprint and area of disturbance would be similar to that of the proposed project, but with less density of residential units. The building would range from two to three stories high, depending on how large the units would be. Private and common open space would be provided consistent with the City's Outdoor Space Standards (Section 20.255.120 of the San Marcos Municipal Code). Architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development.

The Reduced Intensity Alternative would reduce the number of residential units constructed on the project site. This results in a corresponding decrease in vehicular trips by approximately 42% and a corresponding decrease in air pollutant and GHG emissions and noise from offsite traffic compared to the proposed project. Public services, utilities and service systems, and energy demands would also be proportionally decreased. Footprint-specific impacts, such as those related to biological resources, cultural and tribal cultural resources, would be similar as the proposed project since a similar area of disturbance would occur under this alternative. This alternative would contribute less PFF and school fees since fewer residential units would be constructed. This alternative would meet the majority of the project objectives.

1.4.5 Environmentally Superior Alternative

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

Among the other alternatives, not including the proposed project, the Reduced Development Footprint Alternative is the environmentally superior alternative because it would provide a reduced level of impact in some environmental analysis areas including air quality, cultural resources, GHG, noise, public services, recreation, tribal cultural resources, and utilities/service systems. Mitigation measures would still be required to mitigate impacts to biological resources, cultural resources, noise, tribal cultural resources.

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

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Development Footprint Alternative	Reduced Intensity Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Reduced)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)	LTS (Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Reduced)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Reduced)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)	LTS (Reduced)
Greenhouse Gas Emissions	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)	LTS (Reduced)
Land Use and Planning	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)
Noise	LTSM	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)
Population and Housing	LTS	No Impact (Reduced)	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)
Transportation	LTS	No Impact (Reduced)	LTSM (Increased)	LTS (Reduced)	LTS (Reduced)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Reduced)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)

Notes: Impact Status: LTS = Less than significant impact; LTSM = Less than significant with mitigation

Table 1-3. Summary of Alternatives and Project Objectives

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Development Footprint Alternative	Reduced Intensity Alternative
Maximize housing opportunities close to major transit facilities, education facilities, shopping and employment opportunities, and trails to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.	Meets objective	Does not meet this objective	Does not meet this objective	Partially meets objective	Partially meets this objective
To the extent possible, given site constraints, maximize the opportunity to provide transit-oriented housing for the City of San Marcos up to 67.6 dwelling units per acre.	Meets objective	Does not meet this objective	Does not meet this objective	Partially meets this objective	Partially meets this objective
Develop high-quality market-rate for rent housing which meets the housing needs of the City of San Marcos and the region.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective	Meets objective
Provide an affordable dwelling unit component that satisfies the State of California qualifying affordable housing income category of very-low income (30 to 50% of area median income) through development onsite.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective
Facilitate connections to Armorlite Drive complete street circulation system and provide pedestrian friendly architecture and landscaping to promote walkability and connectivity for people to surrounding transit and places.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the planning area.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Development Footprint Alternative	Reduced Intensity Alternative
Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complements and enhances the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan area.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Provide flexible "flex" Commercial space to support residents of the Specific Plan Area that is also capable of adapting to future market conditions and designed to support potential future retail needs.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective
Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the Specific Plan to promote economic stability.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

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2.0 Project Description, Location and Environmental Setting

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

2.1 Project Objectives

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

- Maximize housing opportunities close to major transit facilities, education facilities, shopping and employment opportunities, and trails to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.
- To the extent possible, given site constraints, maximize the opportunity to provide transit-oriented housing for the City of San Marcos up to 67 dwelling units per acre.
- Develop high-quality market-rate for rent housing which meets the housing needs of the City of San Marcos and the region.
- Provide an affordable dwelling unit component that satisfies the State of California qualifying affordable housing income category of very-low income (30 to 50% of area median income [AMI]), through development onsite.
- Facilitate connections to the Armorlite Drive complete street circulation system and provide pedestrian friendly architecture and landscaping to promote walkability and connectivity for people to surrounding transit and places.
- Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the project area.
- Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complement and enhance the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan area.
- Provide flexible ("flex") Commercial space that is capable of adapting to future market conditions and designed to support potential future retail needs.
- Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.
- Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the Specific Plan to promote economic stability.

2.2 Project Description

The approximately 2.44-acre project site is located at 225 N. Las Posas Road. The site is located on the north side of Armorlite Drive generally between N. Las Posas Road to the west and Bingham Drive to the east within the Business/Industrial District in the City of San Marcos (City), California. The Specific Plan area was created from the subdivision of the neighboring AT&T lot. The project site is approximately 0.25 miles north of State Route 78 (SR-78) and adjacent to the NCTD SPRINTER Palomar College Station. The assessor parcel number (APN) is 219-162-62-00 (**Figure 2-1**).

The project applicant is requesting approval of a Specific Plan (SP23-0001), General Plan Amendment (GPA23-0002), Rezone (R23-0001), Site Development Plan (SDP23-0003) and a Conditional Use Permit (CUP23-0002). If approved, these entitlements would allow for the development of a 246,323 square foot (s.f.) building containing 165 apartment units and 5,600 square feet s.f. of commercial use. The conceptual site plan is included in **Figure 2-2**.

2.2.1 Discretionary Actions

As mentioned above, the requested project entitlements/discretionary actions, and permits by the City include a Specific Plan, General Plan Amendment, Rezone, Site Development Plan, and Conditional Use Permit. Each of these actions is described in more detail below. The Specific Plan is included in **Appendix A.1** and the project plans are included in **Appendix A.2**.

- **Specific Plan (SP23-0001)** – The Specific Plan establishes the development rules and regulations for all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the Specific Plan. The Specific Plan would be required to be reviewed and approved concurrently with the Multi-Family Site Development Plan application.
- **General Plan Amendment (GPA23-0002)** – A General Plan Amendment would be required to change the existing PI (Public Institutional) designation to Specific Plan Area (SPA).
- **Rezone (R22-0001)** - A rezone would be required to change the existing Public-Institutional (P-I) zoning to Specific Plan Area (SPA).
- **Site Development Plan (SDP23-0003)** - The Site Development Plan approval would be required to construct 165 apartment units and 5,600 s.f. of commercial and address the details of the architectural style, building elevation, fencing, landscaping, among other criteria, within the development.
- **Conditional Use Permit (CUP23-0002)** - Conditional Use Permit approval would be required for potential use of a temporary rock crusher.

2.2.2 Project Characteristics

This section details the characteristics of the proposed project.

2.2.2.1 Land Use

Residential Land Use

The project proposes 165 residential apartments. The Specific Plan proposes providing 15% of the base density total dwelling units as affordable housing units in the very-low income level (30% to 50%

of the Area Median Income or AMI)[1]. Per State density bonus law (AB 2345), a 50% increase of the base market rate units is allowed. The base density of the site utilizes MU-2 zoning and a maximum of 45 dwelling units per acre, which equates to a total of 110 units for the 2.44-acre site. To utilize the 50% density bonus, a total of 17 affordable housing units would be included as part of the project, thereby adding 55 market rate units based on 50% of the base density of 110 dwelling units, for a maximum total of 165 dwelling units (67.6 du/acre). The conceptual site plan is included as Figure 2-2 at the end of this section.

Commercial Use

The project proposes 5,600 s.f. of commercial use. This would be on the ground-floor facing Armorlite Drive adjacent to the project's entrance.

Retail/Flex Space Concept

The Specific Plan includes a provision for Flex Space. Flex Space allows for commercial, retail, and office uses, as well as the temporary conversion of commercial space to residential units. Section 3.2.1.1 of the Specific Plan provides more detail and supporting documentation on the market conditions affecting commercial vacancies.

Open Space

The project provides a total of 47,375 s.f. of open space which includes a mix of common open space, and private open space, as further detailed below.

Common Open Space

Common open space is for the shared use of residents. The project design proposes 36,944 s.f. of common outdoor open space (32% of the project site). This includes 20,196 s.f. of ground-level common open space consisting of passive areas (18,320 s.f.) and a dog park with dog washing station (1,876 s.f.). On the second level would be 16,748 s.f. of common open space including a pool/spa area, outdoor lounge, game area, yoga area, courtyard, an indoor-outdoor lounge open to the pool area, and a roof deck. All common open space would be for the use of future residents and would be maintained by the property management company. The project also proposes 2,050 s.f. of common indoor space which includes a 1,200 s.f. fitness area and an 850 s.f. lounge

Private Open Space

Private open space is associated with private patio and balcony areas on the residential units and totals 10,431 s.f. The private open space consists of patios and balconies ranging from 55 s.f. to 80 s.f., depending on the unit type and location.

1 Area Median Income (AMI) is the midpoint of a region's income distribution- half of the families in a region earn more than the median and half earn less than the median. This can also be looked at as the Median household income.

Cultural Resources Repatriation Area

An approximate 100 s.f. area would be set aside on the project site should repatriation of cultural resources be the preferred approach for any found resources. This area would be subject to a conservation easement.

Landscape Plan

The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: golden rain tree, Chinese pistache, fern pine, African suman, Japanese zelkova, Chitalpa, king palm, queen palm, Marina strawberry tree, gold medallion tree, desert museum palo verde, Brisbane box, Swan Hill fruitless olive, Mexican palo verde, tree aloe, eastern redbud, western redbud, and crape myrtle. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance (WELO) and Municipal Code, Title 20. The landscape concept plan is included as **Figure 2-3** and the complete landscape plan and planting palette is included in **Appendix A.3.**

2.2.2.2 Architectural Design

One building is proposed and would have four stories of stacked flats over one level of podium parking (five stories total). The commercial use would be on the ground level. The building would have a maximum height of 74 feet. Overall, the project proposes 93 one bedroom/one bath units (ranging from 620 s.f. to 670 s.f.) and 72 two bedroom/one bath units (ranging from 875 s.f. to 1,020 s.f.). All units would be single story. Proposed materials include stucco walls, siding, stone veneer, metal and glass railings, metal or stucco awnings, decorative stucco frame and the use of decorative metal grills. Building elevations are presented in **Figure 2-4**.

Walls and Fencing

Walls and fencing within the proposed project are functional boundaries framing outdoor spaces and complementary pieces of the landscape design. Walls and fences create partitions between private open space, screen the development from roadways and enhance the overall site design.

The wall and fencing exhibit is included as **Figure 2-5**. Fencing for the project includes a mix of split face block and tubular steel fencing. Along the northern project boundary would be a 5-foot split face block wall. Along the western and eastern project boundary 5-foot tubular steel fencing would be used. The proposed dog park would have 4-foot tubular steel fencing.

An existing retaining wall topped with cable rail is current located adjacent to the project's eastern boundary. That retaining wall would remain. The project would construct a retaining wall along a portion of the northern project boundary.

Lighting

Lighting for the proposed project would be used to accent landscaping and provide safety and accent lighting for the building. The lighting concept plan is included as **Figure 2-6.** Proposed lighting fixtures include pole lights, bollard lights, louvered recessed wall lighting, uplit lighting for the entry monument and accent trees. Festoon lighting is proposed for the outdoor common space. All lighting fixtures for the proposed project would be energy efficient, architecturally appropriate, and designed to minimize glare, conflict, and light pollution, while providing illumination levels that create a safe environment for both vehicles and pedestrians. Street area lights would be full cut-off fixtures and would utilize

house-side shields to reduce light trespass and prevent light pollution. Lighting requirements are detailed in Section 3.4.1 of the Specific Plan and all lighting would be required to conform with the City's lighting ordinance and standards, (San Marcos Municipal Code Title 20, Section 20.300.080).

Access, Circulation and Parking

Access and Circulation

Access to the project site would be via one unsignalized driveway on Armorlite Drive. The entrance driveway would be ungated and would be 24-feet wide. Internal vehicular movement would be via a minimum 24-foot-wide drive aisle. Secondary emergency-only access would be provided at the northwest corner of the project site and would be accessed through the adjacent AT&T parcel (APN 219-162-61-00).

Parking

Per the San Marcos Municipal Code Section 20.340 (Off-Street Parking and Loading) 339 spaces would be required for the residential use and 23 spaces would be required for the commercial use (362 total). However, per the requirements of Measures T-12 of the City's Climate Action Plan (CAP), the project is required to reduce its total required parking by 27% (264 total) since the site is within one half mile of a major transit station. To meet the requirements of the CAP, the project would provide 247 spaces for the residential use (69 garage standard spaces, 102 garage tandem spaces, 18 tuck under spaces and 58 open spaces) and 17 spaces for the commercial use. Commercial parking requirements would be met by providing 7 open parking spaces, and 10 of the residential open spaces would be available for commercial use from 9:00 AM to 5:00 PM to meet the required 17 spaces. The project design includes 13 Level 2 electric vehicle (EV) spaces, 62 EV ready spaces and 25 EV capable spaces[2]. The project also includes 34 bicycle parking spaces.

2.2.2.3 Grading and Construction Phase

The project is anticipated to start construction in 2026 with full occupancy in late 2027/early 2028. Grading would consist of approximately 6,950 cubic yards (CY) of cut material and 4,400 CY of fill material requiring an export of approximately 2,250 CY of material once materials shrinkage is considered. Assuming use of 15 CY trucks and 15 workdays, this equates to approximately 10 truck trips per day.

Grading cuts will range from 3 to 7 feet, with maximum fill depths of 9.5 feet. The project design incorporates retaining walls along most of the northern project boundary and along a portion of the eastern boundary. Retaining wall heights would be a maximum of 4 feet on the northern boundary and up to 9 feet on the eastern boundary. Blasting and the use of a temporary rock crusher may be required due to bedrock conditions on the project site.

The import and export of earth material is guided by Section 17.32.080 of the City's Municipal Code and prior to any import of soils, a haul route would be submitted for review and approval by the City Engineer. Additionally, Municipal Code Sections 10.24.020 and Section 17.08.080 limit the hours of grading, extraction, and construction activities to between the hours of 7:00 AM and 6:00 PM, Monday

[2] An EV capable space provides the infrastructure (conduit, breaker space, junction box, etc.) for the future installation of an EV charging station. An EV ready space has all the required infrastructure installed, including the wires and circuit breakers.

through Friday, 8:00 AM and 5:00 PM Saturdays, No grading, extraction or construction is allowed on Sundays or City holidays.

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

Blasting and Rock Crushing

The project has been designed to avoid the need for blasting, however, due to bedrock conditions on the project site, blasting and rock crushing may be required once grading commences. Should blasting be required, the project would comply with all provisions identified in the City's Municipal Code Section 17.60.06 as it relates to blasting and blasting shall only be permitted between the hours of 9:00 AM and 4:00 PM during any weekday. Blasting also requires issuance of a Blasting Permit from the San Marcos Fire Department. If blasting occurs, notification of surrounding property owners would be required consistent with Section 17.60.06 of the City's Municipal Code.

The project's requested approvals include a Conditional Use Permit (CUP23--0002), which would allow for the use of the temporary rock crusher. A rock crusher is required due to the bedrock conditions on the project site and for implementation of the proposed grading plan. Rock crushing could occur between 7:00 AM and 4:00 PM and the duration of rock crushing is two to three weeks. The rock crusher, a Thunderbird Hazemag impact crusher, would be located in the northwest corner of the project site, which would position the crusher as far as possible from the existing residences to the east and south. The crusher would be approximately 300 feet from the multi-family residential units to the east and approximately 500 feet from the residential uses to the south.

2.2.2.4 Public Utilities and Services

Water and Wastewater Facilities

The project site lies within the service area of Vallecitos Water District (VWD) for water service and sewer service. The project would connect to the existing 8-inch water main in Armorlite Drive for potable water and fire protection. Three water connections are proposed for the project site. One potable water connection and one connection for the fire service line will occur at the southwestern corner of the project site with Armorlite Drive. A landscaping irrigation connection is also proposed approximately at the center of the project's southern property line along Armorlite Drive. For sewer service, the project would connect to the existing 8-inch sewer main in Armorlite Drive. Offsite water and sewer improvements are discussed later in this section.

Site Drainage and Stormwater Management

Storm drain systems and connections would be designed using best management practices (BMPs) to accommodate the proposed future development. The project would construct two biofiltration basins (BMP-A and BMP-B) for stormwater quality and a stormwater vault (BMP-C). These features would collect stormwater from the building paved areas and direct the stormwater through stormwater drainage pipes to points of confluence (POCs). The project would also construct storm drain improvements in Armorlite Drive to connect the project to the existing storm drain system in Armorlite Drive. This includes the installation of approximately 175 feet of 12-inch reinforced concrete storm drain to provide the connection between the project site and the downstream storm drain. This work would take place within the Armorlite Drive right-of-way and full pavement restoration would be required once the work is completed. All storm water quality and drainage facilities would be required

with final engineering submittals in conformance with the 2023 City of San Marcos Best Management Practices Design Manual, and the project's Storm Water Quality Management Plan and Drainage Study.

Electricity and Gas

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

Solid Waste Disposal

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

Fire Protection

The project is located within the San Marcos Fire Protection District (SMFPD) boundary. The San Marcos Fire Department (SMFD) would provide fire protection for urban and wildland fires and emergency services to the project site. SMFD services San Marcos with four stations, the closest of which is Fire Station No. 1 located at 180 W. Mission Road, approximately 1.4 miles west of the project site.

Police Protection

Police protection for the proposed project would be provided by the County of San Diego Sheriff's Department. The County Sheriff provides contract law enforcement services to the City of San Marcos through the station located at 182 Santar Place, approximately 2.5 miles east of the project site.

Schools

The project site is within the San Marcos Unified School District (SMUSD) boundary. SMUSD is 49 square miles in size and encompasses most of the City of San Marcos and portions of the Cities of Vista, Escondido, and Carlsbad, as well as the unincorporated areas of the County of San Diego between these cities. The project would generate approximately 82 students for SMUSD. Students generated by the project would attend La Mirada Academy (grades K-8) and San Marcos High School (grades 9-12).

Parks

There are 24 community parks, 13 neighborhood parks and three recreation centers in the City. The closest park to the project site is Innovation Park. Innovation Park, located at 1151 Armorlite Drive, has a dog park, pickleball court, play equipment, permanent restrooms, and picnic tables.

Libraries

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

2.2.2.5 Offsite Improvements

Water and Wastewater Infrastructure

The project includes the following off-site water and sewer improvements. These improvements would be completed prior to project occupancy and would occur within existing roadways:

- Upsize approximately 223 feet of 8-inch diameter water main in Armorlite Drive to a 10-inch diameter main (Pipe Segment P-755). This segment is located west of the project site.
- Upsize approximately 539 feet of 8-inch diameter sewer main in Armorlite Drive to a 10-inch diameter main (Pipe Segments AL-1 through AL-3). This segment is located adjacent to and west of the project site.

Stormwater Infrastructure

The project includes the following off-site stormwater improvement. This improvement would be completed prior to project occupancy and would occur within an existing roadway:

- Installation of approximately 175 feet of 12-inch reinforced concrete storm drain within Armorlite Drive right-of-way, west of the project site.

2.2.2.6 Project Design Features

The project incorporates the following design features and would adhere to specific regulatory requirements that would minimize potential environmental effects. These are summarized, in **Table 2-1**.

Table 2-1. Project Design Features

Aesthetics • Implementation of the Landscape Plan to provide a cohesive and visually appealing planting scheme. • Compliance with the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards.
Air Quality • Compliance with San Diego Air Pollution Control District (SDACPD) Rule 55 – Fugitive Dust. • In accordance with SDAPCD Rule 67.0 (Architectural Coatings), the project would utilize low-volatile organic compound (VOC) paint that does not exceed 100 grams of VOC per liter for interior surfaces and 150 grams of VOC per liter for exterior surfaces. • Heavy diesel construction equipment shall be rated Tier IV or better. • Blasting activities would be limited as follows: 1) blasts would be limited to once per day; blasts are limited to six tons of ammonium nitrate for any given blast operation; and the blast area would be limited to 20,000 s.f. (100-foot X 200-foot area).
Biological Resources • The applicant/developer/property owner shall pay Public Facility Fees, a portion of which go towards City-wide habitat conservation efforts.

Energy

- Ensure proper maintenance of all construction equipment per manufacturer recommendations.
- Comply with the California Air Resources Board (CARB)'s Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes.
- Installation of rooftop solar photovoltaic consistent with Title 24.

Greenhouse Gas Emissions

- Provision of 13 Level 2 EV charging stations.
- Provision of 25 EV capable and 62 EV ready parking spaces in the community parking area.
- To meet the requirements of Reduced Parking Near Transit (Measure T-12) in the City's CAP: the project would provide 247 spaces for residential use (69 garage standard spaces, 102 garage tandem spaces, 18 tuck under spaces and 58 open spaces) and 17 spaces for the commercial uses. Commercial parking requirements would be met by providing 7 open parking spaces, and 10 of the residential open spaces would be available for commercial use from 9:00 AM to 5:00 PM to meet the required 17 spaces.
- Installation of rooftop solar photovoltaic consistent with Title 24 and the CAP compliance checklist.
- Provision of bicycle racks.
- Provision of pedestrian connection between the proposed building to Armorlite Drive.
- The property manager shall provide transit information to the owners and make a good faith effort in offering transit fare subsidies to residents and businesses.
- Designated parking for EV, carpool, vanpool, and/or park-and-ride spaces on site.
- Provision of a workspace in the community room for telecommuting employees.
- Compliance with the City's Model Water Efficient Landscape Ordinance and Municipal Code, Title 20.
- Installation of electric (rather than natural gas) tank water heaters.
- None of the units shall have fireplaces.
- Planting of shade trees.

Hazards

- Future residents shall be notified of potential annoyances commonly associated with proximity to airports (e.g., noise, vibrations, and overflights) through the recording of overflight notification documents as outlined in the McClellan-Palomar Airport Land Use Compatibility Plan and Chapter 20.265 of the City's Municipal Code.

Noise

- Grading, excavation, and other earth moving activities shall occur between 7:00 AM and 6:00 PM, Monday through Friday and between 8:00 AM and 5:00 PM on Saturdays. No grading, excavation and other earth moving activities shall occur on Sunday or City holidays in accordance with the City's Municipal Code, Sections 10.24.200 and 17.080.00.
- Compliance with Municipal Code Section 17.60.060 (Blasting Operations Procedures).
- All equipment shall be properly fitted with mufflers and all staging and maintenance shall be conducted as far away from the existing residences as possible to reduce construction noise.
- The residential units with direct line-of-site to W. Mission Road and Las Posas Road shall have enhanced balcony and patio shielding consisting of 3.5-foot barriers. The barriers shall be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials.
- Parapet walls shall be constructed to shield rooftop HVAC units.
- To ensure compliance with California Code of Regulations (CCR) Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring

a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).
Public Services – Fire Protection, Police Protection and Schools • The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic). • The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 98-01 (Police). • The applicant shall pay the San Marcos Unified School District developer fees that are in effect at the time of building permit issuance. The current residential fee is $5.17 ~~$4.79~~ per square foot and the current commercial fee is $0.84 ~~$0.78~~ per square foot.
Transportation (Vehicle Miles Traveled) • The applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 2011-01 (Congestion Management).
Utilities and Service Systems • The applicant shall pay applicable Water and Wastewater Capital Facility Fees to Vallecitos Water District per Ordinances Nos. 175 and 176.

2.3 Environmental Setting

2.3.1 Existing Land Use and Setting

On-Site

The project site is currently undeveloped, vacant land enclosed by chain-link fencing along the north, south and western property boundary and open cable railing situated atop a small retaining wall along the eastern property boundary. A gated driveway onto the site is located on Armorlite Drive, and a second gated driveway in the northwestern portion of the property provides vehicular access via the adjacent AT&T facility to the west. Well-used foot paths and a hole in the chain-link fencing along the northern property limits indicate informal walk-through access across the property. Other signs of site disturbance include pet waste and miscellaneous trash and litter. The site is generally flat with two small, paved drive aisles and slopes downward along its edges. The project site is generally flat. Elevations range from 575 above mean sea level (amsl) in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive.

Surroundings

The project site is in a developed portion of the City. The project vicinity includes a mix of multi-family residential and commercial uses. The site is bounded by North County Transit District (NCTD) right of way to the north, the Palomar Station mixed-use development to the east and south, and George Burgers and AT&T to the west. The Palomar College Station SPRINTER station is located approximately 0.1-miles from the project site, approximately 1,000 feet east of the intersection of Las Posas Road and W. Mission Road. SR-78 is approximately 0.25 miles south of the project site.

2.3.2 Existing General Plan and Zoning

Existing General Plan Land Use Designation

The project site has an existing General Plan Land Use designation of Public/Institutional (PI) which has a maximum floor area ratio (FAR) of 3.0. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation is for "facilities built and maintained for public use such as academic facilities, institutional uses, community service facilities, water and sewer facilities, detention and drainage facilities, cemeteries, police and fire stations, and other government buildings and properties. This designation may include privately owned facilities built and maintained for public use" (City of San Marcos 2012).

Existing Zoning Designation

The project site has a zoning designation of P-I (Public/Institutional). According to Section 20.240.020 of the City's Zoning Ordinance, this zone is intended to "provide a district for the orderly and harmonious development of public facilities to adequately meet the needs of the San Marcos community. Appropriate P-I Zone uses may include maintenance, public buildings, recreation facilities, schools, and utility installations. The P-I Zone is intended to implement and be consistent with the Public/Institutional (PI) land use designation of the General Plan" (City of San Marcos 2012).

SANDAG Smart Growth Corridor

The project site is located within the SM-3 Mixed Use Transit Corridor as identified in the San Diego Association of Government's Smart Growth Concept Map for North County. The Smart Growth Concept Map identifies locations in the region that can support smart growth, transit, walking, and biking. The map serves as the foundation for prioritizing transportation investments and determining eligibility for local smart growth incentive funds.

2.3.3 Regional Setting

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

2.3.3.1 Climate

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

2.3.3.2 Air Basin

The City and project site is within the San Diego Air Basin (SDAB) and is under the jurisdiction of the SDAPCD. The SDAB is one of 15 air basins that geographically divide the State of California. The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and it is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological

pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for coarse particulate matter less than or equal to 10 microns (PM_{10}), fine particulate matter less than or equal to 2.5 microns ($PM_{2.5}$), and O_3.

2.3.3.3 Soils

Based upon the geotechnical report prepared for the project site, the surficial soils consist of colluvium and alluvium (undifferentiated) and tonalite. Soils near subgrade would be classified as "very low" expansive (GeoTek 2023).

2.3.3.4 Terrain and Topography

The project site is located within the 7.5-minute San Marcos Quadrangle map. The project site is generally flat. Elevations range from 575 amsl in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive.

2.3.3.5 Watersheds and Hydrology

The project site is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). The San Diego Region is divided into eleven hydrologic units. The project site is in the Richland Hydrologic Subarea (904.52) within the San Marcos Hydrologic Area (904.5) of the Carlsbad Watershed or Hydrologic Unit (904). The project site has a central high point and drainage flows in all directions and does not become concentrated on the property (Latitude 33, 2023).

2.3.3.6 Regional Biology

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

Based upon the biological resources study prepared for the project (Dudek 2025 ~~2024~~), the project site contains Diegan coastal sage scrub, non-native grassland, and disturbed habitat. Rare plant surveys were conducted in 2023 and no rare plants were observed on the project site. No special-status wildlife was observed within the project site during the biological surveys conducted in 2022 and 2023. Focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*) (a federally listed threatened species and a California Department of Fish and Wildlife Species of Special Concern) were conducted within the project site between October 2022 and February 2023. California Gnatcatcher was not observed during these focused surveys.

2.4 Intended Uses of EIR

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

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

Lead Agency

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

Responsible Agencies

As defined by CEQA Guidelines Section 15381, a "Responsible Agency" includes all public agencies other than the lead agency which have discretionary approval power over the project. After certification of the Final EIR, agencies with permitting authority over all or portions of the proposed project would use the Final EIR as the basis for their evaluation of environmental effects related to the proposed project that would culminate with the approval or denial of applicable permits. If an Incidental Take Permit would be required for the project, then California Department of Fish and Wildlife (CDFW) would be a Responsible Agency for the project.

Trustee Agencies

As defined by CEQA Guidelines Section 15381, a "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. CDFW is a Trustee Agency with regard to the fish and wildlife of the state, to designated rare and endangered native plants, and to game refuges, ecological reserves, and other areas administered by the department. CDFW is a Trustee Agency for the project.

2.4.1 Scope of the EIR

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

The EIR evaluates all subject areas listed in Appendix G to the CEQA Guidelines, with the exception of those subject areas determined not to have a potentially significant impact on the environment, as determined during preparation of the Initial Study (refer to Chapter 5 of the EIR). Chapter 3 of the EIR evaluates in detail, the following subject areas: aesthetics, air quality, biological resources, cultural resources, energy, greenhouse gas, land use and planning, noise, population and housing, public

services, transportation, tribal cultural resources, utilities and service systems, cumulative impacts, and growth-inducing impacts.

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

2.4.2 Notice of Preparation and Scoping

CEQA establishes mechanisms to inform the public and decision makers about the nature of the proposed project and the extent and types of impacts that the proposed project and alternatives to the proposed project would have on the environment should the proposed project or alternatives be implemented. Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) dated February 12, 2024 to interested agencies, organizations, and parties. The NOP was also posted to the State Clearinghouse CEQANet portal. State Clearinghouse assigned a state identification number (SCH No 2024020372) to the EIR.

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

An online public scoping meeting was held on February 15, 2024. No community members attended. The 30-day public scoping period ended on March 13, 2024. A total of four NOP comment letters were received.

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

- Biological Resources: focused surveys, mitigation measures, biological resources report preparation, analysis of direct and indirect impacts, alternatives, cumulative analysis;
- Cultural Resources: San Diego County Archaeological Society will review Draft EIR when available;
- Transportation: prepare a traffic impact study and CEQA analysis;
- Utilities: water and sewer study provided by VWD.

Public scoping comments regarding the proposed project's potential impact on the environment have been incorporated in the analysis in the EIR in Sections 3.3 (Biological Resources), 3.4 (Cultural Resources), 3.11 (Transportation), 3.12 (Tribal Cultural Resources), and 3.13 (Utilities and Service Systems).

2.4.3 Draft EIR and Public Review

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

Public review of the Draft EIR is intended to focus "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204). The Notice of Completion of the Draft EIR will be filed with the State Clearinghouse as required by CEQA Guidelines, Section 15085. In addition, the Notice of Availability of the Draft EIR will be distributed pursuant to CEQA Guidelines, Section 15087.

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

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

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

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

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

2.4.4 Final EIR Publication and Certification

Once the 45-day public review period has concluded, the City will review all public comments on the Draft EIR and provide a written response to all written comments pertaining to environmental issues as part of the Final EIR. The Final EIR will include all written comments received during the public review period; responses to comments; and, if applicable, edits and errata made to the Draft EIR. The City will then consider certification of the Final EIR (14 CCR 15090). If the EIR is certified, the City may consider project approval (14 CCR 15092).

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

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

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

2.5 Matrix of Project Approvals

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

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

Table 2-2. Required Actions and Approvals

Agency	Required Action/Approval
City of San Marcos – Lead Agency	• Specific Plan • General Plan Amendment • Rezone • Site Development Plan • Conditional Use Permit • Grading Plan/Permit • Public Improvement Plan/Permit • Landscape Plan/Permit • Building Permits • Annexation into CFD 2001-01 (Fire and Paramedic) • Annexation in CFD 98-01 (Police) • Annexation into CFD 98-02 (Lighting and Landscaping) • Annexation into CFD 2011-01 (Congestion Management)
San Diego Regional Water Quality Control Board	National Pollutant Discharge Elimination System Construction General Permit (State Water Resources Control Board Order 2009-09-DWQ and MS4 Permit R9-2015-0001).
Vallecitos Water District	Approval for water and sewer service

2.6 Project Inconsistencies with Applicable Regional and General Plans

Throughout Chapter 3 of this EIR, the project has been evaluated in relation to the applicable goals, policies, and objectives of: the City's General Plan and San Marcos Municipal Code Zoning Ordinance Title 20 (Section 3.7, Land Use); Regional Air Quality Strategy (Section 3.2, Air Quality); San Diego Air Pollution Control District policies (Section 3.2, Air Quality); City's Climate Action Plan (Section 3.6, Greenhouse Gas Emissions); Regional Water Quality Control Board permits (Section 5.6, Hydrology and Water Quality); the Multiple Habitat Conservation Program (Section 3.3, Biological Resources); Airport Land Use Compatibility Plans (Sections 5.5, Hazards and Hazardous Materials, 3.7, Land Use, and 3.8, Noise); and various other applicable regional and local plans and policies.

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

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

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

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

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

With the exception of the impact analyses of air quality and greenhouse gas emissions, the cumulative list approach has been used in this cumulative analysis, as discussed below. The cumulative impacts of air quality and greenhouse gas emissions have been evaluated using the summary of projections method because the geographic scope of such impacts tends to be broad and area wide.

An inventory of past, present, and reasonably foreseeable future projects within the vicinity of the project site is presented in **Table 2-3.**

Table 2-3. Cumulative Projects

No.	Project	Location	Description[(1)]
City of San Marcos			
1	Capalina Apartments	North side of Capalina Road between N. Rancho Santa Fe Road and N. Pacific Street	119 muti-family residential (MFR) units and 4,000 s.f. commercial
2	CRP III Mission, LLC	528 W. Mission Road	Redevelopment of existing 10.83 acre industrial park with 3 new industrial buildings
3	Hughes SMCC, LLC	Northeast corner of Pacific Street	67,410 s.f. industrial building
4	Kiddie Academy	Northeast corner of Twin Oaks Valley Road and Windy Way	11,430 s.f. preschool

No.	Project	Location	Description[(1)]
5	Lanikai Senior Residential	Northwest corner of E. Mission Road and Woodward Street	115 MRF units (age-restricted for 55+)
6	Lonnie Tabbaa (ARCO)	Southwest corner of W. Mission Road and N. Las Posas Road	Gas station, car wash, commercial drive thru and convenience store
7	Main Square	Southeast corner of San Marcos Boulevard and McMahr Road	486 MFR units and approximately 44,000 s.f. of commercial
8	Marcos Specific Plan	Grand Avenue and Linda Vista Drive	63,000 s.f. commercial, 7 live-work units, 102 condos
9	Mariposa II/ Phase 1 (Alora)	Richmar Avenue and Los Olivos Drive	100 MFR affordable units to replace 40 existing MFR units (net increase of 60 units)
10	Mariposa II/ Phase 2 (Estrella)	Richmar Avenue and Los Olivos Drive	96 MFR affordable units to replace 30 existing MFR units (net increase of 66 units)
11	McDonald Group	1100 W. San Marcos Boulevard (Former Sears site)	82 MFR units and 5,000 s.f. commercial
12	Mercy Hill and Marian Center	Borden Road	22,800 s.f. of institutional uses
13	Meritage Homes (Grand Vista Multi-Family)	West of Las Posas Road and Palm Road intersection	120 MFR units
14	Murai-Sab	N. Las Posas Road	89 SFR units
15	Pacific Commercial	Northeast corner of Grand Avenue and N. Pacific Street	122-room hotel
16	Pacifica San Marcos	S. Rancho Santa Fe Road and Creek Street	31 MFR units and 4,375 s.f. commercial
17	Pacific Specific Plan	Las Posas Road and La Mirada	449 MFR units
18	Paul Mayer/Santa Fe Las Flores	Northwest corner of S. Santa Fe and N. Las Flores Drive	50 MFR units
19	Pico Investments	236 Pico Avenue	16 MFR units
20	Restaurant Row Specific Plan	1020 W. San Marcos Boulevard	202 MFR units, 10,400 s.f. commercial space, 1.5 acre park site, and street improvements
21	San Marcos Highlands	North end of N. Las Posas Road	187 single family residential (SFR) units and 21.68 acre passive park
22	University District Specific Plan and Discovery Villages	Twin Oaks Valley Road, south of SR-78, Discovery and Barham Street areas	Various projects within the University District Specific Plan (North City) and adjacent area: • Block 3 student housing • Discovery Village North - office/commercial/residential • Discovery Village South - SFR • SH North City, LLC – MFR units, Master Association community

No.	Project	Location	Description[(1)]
			recreation center, public and private trail systems • Univ District SPA – North City Phase A&B - mixed-use development comprised of 20,000 s.f. retail, 100,00 s.f. office, and 537 MFR units
23	Villa Serena Phases 1 & 2	Northwest corner of Richmar Avenue and Marcos Street	Demolish 136 MFR units and construct 148 MFR units (net increase of 12 units)
24	Woodward 46 Specific Plan	East side of Woodward St, north of Mission Road	46 MFR units

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

Figure 2-1. Project Location and Vicinity

Figure 2-2. Conceptual Site Plan

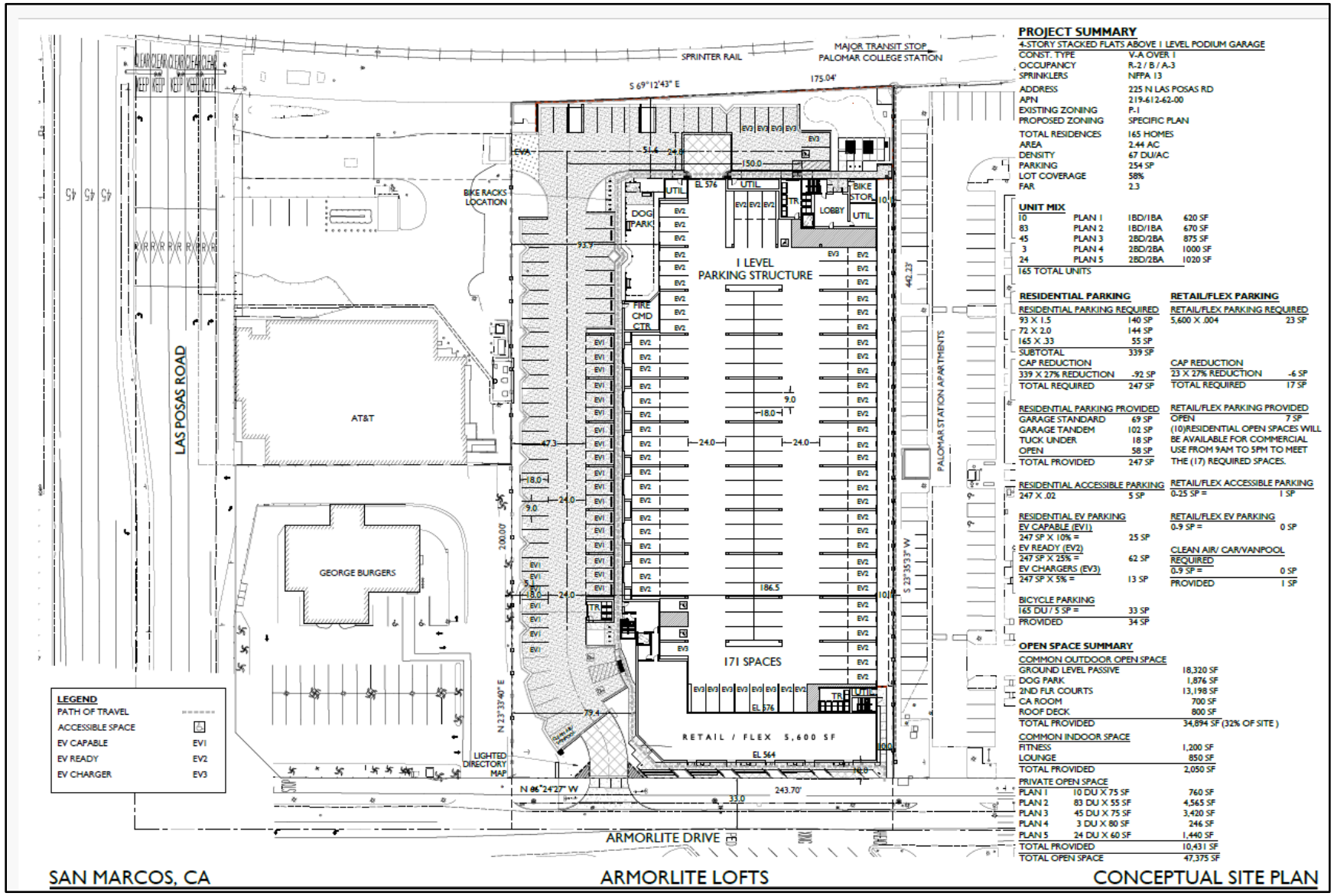
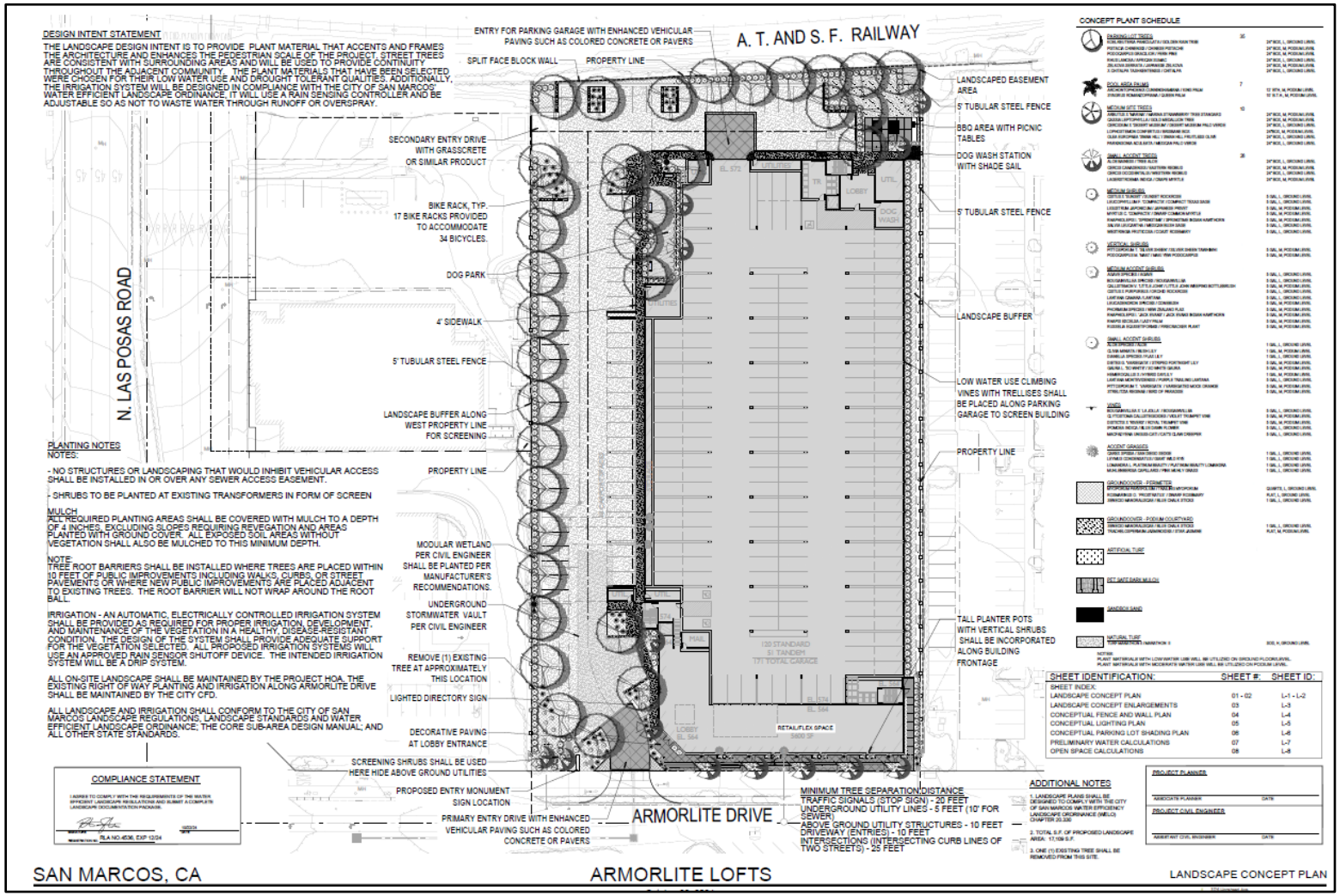


Figure 2-3. Conceptual Landscape Plan



Note: The complete conceptual landscape plan is included as Appendix A.3.

Figure 2-4. Building Elevations

Figure 2-5. Wall and Fencing Plan

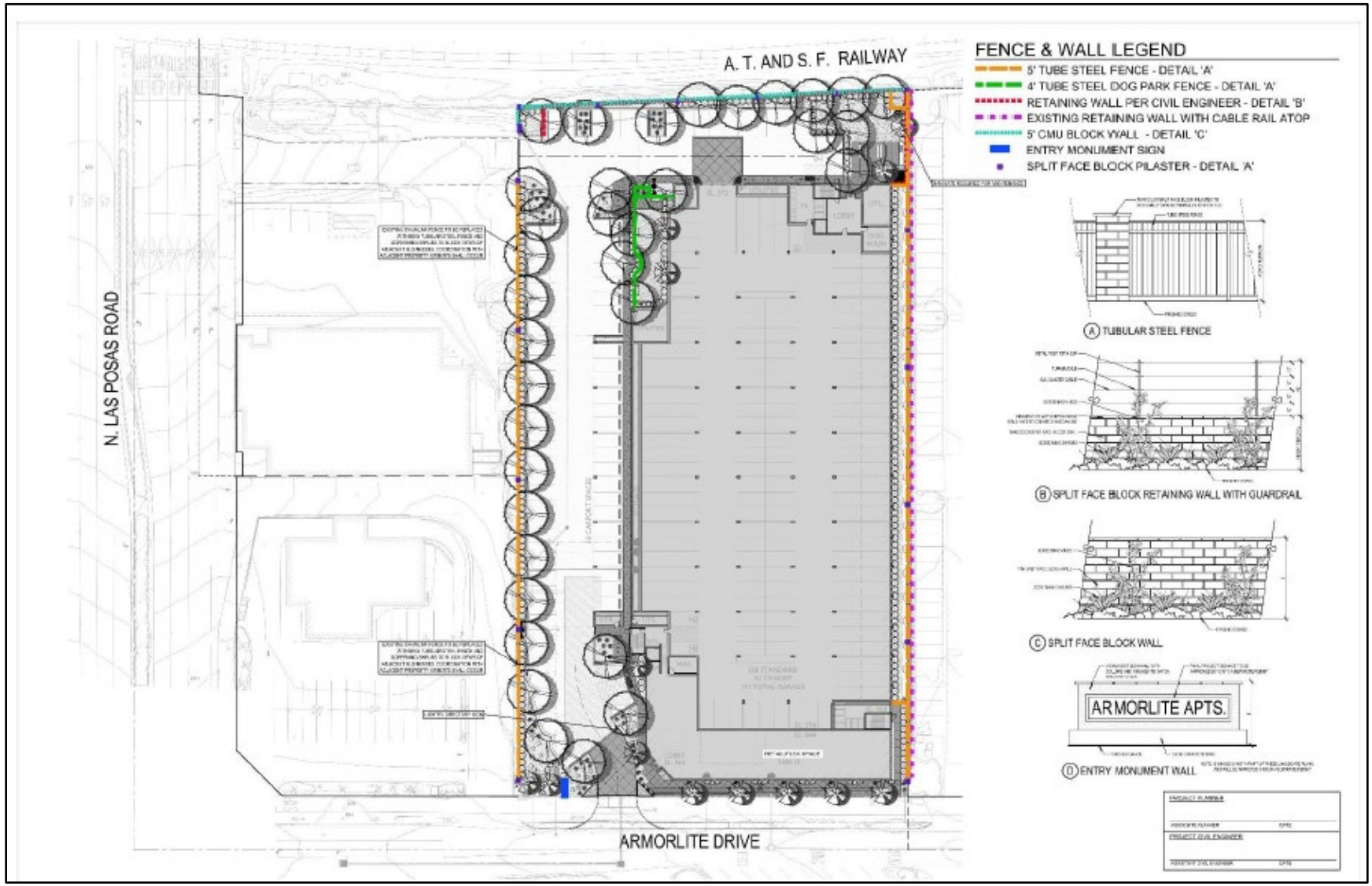
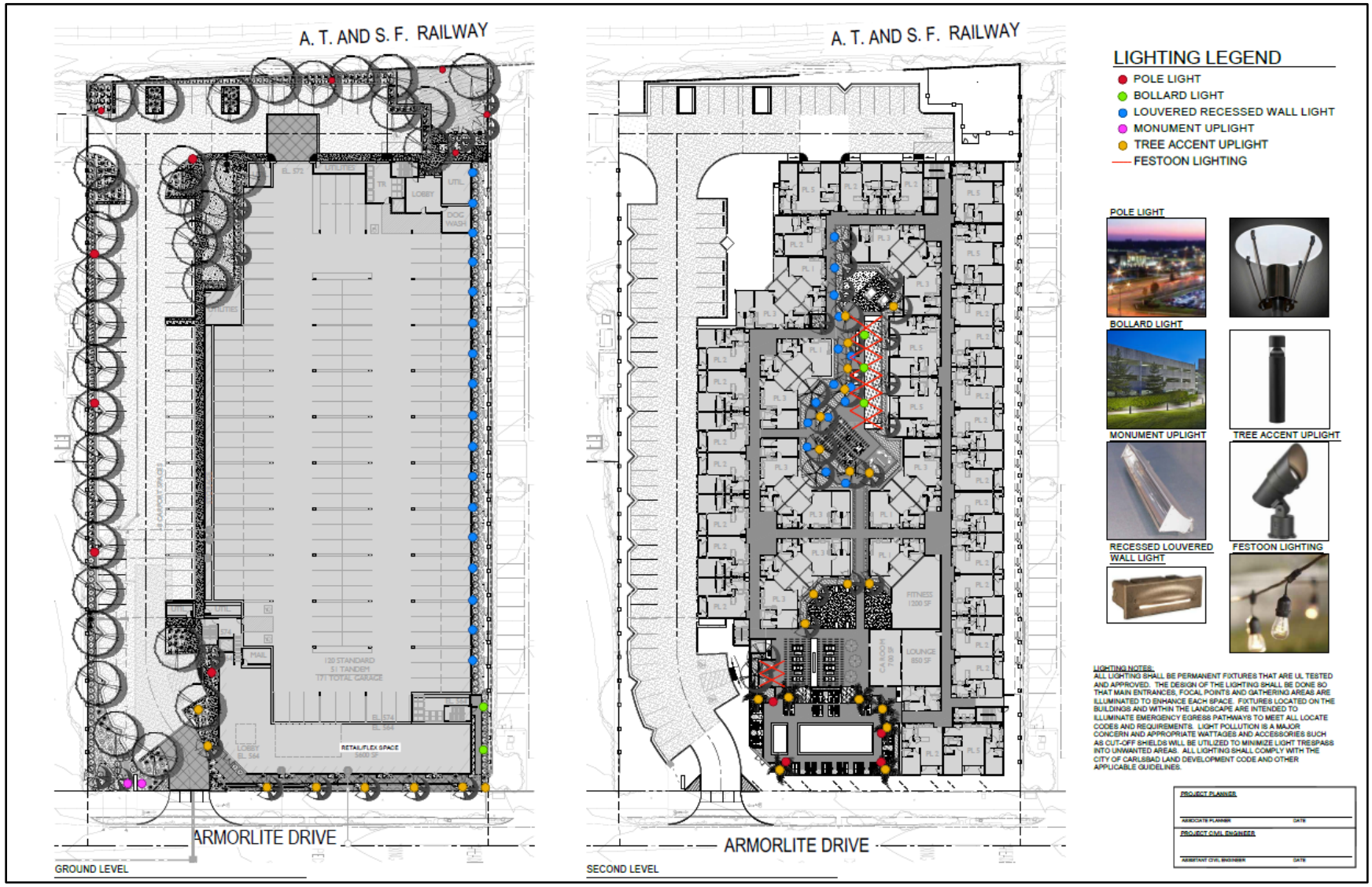


Figure 2-6. Lighting Plan



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3.0 Environmental Impact Analysis

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

After preparation of the Initial Study (IS) for the proposed project (Appendix B.1), it was concluded that impacts to agriculture/forestry resources, geology/soils, hazards/hazardous materials, hydrology/water quality, mineral resources, recreation, and wildfire would be less than significant. Additionally, some of the specific CEQA thresholds under specific environmental topics were eliminated during the IS process including aesthetics (scenic vistas, scenic resources within a state scenic highway), biological resources (federally protected wetlands, wildlife movement), land use and planning (physically divide an established community), noise (project vicinity to private airports or within and airport land use plan), population and housing (Displacement of existing housing or people), public services (parks), and transportation (hazardous design features). The topics that were eliminated during the IS process are discussed in Chapter 3.0.

However, the IS process also concluded that the following issue areas could possibly result in significant impacts: aesthetics, air quality, biological resources, cultural resources, energy, greenhouse gas emissions, land use and planning, noise, population and housing, public services, transportation, tribal cultural resources, and utilities and services systems. Therefore, this Environmental Impact Report (EIR) evaluates the potential for impacts related to these issue areas. The focus of the environmental analysis in each of the following sections is the suite of proposed actions as described in Chapter 2.0, Project Description.

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

- **Introduction** – provides a brief overview to each section.
- **Existing Conditions** – describes the existing environmental conditions on the project site as it relates to the specific environmental topic being addressed in the subchapter.
- **Regulatory Setting** – describes the federal, state, regional, and local regulatory requirements applicable to the proposed project.
- **Thresholds of Significance** – describes the thresholds by which the significance of project impacts are determined. A "no impact" conclusion means the project will not have any impacts for a given threshold. A "less than significant impact" conclusion means the project may have an impact; however, the impact is not to a level that would be deemed significant per the given threshold. A "significant impact" means the project has an impact that meets or exceeds a threshold and mitigation is required to reduce the impact.
- **Project Impact Analysis** – analyzes the project-level impacts, by threshold.
- **Cumulative Impact Analysis** – analyzes the cumulative-level impacts of the project. Cumulative projects considered in this analysis are listed in Table 2-3 in Chapter 2.0, Project Description.
- **Mitigation Measures** – identifies the mitigation measures to reduce project- and/or cumulative-level impacts to below a level of significance.
- **Conclusion** – briefly summarizes the analysis of each section.

3.1 Aesthetics

Introduction

This section addresses the aesthetic resources of the proposed project area and the potential effects that implementation of the proposed project may have related to aesthetics, including impacts to degradation of visual character and lighting/glare. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G, and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's website.3

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

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

Table 3.1-1. Aesthetics Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 - In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant	Less Than Significant	Less Than Significant Without Mitigation
#2 - Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant	Less Than Significant	Less Than Significant Without Mitigation

3.1.1 Existing Conditions

Visual Character

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

The City of San Marcos is in the northern portion of San Diego County. The majority of the City is located on the valley floor, with State Route 78 (SR-78) running through the center of the City. Landforms such as the mountain ranges to the north and south of San Marcos contribute to its scenic corridors.

3 http://www.san-marcos.net/work/economic-development/general-plan

The project site is located on the north side of Armorlite Drive, east of Las Posas Road. The project site is generally flat. Elevations range from 575 above mean sea level (amsl) in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive. The project site is currently undeveloped, vacant land and contains Diegan coastal sage scrub, non-native grassland and disturbed habitat (Dudek 2025 ~~2024~~). **Figure 3.1-1** presents an overview of the project site and a key view map. **Figures 3.1-2 through 3.1-9** present photos of the project site viewed from both onsite and offsite.

The project site is in a developed portion of the City. The project vicinity includes a mix of multi-family residential and commercial uses. The site is bounded by North County Transit District (NCTD) right of way to the north, the Palomar Station mixed-use development to the east and south, and George Burgers and AT&T facility to the west. The Palomar College SPRINTER station is located approximately 0.1-miles from the project site, approximately 1,000 feet east of the intersection of Las Posas Road and W. Mission Road. SR-78 is approximately 0.25 miles south of the project site.

Existing Light and Glare Conditions

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

3.1.2 Regulatory Setting

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

Local

San Marcos General Plan – Conservation and Open Space Element

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

- Goal COS-3: Protect natural topography to preserve and enhance the natural beauty of San Marcos.
    - Policy COS-3.1: Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.
    - Policy COS-3.2: Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.
    - Policy COS-3.3: Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.
    - Policy COS-3.4: Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7 in Section 3.7, the project is consistent with all the applicable goals and policies.

San Marcos Municipal Code and Zoning Ordinance. Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The San Marcos Municipal Code Zoning Ordinance Title 20 is the primary implementation tool for the policies of the General Plan. The Zoning Ordinance provides more detailed direction related to design and development standards; permitted, conditionally permitted, and prohibited uses; and other regulations such as lighting and sign regulations. The land uses specified in the Zoning Ordinance are based upon and consistent with the land use policies set forth in the General Plan. Specifically, building design, setbacks, lighting, and signage standards as well as open space requirements for development to protect open space and ambient light levels in the city. The lighting standards of the Ordinance require energy-efficient lighting that limits light and glare for private projects, with exceptions for specialized streetscape lighting. Private developments are required to submit lighting plans to ensure consistency with dark sky needs of the region (City of San Marcos 2024a).

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

The City of San Marcos Street Lighting Standards and Specifications describes the lighting and glare standards for the city. These standards require lighting to be directed downward and limit the type and spacing of lighting to maintain reasonable lighting levels that do not contribute to light pollution. The City uses International Dark Sky Association thresholds to inform its own testing, leading to a policy that allows for the use of energy-efficient lighting sources that include, but are not limited to, light-emitting diode (LED) and induction lighting technologies (City of San Marcos 2024b).

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

The City of San Marcos adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The Ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, and Ridgeline Overlay Zones (ROZ), surrounding these ridgelines (City of San Marcos 2024b). No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.25 miles northeast of the project site.

3.1.3 Thresholds of Significance

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

- **Threshold #1**: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.

- **Threshold #2**: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4 Project Impact Analysis

Construction

Project construction involves grading and site preparation activities to prepare the site for future buildings and infrastructure improvements. Construction could require staging areas with construction equipment and supplies, and portable trailers to serve as temporary office space or storage. Grading on the site would result in minor modifications to the project site to prepare the site for development. The project plans are included in Appendix A.2.

Operations

The project proposes 165 apartments and 5,600 square feet (s.f.) of commercial floor area on the 2.44-acre site. The conceptual site plan is included as Figure 2-2 in Chapter 2. One building is proposed and would have four stories of stacked flats over one level of podium parking (five stories total). The building would have a maximum height of 74 feet. Overall, the project proposes 93 one bedroom/one bath units (ranging from 620 s.f. to 670 s.f.) and 72 two bedroom/one bath units (ranging from 875 s.f. to 1,020 s.f.). All units would be single story. Proposed materials include stucco walls, siding, stone veneer, metal and glass railings, metal or stucco awnings, decorative stucco frame and the use of decorative metal grills. Elevations are included as Figure 2-4.

The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: golden rain tree, Chinese pistache, fern pine, African suman, Japanese zelkova, Chitalpa, king palm, queen palm, Marina strawberry tree, gold medallion tree, desert museum palo verde, Brisbane box, Swan Hill fruitless olive, Mexican palo verde, tree aloe, eastern redbud, western redbud and crape myrtle. The proposed project would also comply with the City's Model Water Efficient Landscape Ordinance (WELO) and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-3 and the complete landscape plan and planting palette is included in Appendix A.3.

Threshold #1: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

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

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

The City of San Marcos adopted a Ridgeline Protection and Management Overlay Zone in November 2008, set forth in Ordinance 2008-1314, to minimize visual impacts to important ridgelines. These guiding principles are in place to protect natural viewsheds, minimize physical impacts to ridgelines, and establish innovative site and architectural design standards. The Ordinance identifies primary and secondary ridgelines within the City, plus buffer zones, or ROZ surrounding these ridgelines (City of San Marcos 2024b). No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.25 miles northeast of the project site. The project would not result in any visual impact to primary and secondary ridgelines. Therefore, the project would not conflict with the ordinance.

The project site is currently zoned P-I (Public/Institutional) and includes a rezone request to change the zoning to Specific Plan Area (SPA). The project's consistency with goals and policies related to scenic views and aesthetics is presented in Table 3.7-7 in Section 3.7, Land Use and Planning. No conflicts were identified.

The project design incorporates architectural treatments and design to break up the bulk and scale of the proposed building. This includes building articulation and setbacks with varied rooflines. Additionally, the Specific Plan includes design and development standards that the project will be required to comply with. The proposed landscaping plan would further enhance the project site through implementation of a comprehensive and aesthetically pleasing landscape design, which would be maintained by the project owner. The landscape plan is included as Appendix A.3 of the EIR. With approval of the requested waivers, the project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be **less than significant**. Further, the project site is within a Transit Priority Area (TPA), defined as within a half mile of a major transit stop (PRC Section 21064,3). Per PRC Section 21099(d) aesthetics impacts of a residential project on an infill site within a TPA shall not be considered a significant impact.

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

Exterior lighting proposed for the project shall be guided by the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards. These standards require downward-directed LED lighting, with the exception of specialized streetscape lighting or architectural detail lighting, which aid in the preservation of dark-sky conditions that are needed by the local observatories. The location, type, and direction of the lighting would be reviewed during the Improvement Plan review to ensure compliance with City requirements.

Lighting in the project vicinity is associated with roadway lighting along W. Mission Road and lighting associated with existing residential and commercial uses in the area and immediately adjacent to the project site. Development of the proposed project would introduce permanent lighting to a site that is currently undeveloped and does not have lighting.

Excessive, poorly designed, or unshielded lighting can be detrimental to astronomical observations. Two observatories are located in San Diego County: Palomar Observatory, located over 20 miles

northeast of the proposed project site, and Mount Laguna Observatory - located approximately 50 miles southeast of the proposed project site.

Lighting for the proposed project would be used to accent landscaping and provide safety and accent lighting for the building. The lighting concept plan is included as Figure 2-6. Proposed lighting fixtures include pole lights, bollard lights, louvered recessed wall lighting, uplit lighting for the entry monument and accent trees. Festoon lighting is proposed for the outdoor common space. All lighting fixtures for the proposed project would be energy efficient, architecturally appropriate, and designed to minimize glare, conflict, and light pollution, while providing illumination levels that create a safe environment for both vehicles and pedestrians. Street area lights would be full cut-off fixtures and would utilize house-side shields to reduce light trespass and prevent light pollution. Lighting requirements are detailed in Section 3.4.1 of the Specific Plan and all lighting would be required to conform with the City's lighting ordinance and standards (San Marcos Municipal Code Title 20, Section 20.300.080).

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

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

3.1.5 Cumulative Impact Analysis

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

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

From Owen's Peak and "P" Mountain, the closest primary ridgelines to the project site, viewers may be able to see cumulative projects in the same viewshed, and potentially portions of the project site. The proposed building would be four stories of stacked flats over one level of podium parking (five stories total) and have a maximum height of approximately 74 feet. There is existing multi-story development in the project vicinity and the project would not substantially contrast with the visual patterns of the area. The project would appear as an extension of the already urbanized landscape. When the proposed project is considered with other cumulative projects in the same viewshed, cumulatively, the increase in development would blend in with the existing urban landscape and would

not result in a significant visual impact. Therefore, the proposed project would not substantially contribute to a cumulative change in the visual character of the surrounding area.

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

3.1.6 Mitigation Measures

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

3.1.7 Conclusion

The project site is in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality, including the scenic resource protection policies in the Conservation and Open Space Element of the City's General Plan (refer to Section 3.7, Land Use and Planning). Implementation of the proposed project would reasonably result in changes to the visual character of the site by allowing a mixed-use residential development; however, impacts would be minimal due to a general lack of public vantage points and the developed nature of the project vicinity. Landscaping associated with the project would also soften views of the project site from adjacent uses.

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

Figure 3.1-1. Site Photos Key Views

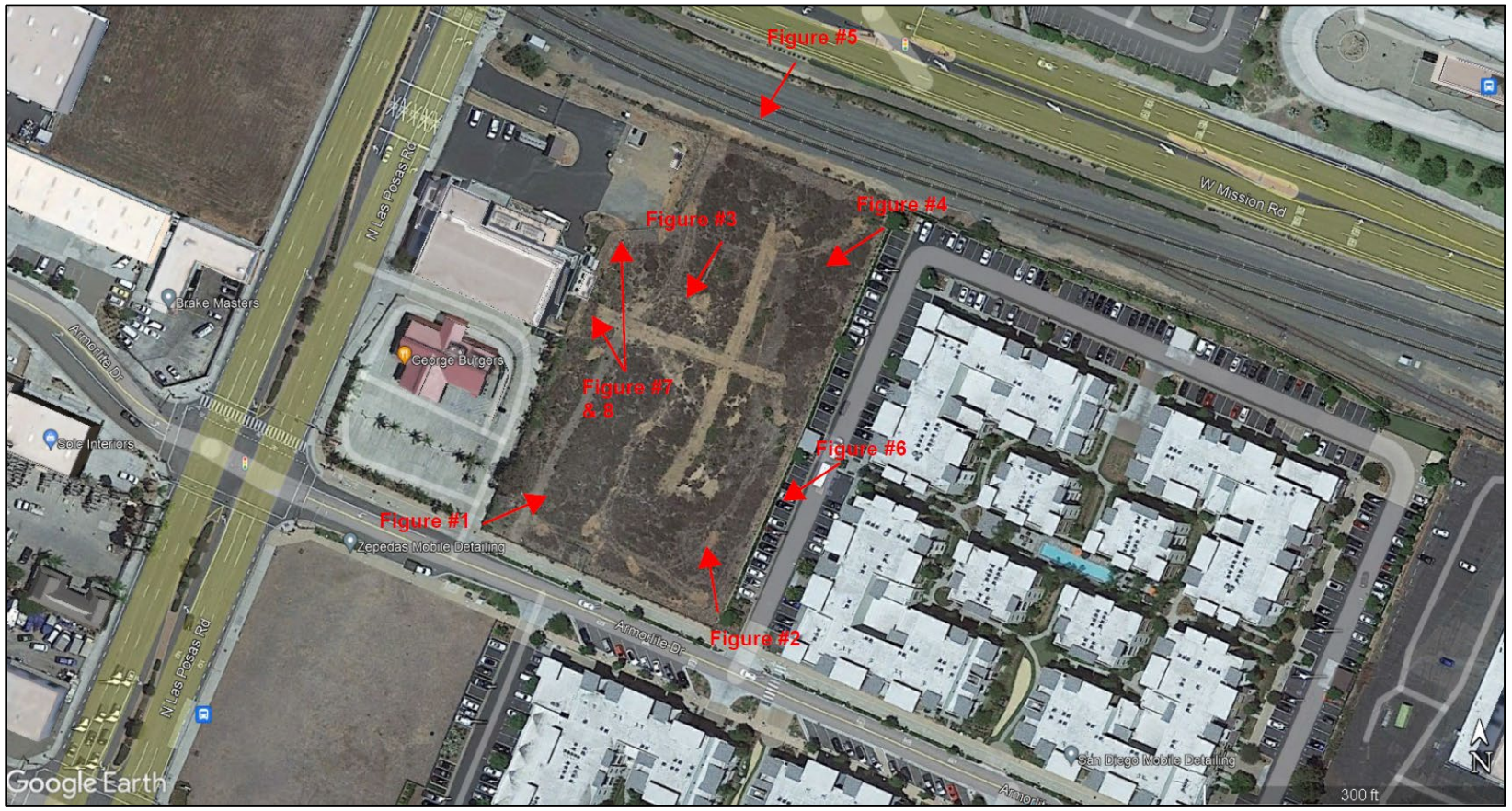


Figure 3.1-2. View 1 - Southwest Corner Looking Northeast

Figure 3.1-3. View 2 – Southeast Corner Looking Northwest

Figure 3.1-4. View 3 – Northwest Corner Looking Southeast

Figure 3.1-5. View 4 – Northeast Corner Looking Southwest

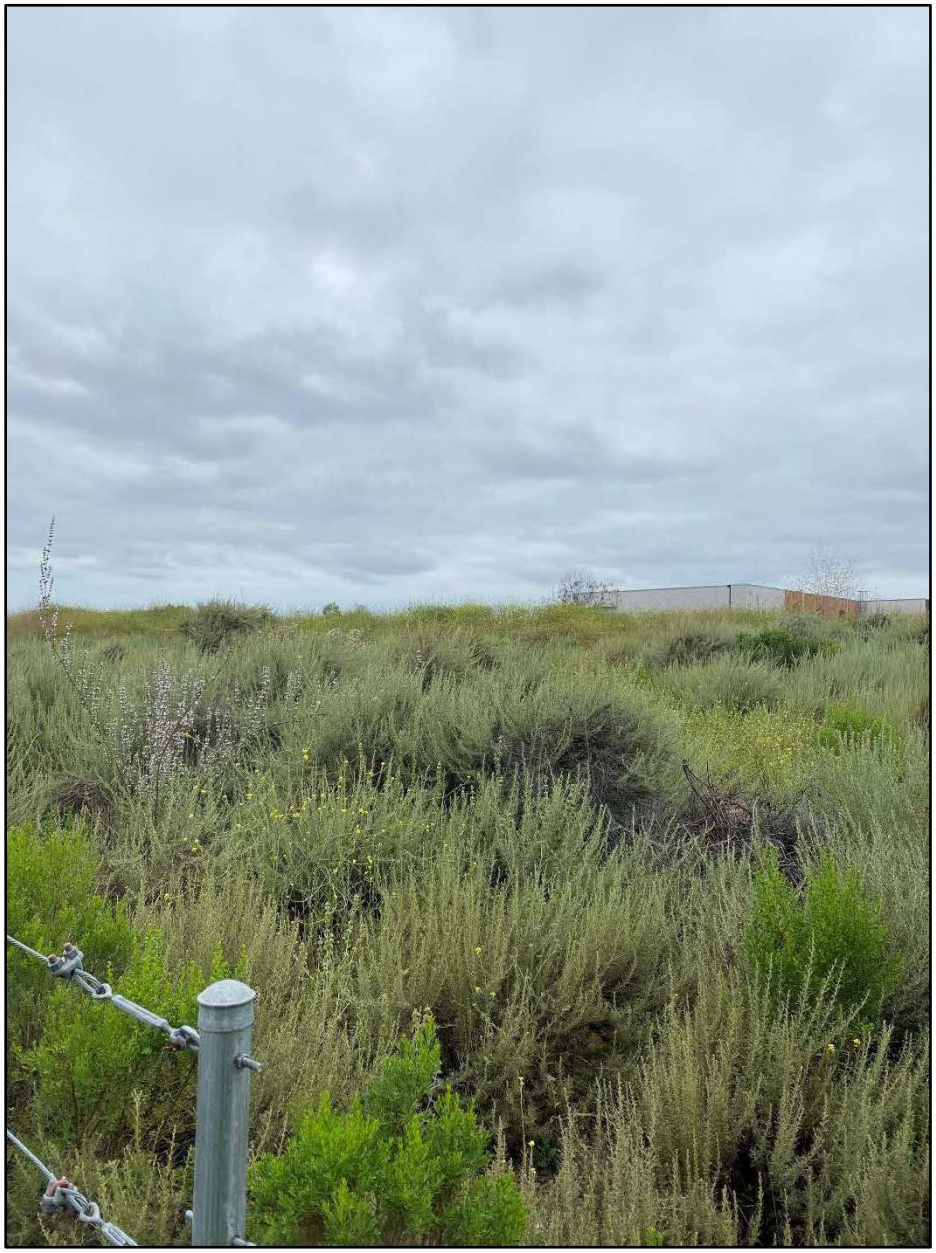


Figure 3.1-6. View 5 – Offsite Fencing

Figure 3.1-7. View 6 – Eastern Property Line

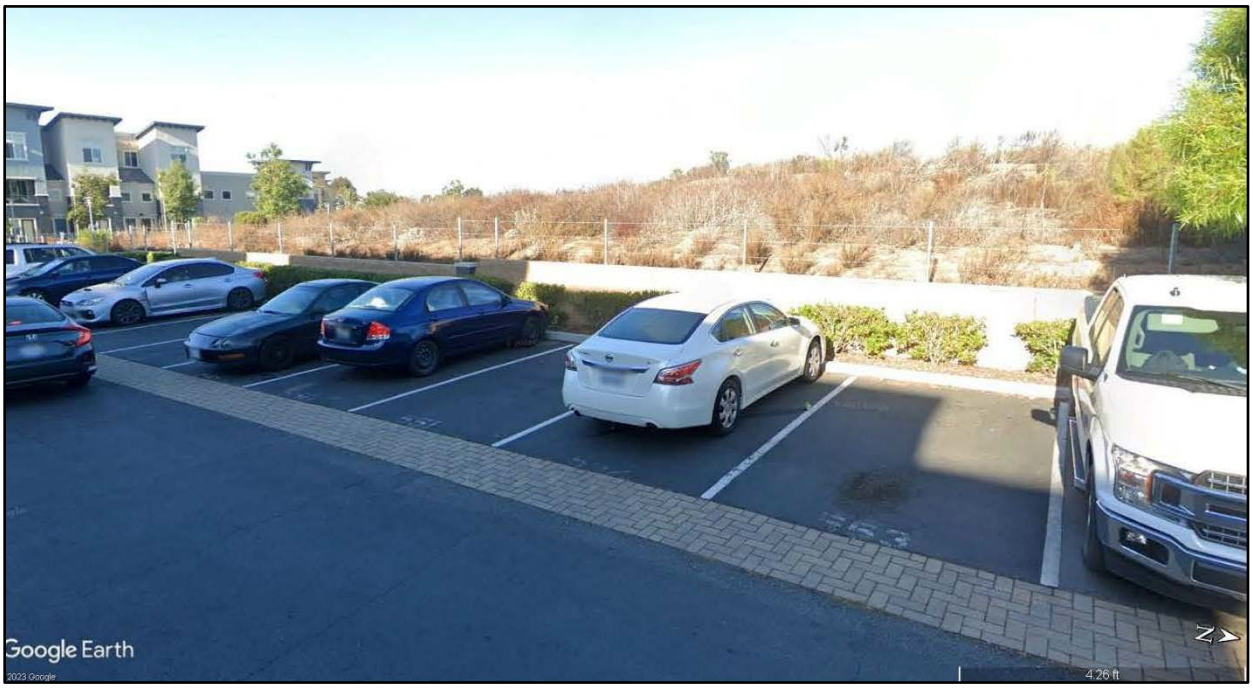
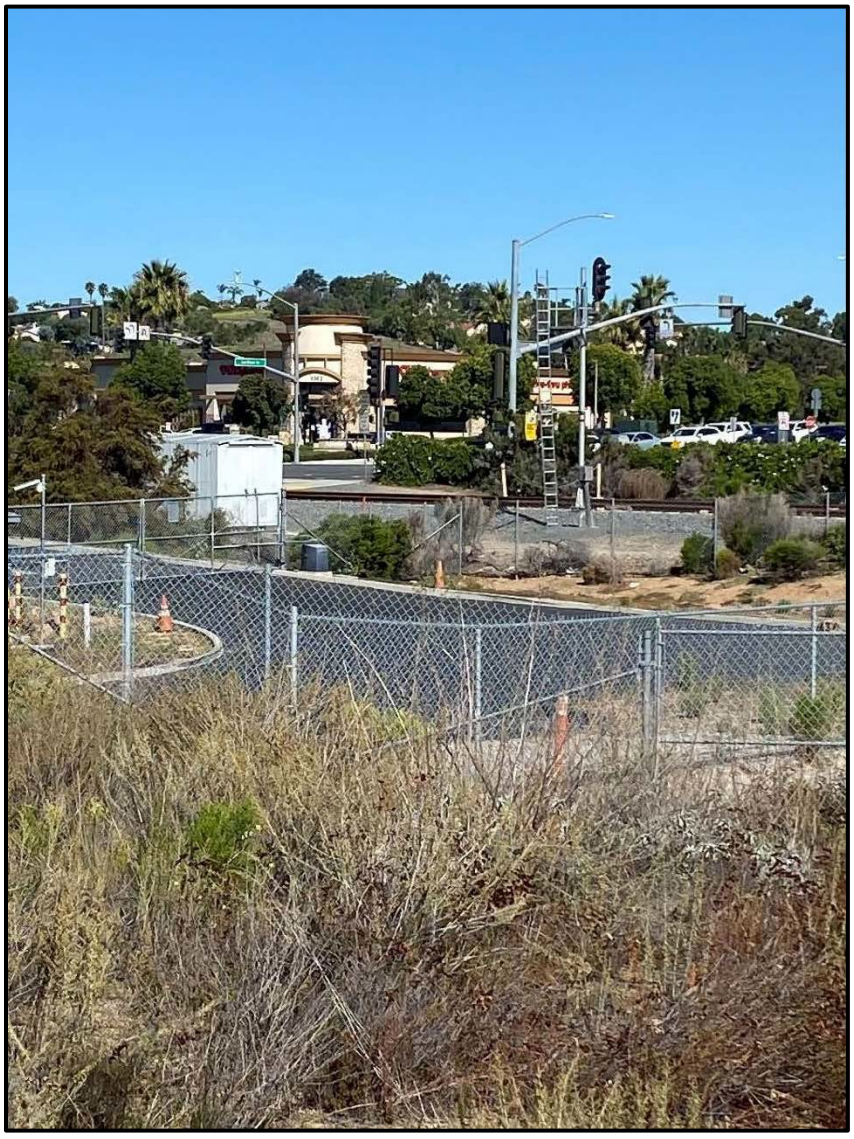


Figure 3.1-8. View 7 – Western Property Line

Figure 3.1-9. View 8 – Looking Northwest from Project Site



3.2 Air Quality

Introduction

This section identifies, describes, and evaluates air quality issues associated with the proposed project. This section analyzes short-term construction impacts and long-term operational impacts to air quality and determines whether the project would result in a significant air quality impact. This section is based upon the following report, which is included as **Appendix C** of the Environmental Impact Report (EIR)[4]:

- *Air Quality Assessment, Armorlite Lofts Residential Development Project* prepared by LDN Consulting, November 4, 2024 (LDN 2024).

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

Table 3.2-1. Air Quality Summary of Impacts

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

3.2.1 Existing Conditions

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

Meteorology/Climate

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

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

Meteorological trends within the City of San Marcos produce daytime highs typically ranging between 64°F in the winter to approximately 88°F in the summer with August usually being the hottest month. Daytime Low temperatures range from approximately 37°F in the winter to approximately 59°F in the summer. Precipitation is generally about 16.2 inches per year. Prevailing wind patterns for the area vary during any given month during the year and vary depending on the time of day or night. The predominant pattern throughout the year is usually from the west or westerly (LDN 2024).

Baseline Air Quality

Regional

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

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

Current attainment designations for the SDAB are presented in **Table 3.2-2.** As shown, the SDAB currently exhibits a non-attainment status for the federal 8-hour standard for ozone (O_3). Additionally, the SDAB is either in attainment or unclassified for federal standards of 1-hour O_3, carbon monoxide (CO), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). The SDAB is also in attainment of state air quality standards for all pollutants except for O_3, PM_{10}, and $PM_{2.5}$. An attainment plan is available for O_3.

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

Criteria Pollutant	Federal Designation	State Designation
Ozone (O_3) – 8-hour	Nonattainment	Nonattainment
Ozone (O_3) – 1-hour	Attainment	Nonattainment(1)
Carbon Monoxide (CO)	Attainment	Attainment
Respirable Particulate Matter (PM_{10})	Unclassifiable(2)	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Attainment	Nonattainment(3)
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified

Source: SDAPCD 2024.

Notes: (1) The federal 1-hour standard of 12 parts per hundred million (pphm) was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.
(2) At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.
(3) The California Air Resources Board (CARB) has not reclassified the region to attainment yet due to: incomplete data, and the use of non-California Approved Samplers (CAS). While data collected does meet the requirements for designation of attainment with federal $PM_{2.5}$ standards, the data completeness requirements for state $PM_{2.5}$ standards substantially exceed federal requirements and mandates and have historically not been feasible for most air districts to adhere to given local resources. SDAPCD has begun replacing most regional filter-based $PM_{2.5}$ monitors as they reach the end of their useful life with continuous $PM_{2.5}$ air monitors to ensure collected data meets stringent completeness requirements in the future. SDAPCD anticipates these new monitors will be approved as "CAS" monitors once CARB reviews the list of approved monitors, which has not been updated since 2013.

Local

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

Sensitive Receptors

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

The project site is currently vacant. The project site is bounded by existing commercial and retail uses to the west, existing multi-family residential units to the east, W. Mission Road and the SPRINTER rail line to the north, and Armorlite Drive to the south. Existing multi-family residential units are located across Armorlite Drive to the south.

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

Pollutant[1]	Averaging Time	CAAQS	NAAQS	2021	2022	Days Exceeded Over 2 Years
O_3 (ppm)	1 hour	0.09 ppm	No Standard	0.07	0.08	0
	8 hour	0.070 ppm	0.070 ppm	0.06	0.07	0
PM_{10} ($\mu g/m^3$[3])	24 hour	50 $\mu g/m^3$	150 $\mu g/m^3$	PM_{10} Data Not Available for Monitoring Sites near Project Site.		
	Annual[2]	20 $\mu g/m^3$	No Standard			
$PM_{2.5}$[3] ($\mu g/m^3$)	24 hour	No Standard	35 $\mu g/m^3$	23.5	14.9	N/A
	Annual[2]	12 $\mu g/m^3$	15 $\mu g/m^3$	8.5	7.6	N/A
NO_2 (ppm)	Annual[2]	0.030 ppm	0.053 ppm	0.013	0.013	N/A
	1 hour	0.18 ppm	0.100 ppm	0.059	0.059	N/A
CO[3] (ppm)	1 hour	20 ppm	35 ppm	3.0	2.2	N/A
	8 hour	9 ppm	9 ppm	1.8	1.2	N/A

Source: LDN 2024.

Notes: parts per million = ppm

(1) SO_2 is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO_2 emissions within the County are essentially zero for all metrics including the average, maximum 24 hour and 1-hour standards. The highest 1-hr measurement identified is 0.004 ppm and the most restrictive standard (CAAQS for SO_2) is 0.25 ppm.

(2) Annual arithmetic mean

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

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. The criteria air pollutants that are monitored by the USEPA are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than or equal to 10 microns or 2.5 microns in diameter (PM_{10}, and $PM_{2.5}$) sulfur dioxide (SO_2), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed in the following text. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. Examples of sources and effects of these pollutants are identified below:

Ozone (O_3): A strong smelling, pale blue reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy. O_3 exists in the upper atmosphere O_3 layer, as well as at the earth's surface. O_3 at the earth's surface causes numerous adverse health effects, including lung inflammation, tissue damage, and impaired lung functioning, is a major component of smog, and can damage materials such as rubber, fabrics, and plastics.

It should be noted that Oxides of Nitrogen (NO_x) is a family of poisonous, highly reactive gases. These gases form when fuel is burned at high temperatures. NO_x pollution is emitted by automobiles, trucks, and various non-road vehicles (e.g., construction equipment, boats, etc.) as well as industrial sources such as power plants, industrial boilers, cement kilns, and turbines. NO_x often appears as a browning gas. It is a strong oxidizing agent and plays a major role in the atmospheric reactions with Volatile Organic Compounds (VOCs) which produce ozone on hot summer days (LDN 2024).

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

Nitrogen Dioxide (NO_2): NO_2 is formed when nitrogen (N_2) combines with oxygen (O_2). Its life span in the atmosphere ranges from one to seven days. NO_2 is typically created during combustion processes and is a major contributor to smog formation and acid deposition. NO_2 may result in numerous adverse health effects, including respiratory damage. It absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility.

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

Particulate Matter Less Than or Equal to 2.5 Microns in Diameter ($PM_{2.5}$): A similar air pollutant consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which are often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 released from power plants and industrial facilities and nitrates that are formed from NO_x released from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles depends mostly on location of the emissions, time of year, and weather conditions. The adverse health effects of $PM_{2.5}$ are similar to those of PM_{10}.

Sulfur Dioxide (SO_2): Typically, strong smelling, colorless gas that is formed by the combustion of fossil fuels. SO_2 and other sulfur oxides contribute to the problem of acid deposition as well as adverse health effects including respiratory constriction and, with continued exposure, increased incidents of pulmonary symptoms.

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

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

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

Hydrogen Sulfide (H_2S): A colorless, toxic, and flammable gas with a recognizable smell of rotten eggs, H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of H_2S (greater than 500 parts per million) can cause a loss of consciousness and possibly death.

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

Non-Criteria Air Pollutants

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

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

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

3.2.2 Regulatory Setting

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

Federal

Federal Clean Air Act

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency is responsible for implementing most aspects of the Clean Air Act, including setting National ambient air quality standards (NAAQS) for major air pollutants, setting hazardous air pollutant standards, approving state attainment plans, setting motor vehicle emission standards, issuing stationary source emission standards and permits, and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the criteria pollutants O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead and shown in **Table 3.2-4.**

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS for CO, Lead and those based on annual averages or arithmetic mean are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the USEPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames. These plans must include pollution control means that demonstrate how the standards will be met as expeditiously as possible. The NAAQS were amended in July 1997 to include an additional standard for O_3, and to adopt a standard for fine particulates ($PM_{2.5}$). In June 2002, a stringent statewide $PM_{2.5}$ standard was adopted. In 2012, the $PM_{2.5}$ standard was lowered further based on air quality monitoring data.

Table 3.2-4. Ambient Air Quality Standards

Pollutant	Average Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3][5]	Secondary[3][6]	Measurement Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry		Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3				
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)				

Pollutant	Average Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3][5]	Secondary[3][6]	Measurement Method[7]
Nitrogen Dioxide (NO_2) [10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3) [8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm[8] (188/ µg/m3)	-	
Sulfur Dioxide (SO2) [11]	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm[10] (for Certain Areas)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararoosaniline Method)[9]
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm[10] (for Certain Areas) (See Footnote 9)	-	
	3 Hour			-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead[12] [13]	30 Day Average	1.5 µg/m3	Atomic Absorption	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 13		No National Standards		
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15 µg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except

Pollutant	Average Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3][5]	Secondary[3][6]	Measurement Method[7]
that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. 12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants. 13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. 14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively. **Source:** CARB 2016, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf ppm = parts per million µg/m^3 = micrograms per cubic meter mg/m^3= milligrams per cubic meter						

National Ambient Air Quality Standards (NAAQS)

To gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. Primary standards set limits for the protection of public health, including those people most susceptible to further respiratory distress such as asthmatics, children, and the elderly, or sensitive receptors. Secondary standards set limits to protect public welfare and include protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Research has shown that chronic exposure to O_3 at levels that just marginally meet clean air standards may nevertheless have adverse health effects. State and federal agencies, therefore, have promulgated a more stringent 8-hour O_3 standard that better reflects human health response to more chronic exposure, shown in Table 3.2-4. USEPA set the 2008 ozone standard to 75 parts per billion (ppb) and required all areas of the country to meet this monitored concentration by July 20, 2018. The areas that were not able to demonstrate compliance with this standard have now been classified as an ozone nonattainment area. USEPA revised the standard to 70 ppb in 2015 but some areas, including San Diego County, have still not met the 2008 standard and their attainment status changed in level of severity.

State

California Ambient Air Quality Standards (CAAQS)

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

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. Additionally, sulfates, vinyl chloride,

hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants in California. The CAAQS currently in effect in California are also shown in Table 3.2-4 and include the most recently adopted federal standards for chronic (8-hour) O_3 exposure and for ultra-small diameter particulate matter of 2.5 microns or less in diameter ($PM_{2.5}$). Current attainment designations for the SDAPCD are presented in Table 3.2-2.

California Clean Air Act

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

Local

San Diego Air Pollution Control District

Although CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In San Diego County, O_3 and particulate matter are the pollutants of main concern, because exceedances of the CAAQS for those pollutants are experienced here in most years. In January 2021, SDAPCD sent a request to the USEPA to reclassify San Diego County from Serious Nonattainment to Severe Nonattainment for the 2008 ozone NAAQS and from Moderate to Severe Nonattainment for the 2015 ozone NAAQS. The USEPA granted this request in April 2021. SDAPCD prepared and submitted to the USEPA, via CARB, ozone attainment plans identifying control measures and associated emissions reductions necessary to demonstrate attainment of the 75-ppb 2008 standard by July 20, 2027, and attainment of the 70-ppb 2015 standard by August 3, 2033. Reclassification imposes additional requirements under the Clean Air Act (for example, transportation control strategies and measures to offset emissions increases from vehicle miles traveled) that will help ensure the area has the tools needed to attain the standard. The 2020 Plan for Attaining the National Ozone Standards (SDAPCD 2020) addresses all requirements for both ozone standards.

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The Regional Air Quality Strategy (RAQS) for the SDAB was initially adopted in 1991 and most recently updated in 2022. The RAQS outlines SDAPCD's plans, and control measures designed to attain the CAAQS for O_3. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and USEPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of

emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans. Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS. Projects that create more growth than projected by SANDAG may create a significant impact if the project produces unmitigable air quality emissions or if the project produces cumulative impacts.

City of San Marcos General Plan

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

- Goal COS-4: Improve regional air quality and reduce greenhouse gas emissions that contribute to climate change.
    - Policy COS-4.1: Continue to work with the USEPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.
    - Policy COS-4.5: Encourage energy conservation and the use of alternative energy sources within the community.
    - Policy COS-4.6: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.
- Policy COS-4.8: Encourage and support the generation, transmission, and use of renewable energy.

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

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

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7, the project is consistent with the applicable General Plan goals and policies pertaining to air quality.

3.2.3 Thresholds of Significance

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

- **Threshold #1:** Conflict with or obstruct implementation of the applicable air quality plan;
- **Threshold #2:** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- **Threshold #3:** Expose sensitive receptors to substantial pollutant concentrations;

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

To determine whether a project would: (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM_{10} or $PM_{2.5}$ or exceed quantitative thresholds for O_3 precursors, NO_x and VOCs, project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD, the agency responsible for air quality planning, monitoring, and enforcement within this basin. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIAs) (SDAPCD 2019).

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

The thresholds listed in **Table 3.2-5** represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality for both construction and operation. Emissions below the screening-level thresholds would not cause a significant impact. If emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the state and federal Ambient Air Quality Standards (AAQS), including appropriate background levels. For nonattainment pollutants (PM_{10} and $PM_{2.5}$ plus O_3, with O_3 precursors NO_x and VOCs), if emissions exceed the thresholds shown in Table 3.2-5, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

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

Pollutant	Total Emissions (Pounds/Day)
Construction Emissions	
Respirable Particulate Matter (PM_{10})	100
Particulate Matter ($PM_{2.5}$)	55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) (SCAQMD)	75
Operational Emissions	
Respirable Particulate Matter (PM_{10})	100
Particulate Matter ($PM_{2.5}$)	55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250

Pollutant	Total Emissions (Pounds/Day)
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs) (1)	75
Reactive Organic Gases (ROG) SCAQMD(1)	75

Source: LDN 2024.

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

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). SDAPCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210 (adopted in 1996 and revised several times, most recently 2023), emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP that results in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact and would be required to implement toxics best available control technology (T-BACT) (SDAPCD 2023).

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person (SDAPCD 1976). A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors. Projects that may cause odor conflicts include certain types of commercial uses (e.g., auto body shops, furniture repair), industrial, public (e.g., landfill, wastewater treatment facilities), and agricultural operations (CARB 2005). The impacts associated with construction and operation of the project were evaluated for significance based on the aforementioned significance criteria.

3.2.4 Project Impact Analysis

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

As part of the RAQS and SIP planning process, the SDAPCD develops an emission inventory, based on growth projections from SANDAG and existing emissions figures within the SDAB. The SDAPCD then uses the emission inventory to conduct modeling to demonstrate that the SDAB will attain and maintain the state and federal O_3 standards. This inventory could be thought of as an "emissions budget" for the SDAB, accounting for current emissions as well as previously approved projects consistent with current General Plan policies.

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

The project site has an existing General Plan Land Use designation of Public/ Institutional (PI), which has a maximum floor area ratio (FAR) of 3.0. The project includes a General Plan amendment request to change the PI designation to Specific Plan Area (SPA) for the proposed mixed-use development, consisting of 165 multifamily units and 5,600 square feet (s.f.) of commercial use. The P-I land use is typically used for any type of public land use, including schools, hospitals, civic centers, etc. With an allowable FAR of 3.0, any facility which could be constructed onsite would be limited to approximately 318,000 s.f. Vehicular trip generation of public institutions like schools or hospitals would result in significantly more traffic than the 1,214 trips that the proposed project would generate and would therefore generate larger quantities of operational air quality emissions. For example, based on SANDAG's trip generation guide a hospital can generate as many as 25 trips per 1,000 s.f. or over 7,000 trips for a project of this size (SANDAG 2002). Since the largest component of air quality emissions are typically derived from vehicular trips, development under the proposed project would be considered less intense.

Another potential use for the site could be to install a 160,000 s.f. telecommunications data center or larger if multiple stories are constructed. Data centers are recognized as very high consumers of electrical energy. For example, a 413,000 s.f. data center in Santa Clara was found to consume 665,750 megawatt hours (MWH) or 1.61 MWH/SF/year (LDN 2024). Based on this, a 160,000 s.f. building would require at least 257,600 MWH annually. Based on modeling, the proposed project would consume 907 MWH which is about 285 times less energy and significantly less intense (LDN 2024).

Therefore, the project's development intensity would decrease from its current General Plan designation. The project is therefore considered consistent with the County's RAQS and would comply with the state's SIP. Impacts would be **less than significant.**

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

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

Construction Emissions Analysis

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

Construction grading operations for the project are anticipated to include 6,950 cubic yards (cy) of cut material and 4,400 cy of fill material requiring an export of approximately 2,250 cy of fill material once materials shrinkage is considered. The air quality model assumed a default load size of approximately 15 cy per truck for a total of 150 loads (300 trips) during project grading. Assuming 15 work days for materials import and the use of a 15 cy truck, there would be approximately 10 truckloads per day during grading. The project would start grading in 2026 with full occupancy in late 2027/early 2028.

The California Emissions Estimator Model (CalEEMod) 2022.1 was used to calculate the emissions associated with the construction of the project. The AERSCREEN dispersion model was used to determine the concentration for air pollutants at any location near the pollutant generator as well as to predict the maximum exposure distance and concentrations. The following design features were assumed within the CalEEMod analysis:

- All heavy diesel construction equipment would be classified as Tier 4; and
- Compliance with SDAPCD's fugitive dust rules and fugitive dust control measures which would be provided by the City of San Marcos.

In addition, due to bedrock conditions, the project also may require some blasting and crushing during earthwork/ grading of the project site. During blasting operations, grading operations would temporarily stop and resume once blasting is completed. Per conversations with the project civil engineer, it is expected that each blast would be limited to the following. as noted in the project design feature table (Table 2-1):

- Blasts are limited to once per day;
- Blasts are limited to six tons of ammonium nitrate for any given blast operation; and
- The area of each blast would be limited to 20,000 s.f. or (100-foot x 200-foot) area.

Blasting operations usually require a chemical material that is capable of extremely rapid combustion resulting in an explosion or detonation. These materials are usually mixtures of several ingredients but are often oxygen deficient as combustion reactions take place which causes a formation of carbon monoxide and to a lesser extent, nitrogen oxides. For ammonium nitrate and fuel oil (ANFO) mixtures, it is expected that carbon monoxide would be generated in quantities of 67 pounds (lbs) per every ton of explosives and nitrogen oxides would be generated at 17 lbs per the same quantity. Particulate matter will also be generated from blasting and was estimated using US EPA AP-42 (Compilation of Air Emissions Factors from Stationary Sources (Table 13.3-1)[5] methodology (USEPA 1980).

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

The project's requested approvals include a Conditional Use Permit (CUP 23–0002), which would allow for the use of a temporary rock crusher. The rock crusher assumed to be used during blasting would be similar to the Terex 4242SR 310 HP unit (LDN 2024).

[5] Table 13.3-1 is Emission Factors for Detonation of Explosives Emission Factor Rating https://www.epa.gov/sites/default/files/2020-10/documents/13.3_explosives_detonation.pdf

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

Table 3.2-6. Construction Emissions (Pounds/Day)

Year	ROG	NO_x	CO	SO_2	PM_{10} (Dust)	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Dust)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
2026	14.3	8.22	31.7	0.07	0.16	9.76	9.92	0.14	3.89	4.03
Blasting Emissions		102	402		20.59		20.59			
Total Construction With Blasting (Maximum) Emissions	14.3	110.22	433.7	0.07	20.75	9.76	30.51	0.14	3.89	4.03
Screening Level Threshold	75	250	550	250	-	-	100	-	-	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**-**	**-**	**No**	**-**	**-**	**No**

Source: LDN 2024.

Operational Emissions Analysis

Daily project operations would generate emissions from sources such as area, energy, and mobile uses. Area sources include consumer products, landscaping, and architectural coatings as part of regular maintenance. Energy sources would be from uses such as onsite natural gas and electrical use. Mobile source emissions include project traffic generation. Operational emissions were calculated using CalEEMod for both summer and winter scenarios.

The CalEEMod calculations include the following assumptions (LDN 2024):

- The traffic inputs for CalEEMod were adjusted to be consistent with the proposed project traffic study. Based on that study, the proposed project would generate 1,214 net average daily trips (LLG 2024).
- Default trip distances within CalEEMod were utilized.
- It was assumed that an average of 10% of the structural surface area will be re-painted each year.
- Since the proposed project would not be installing hearth options, CalEEMod default hearth settings were modified to represent no hearth options.
- CalEEMod includes landscaping and consumer product assumptions which would apply to this project. Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products. Emissions associated with these products primarily depend on the increased population associated with residential development (512 residents).

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

Table 3.2-7. Operational Emissions (Pounds/Day)

	ROG	NO_x	CO	SOx	PM10	$PM_{2.5}$
Summer Scenario						
Mobile	4.52	2.82	29.7	0.07	6.30	1.63
Area Source	5.20	0.12	12.90	< 0.005	0.01	0.01
Energy Use	0.02	0.30	0.13	< 0.005	0.02	0.02
Total	**9.73**	**3.24**	**42.7**	**0.07**	**6.34**	**1.67**
Screening Level Threshold	75	250	550	250	100	55
Above threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Scenario						
Mobile	4.42	3.10	28.40	0.07	6.30	1.63
Area	3.80	0.22	0.10	0.00	0.02	0.02
Energy	0.02	0.30	0.13	< 0.005	0.02	0.02
Total	**8.24**	**3.40**	**28.50**	**0.07**	**6.33**	**1.66**
Screening Level Threshold	75	250	550	250	100	55
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LDN 2024.
Notes: Daily pollutant generation assumes trip distances within CalEEMod.
Outputs from CalEEMod include rounding and may not add up exactly.

Threshold #3: Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are defined as schools, hospitals, resident care facilities, or day-care centers, as well as residential receptors in the project vicinity. Sensitive residential receptors are adjacent to the project site, less than 100 feet from the eastern property line. The threshold related to sensitive receptors addresses whether the project could expose sensitive receptors to substantial pollutant concentrations of criteria pollutants or TACs. As identified above, if a project has the potential to result in emissions of any TAC that results in a cancer risk of greater than 10 in 1 million or substantial non-cancer risk, the project would be deemed to have a potentially significant impact.

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

Risks were calculated based on the Office of Environmental Health Hazards Assessment update guidance (OEHHA 2015). Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home, and the exposure duration divided by averaging time, to yield the excess cancer risk. Based upon the air quality

modeling, worst-case onsite PM_{10} from onsite construction exhaust would cumulatively produce 0.006 tons over the construction duration (337 calendar days) or an average of $1.87x10^{-4}$ grams/second (LDN 2024).

Utilizing these figures and based on the AERSCREEN dispersion model, the maximum 1-hr concentration is 0.537 µg/m^3 during the worst-case construction period. The annual concentration is 0.0429 µg/m^3. Therefore, the inhalation cancer risk is 6.04 per million over the construction duration. This risk would be expressed at the point of maximum exposure 50 meters (164 feet) away. As a condition of project approval, the project would be required to utilize Tier 4 diesel equipment. Since the threshold is 10 per million exposed with T-BACT installed, the project would have a less than significant impact and would be in compliance with the City's thresholds. It should be noted that sensitive residential receptors are adjacent to the project site, less than 100 feet from the eastern property line. With the use of Tier 4 diesel equipment, the project would not expose sensitive receptors to cancer risk above the threshold (LDN 2024).

There are known chronic health risks associated with diesel exhaust which are considered non-cancer risks. Non-Cancer risks or risks defined as chronic or acute are also known with respect to diesel particulate matter and are determined by the hazard index. To calculate hazard index, diesel particulate matter concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment. Diesel Exhaust has a REL of 5 µg/m^3 and targets the respiratory system (LDN 2024). The hourly concentration of 0.537 µg/m^3 divided by the REL of 5 µg/m^3 yields a Health Hazard Index of 0.107, which is less than one. Therefore, based on thresholds for non-cancer risks, non-cancer health risks are also considered less than significant. Therefore, toxic air contaminant impacts associated with the project would be **less than significant.**

Carbon Monoxide (CO) Hotspot Analysis

Air quality emissions from the operation of the proposed project, including project generated traffic would not exceed air quality significance thresholds established by the City of San Marcos. In addition, the project traffic study indicated that under no scenario (existing, near term or long term) would the project have significant effects on nearby intersections and segments because the project traffic does not exceed the City's LOS D thresholds (LLG 2024). Given this, the project would not have the potential to increase CO hot spots at any of the nearby intersections or roadway segments.

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

Construction

Construction activities associated with development of the project site could generate trace amounts of substances such as ammonia, carbon dioxide, hydrogen sulfide, methane, dust, organic dust, and endotoxins. Any generation of odors related to these substances would occur intermittently during construction. Construction activities may also generate odors associated with diesel equipment at various locations. Odors would be strongest at the source and would quickly dissipate. The short term and intermittent duration of any odor emissions would ensure construction-related impacts are **less than significant**.

Operation

Future development on the project site includes multi-family residences and commercial retail uses. These uses would not meet typical uses generating odors which CARB outlines in their Land Use Handbook which include: sewage treatment plants, landfills, recycling facilities, waste transfer stations, refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants and livestock operations. Since the project does not propose these types of uses or any other uses which would result in operational odors, impacts would be less than significant.

3.2.5 Cumulative Impact Analysis

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

As part of the RAQS and SIP planning process, the SDAPCD develops an emission inventory, based on growth projections from SANDAG (which are based on land use designations) and existing emissions figures within the SDAB. The SDAPCD then uses the emission inventory to conduct modeling to demonstrate that the SDAB will attain and maintain the state and federal O_3 standards. This inventory could be thought of as an "emissions budget" for the SDAB, accounting for current emissions as well as previously approved projects consistent with current General Plan policies. Projects that are consistent with the currently adopted General Plan are determined to be consistent with SDAB's air quality plans, including the RAQS and the SIP. If a project proposes development that is consistent with or less than estimates provided in the General Plan, the project will not conflict with or obstruct implementation of the RAQS or SIP. Provided a project's emissions are consistent with the projections within the RAQS and SIP, the project would not result in a cumulatively considerable impact on O_3 within the SDAB.

As discussed in Section 3.2.4, Threshold #1, a potential use for the site under its current land use and zoning designation could be to install a 160,000 s.f. telecommunications data center or larger if multiple stories are constructed. Data centers are recognized as very high consumers of electrical energy. A 160,000 s.f. building would require at least 257,600 MWH annually. Based on modeling, the proposed project would consume 907 MWH which is about 285 times less energy and significantly less intense (LDN 2024). From an energy usage standpoint even though, electrical energy is not directly estimated in this air quality analysis, a reduction in energy would generate fewer offsite air quality emissions which could be expected within the utility provider's electrical generation.

The proposed project is, therefore, considered less intense in terms of air quality than would otherwise be allowed within the P-I General Plan land use. In addition, the project conforms to all local air district significance thresholds. For nonattainment pollutants (PM_{10} and $PM_{2.5}$ plus O_3, with O_3 precursors NO_x and VOCs), if emissions exceed the thresholds shown in Table 3.2-5, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality. As shown in Tables 3.2-6 and 3.2-7, air quality

emissions generated by the project would be lower than the SDAPCD screening thresholds. Also, since the project would not generate significant direct or cumulative construction or operational impacts, the project would be consistent with the County's RAQS and would comply with the state's SIP.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Based on discussions with the City, no other large construction projects are expected to occur simultaneously and within the immediate vicinity (up to 0.5 miles) to the proposed project. Further, it is unknown whether the cumulative projects under review will be approved or not, and, if approved, when actual construction would begin, it would be speculative to estimate any potential overlap of the proposed project. However, future projects would be subject to CEQA and would require an air quality analysis and, where necessary, mitigation, if the project would exceed the SDAPCD significance thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by SDAPCD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SDAPCD Rule 55, Fugitive Dust, which sets forth general and specific requirements for all construction sites in the SDAPCD.

Based upon the air quality modeling, with the use of Tier 4 diesel equipment, the project would not expose sensitive receptors to cancer risk above the threshold Additionally, no odor impacts were identified. Implementation of the project is not expected to contribute to any cumulative health risks or annoyance from odors. Cumulative impacts would be **less than significant.**

3.2.6 Mitigation Measures

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

3.2.7 Conclusion

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

3.3 Biological Resources

Introduction

This section provides a biological resources impact analysis for the proposed project. The analysis in this section is based upon the following report prepared by Dudek, which is included as **Appendix D** of the Environmental Impact Report (EIR):

- *Biological Resources Technical Report for the Armorlite Lofts Project.* Prepared by Dudek, October 2024 (Dudek 2025 ~~2024~~)

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to interfere with or impact state or federally protected wetlands, wildlife corridors and nursery sites. Section 5.3, Environmental Effects Found Not to be Significant – Biological Resources, of the EIR provides additional information on these topics.

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

Table 3.3-1. Biological Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1: Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Significant Impact	Less than Significant	Mitigated to Less Than Significant
#2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Significant Impact	Less than Significant	Mitigated to Less Than Significant
#3: Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.3.1 Existing Conditions

The 2.44-acre project site is currently undeveloped, vacant land located on Armorlite Drive, east of North Las Posas Road and south of W. Mission Road. The project site is enclosed by chain-link fencing along the north, south and western property boundary and open cable railing situated atop a small

retaining wall along the eastern property boundary. A gated driveway onto the site is located on Armorlite Drive, and a second gated driveway in the northwestern portion of the property provides vehicular access via the adjacent AT&T facility to the west. Well-used foot paths and a hole in the chain-link fencing along the northern property limits indicate informal walk-through access across the property. Other signs of site disturbance include pet waste and miscellaneous trash and litter. The site is generally flat with two small, paved drive aisles and slopes downward along its edges. Elevations on site range from 562 to 575 feet above mean sea level.

The project site is situated in a developed area of the City with the mixed use residential to the east and south (Palomar Station and Marc San Marcos); a drive-thru restaurant and AT&T facility to the west; and the North County Transit District railroad right-of-way, W. Mission Road, and additional commercial development to the north.

Dudek conducted a review of historical aerial photographs of the project site and general vicinity, to help determine if ephemeral basins or vernal pools may currently be on the project site or may have been present in the past. Historical aerial photographs of the project site were available from as far back as 1938 to the present. No evidence or aerial signatures of vernal pools or ephemeral basins were documented during these years. Note that the lack of evidence or aerial signatures of vernal pools and ephemeral basins does not necessarily mean that these features were never present on the project site during these years, but it is likely that if these features were present for a sustained period of time that they would have most likely been detected during this analysis (Dudek 2025 ~~2024~~).

The available historical aerial photographs prior to 2012 showed a significant amount of disturbed land (primarily disturbed Diegan coastal sage scrub and bare ground) across the project site. The parcel may have been used as an informal dirt parking area or subject to off-road vehicle use as aerial photographs show bare areas and dirt roads becoming established over time. An aerial photograph from 1994 shows commercial development immediately west of the project site. By late 2005, it appears the project site was at least partially fenced, coinciding with a steady increase of new coastal sage scrub habitat from that point onwards likely resulting from diminished human disturbances on the site. Construction of the mixed-use residential (Palomar Station), abutting the east side of the project site began in 2013. A retaining wall constructed along the eastern boundary of the project site as part of the Palomar Station development suggests the existing topography of the site is at least partially, if not entirely, natural and comprised of native rather than imported soils. By 2021, aerial photographs show the majority of coastal sage scrub habitat in the project site to be disturbed. However, the aerial photograph from July 2021 shows more evidence of project site disturbance, with two intersecting, perpendicular lines having been graded within the project site, exposing more soil and creating more bare ground. The project site remains undeveloped to the present.

Dudek conducted an initial biological reconnaissance visit, habitat assessment, vegetation mapping, aquatic resources assessment, 24-hour post rainfall site visits, focused coastal California gnatcatcher (*Polioptila californica californica*) surveys, and focused special-status plant surveys between 2021 and 2023.The results of these assessments are summarized below.

Vegetation Communities, Land Cover and Habitat Assessment

Assessment Methodology

To locate and characterize natural vegetation communities, including habitats for special-status species, within the project site, Dudek conducted biological field surveys in June 2023, including a biological reconnaissance survey and general habitat assessment. Vegetation communities and land covers on site were mapped in the field directly onto a digital aerial photograph–based field map of

the project study area. Following completion of the fieldwork, all vegetation polygons were transferred to a topographic base and digitized using ArcGIS, and a geographic information system (GIS) coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover present in the project study area was determined. Vegetation community classifications followed the *Preliminary Descriptions of the Terrestrial Natural Communities of California (*Holland 1986), as modified for San Diego County in *Draft Vegetation Communities of San Diego County* (Oberbauer et al. 2008). Vegetation mapping was originally conducted within the project site on June 11, 2021. Vegetation mapping was updated on May 25 and July 12, 2023, in conjunction with the botanical surveys.

Vegetation Communities

The project site consists of mostly undeveloped lands, with a mix of native and non-native vegetation communities. In total, three vegetation communities and/or land cover types were identified within the project site based on general physiognomy and species composition, including two native or naturalized vegetation types and one non-natural land cover. The Multiple Habitat Conservation Program (MHCP) organizes vegetation into habitat group types: Group A- Wetland Communities, Group B - Rare Upland, Group C- Coastal Sage Scrub, Group D- Chaparral, Group E- Annual Grassland, and Group F- Other (SANDAG 2003). **Table 3.3-2** shows the vegetation communities observed on the project. These communities are mapped in **Figure 3.3-1** and discussed further below.

Table 3.3-2. Vegetation Community/Land Cover Types within Project Site

Habitat Group	Vegetation Community/ Land Cover Type	Sensitive?	Total Onsite (Acres)
C	Diegan Coastal Sage Scrub	Yes	2.13
E	Non-Native Grassland Broadleaf-Dominated	Yes	0.12
F	Disturbed Habitat	No	0.20
Total(1)			**2.44**

Source: Dudek 2025 ~~2024~~.
Notes: (1) Numbers may not sum due to rounding

Diegan Coastal Sage Scrub

Diegan coastal sage scrub habitat occupies 2.13 acre on site. Diegan coastal sage scrub is a native vegetation community that is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages *(Salvia* spp.), with scattered evergreen shrubs, including lemonade berry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). The average height of coastal sage scrub reaches three to four feet.

Diegan coastal sage scrub occurs throughout most of the project site. In the northern portion of the site, the Diegan coastal sage scrub is dominated by California sagebrush (*Artemisia californica*). Other shrubs include black sage (*Salvia mellifera*), white sage (*S. apiana*), coyotebrush (*Baccharis pilularis*), and California buckwheat (*Eriogonum fasciculatum*). The Diegan coastal sage scrub is disturbed by the presence of non-native species, such as black mustard (*Brassica nigra*), horehound (*Marrubium vulgare*), and some anthropogenic trash. The Diegan coastal sage scrub in the southern portion of the site includes a higher cover of black sage and white sage and is generally denser than the northern

portion of the site. The City considers Diegan Coastal Sage Scrub a sensitive community, falling under Habitat Group C.

Non-Native Grassland- Broadleaf Dominated

Non-native grassland—broadleaf dominated habitat occupies 0.12 acres on site. Non-native grassland consists of dense to sparse cover of non-native invasive broadleaf species. This designation is used when non-native, invasive broadleaf species make up more than 50% cover of the vegetation community. In San Diego County, the presence of black mustard and shortpod mustard (*Hirschfeldia incana*) are common indicators of this community. In some areas, depending on past disturbance and annual rainfall, some mustards are more abundant than others.

Non-native grassland–broadleaf dominated is disturbed on site and consists mostly of black mustard. Less commonly occurring species include stinkwort (*Dittrichia graveolens*) and red brome (*Bromus madritensis*). Non-Native Grassland – Broadleaf Dominated is considered a sensitive community by the City, falling under Habitat Group E.

Disturbed Habitat

Disturbed habitat occupies 0.20 acre on site. Disturbed habitats are areas that have been physically disturbed and are no longer recognizable as a native or naturalized vegetation association. These areas may continue to retain a soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species. Examples of these areas may include graded landscapes, graded firebreaks, graded construction pads, temporary construction staging areas, off-road-vehicle trails, areas repeatedly cleared for fuel management, and areas that are repeatedly used in ways that prevent revegetation (e.g., parking lots, worn trails that have persisted for years).

Disturbed habitat occurs in the fenced off portion in the northwestern portion of the site that consists of gravelly substrate, as well as mulch. There are a few scattered immature shrubs and non-native forbs still present in this area. The other area of disturbed habitat is the road that extends from the southwestern edge of the site north through about half of the property. Some gravel has been applied and the road is maintained enough to prevent significant plant development. Disturbed habitat is not considered a sensitive community by the City. Disturbed habitat falls under Habitat Group F.

Aquatic Resources Assessment

Assessment Methodology

A jurisdictional aquatic resource assessment was conducted within the project site on November 4, 2022 by Dudek biologist Brock Ortega to determine the extent of aquatic resources that may be under the jurisdiction of the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act, Regional Water Quality Control Board (RWQCB) pursuant to Clean Water Act Section 401 and the Porter–Cologne Act, and California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600–1603 of the California Fish and Game Code. The assessment was conducted in accordance with the methods prescribed in the 1987 Corps of Engineers Wetland Delineation Manual, the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), and the Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual.

During the assessment, the site was walked and evaluated for evidence of an OHWM, surface water, saturation, wetland vegetation, and nexus to a traditional navigable water of the United States. In addition, any aquatic resources were anecdotally identified using the Cowardin method of wetlands classification, which defines wetland boundaries by the presence of at least one parameter (i.e., hydric soils, hydrophytic vegetation, or hydrology). Aquatic resources were documented by visually assessing and mapping any hydrophytic vegetation and/or the presence or absence of surface hydrology indicators (e.g., drift lines, drainage patterns, scour etc.). Soil samples were not taken during this effort.

In addition, site visits to check for the presence of surface water or ponding of at least 3 centimeters (cm) were conducted within 24 hours after each rain event (approximately 15 visits) during the 2022-2023 wet season. Visits to a nearby reference site (within one mile of the project site) where vernal pools were present were also conducted.

Aquatic Resources

Although the site falls within the northwestern corner of a polygon that is identified as a Vernal Pool Major Amendment Area (as shown in the City's Draft SAP), it has been extensively disturbed over the years by anthropogenic influences such as past construction grading as well as utility excavation and exploration, and historic aerial photographs show that the parcel may have been used as an informal dirt parking area or subject to off-road vehicle use in the past. While some minor ponding was observed within the project site during visits within 24 hours after rainfall events, during none of the visits did ponding meet the 3 cm threshold that would trigger initiation of wet-season protocol surveys for San Diego fairy shrimp. By comparison, the rainfall was sufficient to establish inundation (pools greater than 3 cm deep) at the nearby reference site where known vernal pools have filled and remained inundated beyond the 24-hour post-rainfall assessment period. Therefore, observations show that the site is not suitable for ponding or fairy shrimp, and that there are no other aquatic resources that would be under the jurisdiction of aquatic resource agencies (Dudek 2025 ~~2024~~).

Critical Habitat

Critical habitat, as defined by the U.S. Fish and Wildlife Service (USFWS), are (1) specific areas that are either occupied by a species at the time of its listing that contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection and/or (2) include areas that were not occupied by the species at the time of listing but are essential to its conservation.

San Diego Fairy Shrimp

San Diego fairy shrimp critical habitat designated in 2007 encompasses nearly the entire project site as well as a large portion of the existing Palomar Station development to the east and south. There is also San Diego fairy shrimp critical habitat designated within a vernal pool reference site southeast of the project site, as well as within two additional parcels west of S. Las Posas Road, on opposite sides of Linda Vista Drive, within the one-mile vicinity of the project site, all designated in 2007. However, field study observations in 2023 show that the site does not support suitable ponding or habitat for fairy shrimp. Therefore, the site does not contain the physical or biological features essential to the conservation of the species (i.e., primary constituent elements, such as vernal pools or supporting topographic features) (Dudek 2025 ~~2024~~).

Thread-leaved Brodiaea

The closest critical habitat for thread-leaved brodiaea is located approximately 0.2-miles northwest of the project site, between W. Mission Road and N. Las Posas Road, designated in 2011. Additional thread-leaved brodiaea critical habitat designated in 2011 overlaps the same two parcels containing critical habitat for San Diego fairy shrimp located on opposite sides of Linda Vista Drive within one mile of the project site. However, no critical habitat for thread-leaved brodiaea was identified on the project site and thread-leaved brodiaea was not observed during focused surveys for special-status plants in May and July 2023. Although there is suitable coastal sage scrub vegetation, soils are not clay so it was determined to have a low potential to occur (Dudek 2025 ~~2024~~).

Spreading Navarretia

Critical habitat for spreading navarretia was designated in 2010 within the same vernal pool mitigation area discussed above, as well as in the same parcels west of S. Las Posas Road on opposite sides of Linda Vista Drive. However, no critical habitat for spreading navarretia was identified on the project site and spreading navarretia is not expected to occur as no suitable vegetation is present (Dudek 2025 ~~2024~~).

There is no critical habitat for coastal California gnatcatcher within the site or within a 1-mile buffer

Plant Species Assessment

Seventy-five vascular plant species consisting of 35 native species (47%) and 40 non-native species (53%) were recorded during rare plant surveys conducted for the project study area.

Special-Status Plant Survey Methodology

Prior to special-status plant surveys, Dudek evaluated plant records in the U.S. Geological Survey 7.5-minute San Marcos quadrangle and the surrounding Morro Hill, Bonsall, Pala, San Luis Rey, Valley Center, Encinitas, Rancho Santa Fe, and Escondido quadrangles to determine target species. In addition, Dudek's knowledge of biological resources and regional distribution of each species, as well as elevation, habitat, and soils present within the project site were evaluated to determine the potential for various special-status plant species to occur (Dudek 2025 ~~2024~~).

On May 25, 2023 and July 12, 2023, focused surveys for special-status plants were conducted on site by Dudek biologist Kathleen Dayton. This survey was conducted at the appropriate phenological stage to detect and identify target species. Reference checks were conducted for key target species. Thread-leaved brodiaea (*Brodiaea filifolia*) and Orcutt's brodiaea (*Brodiaea orcuttii*) were observed just starting to bloom on May 10, 2023, in San Marcos. Orcutt's brodiaea (*Brodiaea orcuttii*) was observed again in early bloom on May 17, 2023, and still in bloom on June 27, 2023. Southern tarplant (*Centromadia parryi* ssp. *Australis*) was observed in full bloom on reference sites on July 11, 2023.

Field survey methods conformed to California Native Plant Society (CNPS) Botanical Survey Guidelines; Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities; and General Rare Plant Survey Guidelines. Surveys were conducted by walking meandering transects throughout the project site to detect special-status species. All plant species were identified and recorded in Appendix A of the biological resources technical report, which is Appendix D of the EIR.

Sensitive Plant Species Observed or With Potential to Occur

Endangered, rare, or threatened plant species, as defined in the California Environmental Quality Act (CEQA) Guidelines Section 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status plant species" in the biological technical report and include (1) endangered or threatened plant species recognized in the context of the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA), and (2) plant species with a California Rare Plant Rank (CRPR) 1 through 3. The biological technical report also includes CRPR 4 plant species (Dudek 2025 ~~2024~~).

No special-status plants were observed on site. Appendix C of the biological resources technical report (Appendix D of the EIR) provides a list of all special-status plant species with their habitat requirements and potential to occur on the project site. It also provides evaluations for each of the special-status species' occurrence in the vicinity of the project site and its potential to occur in the project site based on known geographic range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. No special-status plants were observed on site, and none have a moderate or high potential to occur (Dudek 2025 ~~2024~~).

Wildlife Species

A total of 16 wildlife species were observed at the project site, all of which consisted of native species. A cumulative list of wildlife species observed during 2022 and 2023 surveys is provided in Appendix B of the biological resources technical report, which is Appendix D of the EIR.

Sensitive Wildlife Species Observed or With Potential to Occur

Species defined as "special-status wildlife species" in the biological resources technical report include endangered and threatened wildlife species recognized in the context of the California and federal Endangered Species Acts; Species of Special Concern (SSC) assigned by CDFW to species whose population levels are declining, have limited ranges, and/or are vulnerable to extinction due to continuing threats; Fully Protected species protected by CDFW and Watch List species candidates for higher sensitivity statuses; and Birds of Conservation Concern designated by USFWS to migratory and non-migratory bird species that adhere to the 1988 amendment to the Fish and Wildlife Conservation Act that mandates USFWS to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Federal Endangered Species Act of 1973.

Appendix D of the biological resources technical report lists the special-status wildlife species known to occur within the U.S. Geological Survey (USGS) San Marcos 7.5-minute quadrangle map and the eight quadrangle maps surrounding the project site—Morro Hill, Bonsall, Pala, San Luis Rey, Valley Center, Encinitas, Rancho Santa Fe, and Escondido. Based on a review of the potential species to occur within the region, habitat conditions identified within project site, as well as results of focused surveys, no special-status wildlife species have a moderate to high potential to occur within the project site.

Coastal California Gnatcatcher

Focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*) (a federally listed threatened species and a CDFW Species of Special Concern) were conducted within the project site between October 2022 and February 2023 by Dudek biologist Kamarul Muri (Permit # TE-813545). The surveys were conducted in conformance with the currently accepted protocol of the U.S. Fish and Wildlife Service (USFWS 1997) for projects that are not within an NCCP jurisdiction.

A tape of recorded California gnatcatcher vocalizations played approximately every 50 to 100 feet was used to induce responses from potentially present gnatcatchers. If a gnatcatcher was detected, the recorded playback would be immediately terminated to minimize potential for harassment. Aerial coverage of the area in the ESRI Field Maps mobile application was used to navigate the site and map any gnatcatchers detected. Binoculars (10 x 42) were used to aid in detecting and identifying bird species. Weather conditions, time of day, and season were appropriate for the detection of gnatcatchers.

Although suitable coastal sage scrub habitat capable of supporting coastal California gnatcatcher (*Polioptila californica californica*) occurs throughout the study area, none were heard or observed during the focused, protocol level surveys for this species. As such, this species is not expected to occur within the project site (Dudek 2025 ~~2024~~). Appendix E of the biological resources technical report includes the focused California gnatcatcher survey report (Appendix D of the EIR).

Due to lack of suitable habitat, no other focused special-status wildlife species surveys were conducted within the project site (Dudek 2025 ~~2024~~).

Nesting Birds

The habitats within the project site, which include Diegan coastal sage scrub, provide suitable nesting habitat for a variety of nesting bird species that are protected under the Migratory Bird Treaty Act and Fish and Game Code 3503.5.

Roosting Bats

Due to its small size, location within an urbanized setting, and lack of suitable habitat including rocky outcrops and cliffs, caves, mines, trees, and structures such as buildings, bridges, or other anthropogenic features, the project site is not likely to provide suitable roosting habitat for special-status bats. Additionally, no active roosts or sign of active roosting (i.e., guano or staining) were detected during any of the site visits between 2021 – 2023.

Crotch's Bumble Bee

Crotch's bumble bee (*Bombus crotchii*) is a candidate for listing as endangered under the California Endangered Species Act (CESA). The species was listed as a candidate on September 30, 2022, with the final listing determination expected in summer 2025.

The site is small and located within an urbanized setting as it is surrounded by commercial and residential developments on all sides. Additionally, although potentially suitable coastal sage scrub habitat is present, the site shows evidence of anthropogenic disturbance and past grading activities and is largely depauperate, lacking many of the diverse floral resources preferred by Crotch's bumble bee such as milkweeds, lupines, medics, phacelias, clarkias, poppies, and larkspurs. Furthermore, the closest known records of this species occur in the Lake Calavera area, approximately 5.5 miles northwest from the site (CDFW 2025). Therefore, the proposed project site is not likely to support foraging or nesting of this species.

Habitat Connectivity and Wildlife Corridors

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. To function effectively, a wildlife

corridor must link two or more patches of habitat for which connectivity is desired, and it must be suitable for the focal target species to achieve the desired demographic and genetic exchange between populations.

The 2.44-acre project site is a predominantly undeveloped parcel surrounded by existing, high-density residential and mixed commercial development that likely does not provide large-scale regional wildlife movement or habitat connectivity value, but may provide small-scale, local value for small mammals, reptiles, and mesocarnivores. In addition, birds (especially those protected by the MBTA that are using the Pacific Flyway) and bats may use the site as foraging habitat.

The project site is also fenced on all sides (with chain-linked fencing on three sides and open cable railing on a single side) which would preclude its use in facilitating any large wildlife movement through urban landscape. In addition, the site is not located within a Biological Core Linkage Area. As such, the isolated project site is not expected to provide for wildlife movement or serve as an important habitat linkage for wildlife traversing the region (Dudek 2025 ~~2024~~).

3.3.2 Regulatory Setting

Federal

United States Army Corps of Engineers – Clean Water Act

Recognizing the potential for continued or accelerated degradation of the Nation's waters, the U.S. Congress enacted the Clean Water Act (CWA), formerly known as the Federal Water Pollution Control Act (33 U.S.C. 1344). The objective of the CWA is to maintain and restore the chemical, physical, and biological integrity of the waters of the United States. Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into the waters of the United States, including wetlands. The term "wetlands" (a subset of waters of the United States) is defined in Title 33 of the Code of Federal Regulations, Section 328.3(c)(1), as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM), which is defined in Title 33 of the Code of Federal Regulations, Section 328.3(c)(4).

United States Fish and Wildlife Service – Endangered Species Act

The United States Fish and Wildlife Service (USFWS) is responsible for enforcing the federal Endangered Species Act (ESA), Migratory Bird Treaty Act, and Wildlife Coordination Act, and reviews and comments on applications for Section 404 CWA permits submitted to the USACE. If the proposed project is determined to have an adverse effect on a species that is federally listed as threatened or endangered, consultation with the USFWS would be required. The federal Endangered Species Act defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." If the proposed project may result in "take" of a federally listed species, an incidental take permit would be required. "Take" is defined in the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct."

United States Fish and Wildlife Service – Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed in 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and includes any part, egg, or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

State

California Fish and Game Code

Sections 3511 (Birds), 4700 (Mammals), 5050 (Reptiles and Amphibians), and 5515 (Fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law.

Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey; or to take, possess, or destroy any nest or eggs of such birds. Birds of prey refer to species in the orders Falconiformes and Strigiformes.

Nests of all other birds (except English sparrow [*Passer domesticus*] and European starling [*Sturnus vulgaris*]) are protected under Sections 3503 and 3513 of the California Fish and Game Code.

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

California Endangered Species Act

The CDFW administers the California Endangered Species Act (CESA), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the

absence of the special protection and management efforts required by this chapter. Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species." A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

CESA authorizes the taking of threatened, endangered, or candidate species if take is incidental to an otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, CESA allows CDFW to adopt a CESA incidental take authorization as satisfactory for CEQA purposes based on finding that the federal permit adequately protects the species and is consistent with state law.

On July 10, 2023, Senate Bill 147 (SB147) was signed into law and amends the Fish and Game Code to allow a 10-year permitting mechanism for a defined set of projects within the renewable energy, transportation, and water infrastructure sectors. Currently, this project does not fall within those categories and therefore would not be authorized to take of "fully protected" species that are protected under the provisions of the California Endangered Species Act California Fish and Game Code.

California Fish and Game Code

Sections 3511 (Birds), 4700 (Mammals), 5050 (Reptiles and Amphibians), and 5515 (Fish) of the California Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental take of these species is not authorized by law.

Pursuant to Section 3503.5 of the California Fish and Game Code, it is unlawful to take, possess, or destroy any birds of prey; or to take, possess, or destroy any nest or eggs of such birds. Birds of prey refer to species in the orders Falconiformes and Strigiformes.

Nests of all other birds (except English sparrow [*Passer domesticus*] and European starling [*Sturnus vulgaris*]) are protected under Sections 3503 and 3513 of the California Fish and Game Code.

Pursuant to Section 1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code.

Porter-Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board (SWRCB) develops statewide water quality plans, and the Regional Water Quality Control Boards (RWQCBs) develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a "water of the state" (California Water Code, Section 13260[a]). Waters of the state are defined as "any surface water or

groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter– Cologne Act by developing Stormwater Pollution Prevention Plans, Standard Urban Stormwater Mitigation Plans, and other measures to obtain a Clean Water Act Section 401 certification. If a Clean Water Act Section 404 permit is not required for a project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter–Cologne Act.

California Environmental Quality Act

CEQA (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) require identification of a project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15000 et seq.). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (CFGC Sections 1900–1913) directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the Fish and Game Commission the power to designate native plants as "endangered" or "rare," and prohibited take, with some exceptions, of endangered and rare plants. When CESA was amended in 1984, it expanded on the original Native Plant Protection Act, enhanced legal protection for plants, and created the categories of "threatened" and "endangered" species to parallel FESA. The 1984 amendments to CESA also made the exceptions to the take prohibition set forth in Section 1913 of the Native Plant Protection Act applicable to plant species listed as threatened or endangered under CESA. CESA categorized all rare animals as threatened species under CESA, but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The Native Plant Protection Act remains part of the California Fish and Game Code, and mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and project proponents.

Natural Community Conservation Planning

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

Multiple Habitat Conservation Program

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

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

The proposed project site is situated within an urbanized area, surrounded by existing residential and commercial developments, and does not act as a wildlife corridor. It is not designated as a Biological Core and Linkage Area or MHCP Focused Planning Area.

Local

San Marcos General Plan

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

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

- Policy COS-2.6: Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As shown in Table 3.7-7, the project is consistent with the applicable goals and policies.

3.3.3 Thresholds of Significance

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

- **Threshold #1:** Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- **Threshold #2:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- **Threshold #3:** Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
- **Threshold #4:** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As noted above, it was determined that there would be less than significant impacts related to state and federally protected wetlands, wildlife corridors and nursery sites. Section 5.3, Environmental Effects Found Not to be Significant – Biological Resources, of this EIR provides additional information on these topics. The Initial Study is included in Appendix B.1.

3.3.4 Project Impact Analysis

The proposed project is expected to permanently impact the entire project site through grading and development of the project. Figure 3.3-1 illustrates the distribution of biological resources on the project site and the extent of the proposed impacts. Table 3.3-2 present the types and acreage of each vegetation community/land cover type within the project site. The project includes off-site water, wastewater, and stormwater infrastructure improvements as detailed in Chapter 2 Project Description. These improvements would all be constructed within the existing right-of-way of Armorlite Drive. No biological resources impacts would occur as a result of these improvements. As a condition of project approval, the applicant/developer/property owner shall pay Public Facility Fees, a portion of which go towards City-wide habitat conservation efforts.

Threshold #1: Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans,

policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Special - Status Plants Species and Critical Habitats

No rare or special-status plant species were observed within the project site during either of the focused rare plant surveys conducted in May 2023 and July 2023. The proposed project site does not support any special-status plant species, and none are considered as having a moderate or high potential to occur. There is critical habitat for both thread-leaved brodiaea and spreading navarretia designated near the project site. However, no critical habitat for either plant species was identified on the project site, nor were they observed during focused surveys for special-status plants. Thread-leaved brodiaea and spreading navarettia were determined to have low to no potential to occur. Therefore, construction of the project would not result in significant impacts to any special-status plant species.

Special - Status Wildlife Species

No special-status wildlife was observed within the project site during the biological surveys conducted in 2022 and 2023. Based on a review of the potential species to occur within the region, habitat conditions identified within the project site, as well as results of general and focused surveys in 2022 and 2023, no special-status wildlife species have a moderate to high potential to occur within the project site. Focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*) (a federally listed threatened species and a CDFW Species of Special Concern) were conducted within the project site between October 2022 and February 2023.

California Gnatcatcher was not observed during these focused surveys. While coastal sage scrub vegetation on site is superficially suitable for California gnatcatcher, based on the overall habitat structure and the presence of primary constituent species such as California sagebrush, the available habitat patch on site is small, is substantially degraded by physical disturbances and non-native species, and lies in an urbanized setting isolated on all sides from larger, intact habitat areas. As such, this species is not expected to occur within the project site. Therefore, the proposed project would not result in direct or indirect impacts to any special-status wildlife species.

Nesting Birds

The project site contains habitat (disturbed Diegan coastal sage scrub, non-native grassland, and disturbed land), which could potentially provide opportunities for avian species to nest on site. The proposed project has the potential to impact ~~active bird nests~~ nesting birds or other wildlife if vegetation. ~~is removed or ground disturbing activities occur during the breeding and nesting season (typically February 1 to September 15).~~ Impacts on nesting birds or other wildlife are prohibited by the MBTA and the California Fish and Game Code. Clearing, grubbing and construction activities, if conducted during the breeding and nesting season, could directly or indirectly impact species protected under the MBTA. This represents a **significant impact** (**Impact BIO-1**) and mitigation is required.

- **Impact BIO-1:** There is potential to impact avian species protected under the Migratory Bird Treaty Act and California Fish and Game Code 3503.5 and other wildlife if tree removal, vegetation removal, or other construction activities occur during the nesting season.

Indirect Impacts

Indirect impacts are physical changes to the environment which are not immediately related to a project but may occur at some point in the future due to conditions introduced with implementation of the project. Indirect impacts during construction may include dust, anthropogenic trash, and accidental transport of non-native plant species into the project site by vehicles, equipment, or foot traffic. Therefore, the project has the potential to result in **significant indirect impacts** to sensitive habitat (**Impact BIO-2**) and mitigation is required.

- **Impact BIO-2** The proposed project has the potential to result in indirect impacts to sensitive species due to dust, trash, and accidental transport of non-native plant species into the project site, and invasive plant species, and noise and lighting effects.

Threshold #2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Sensitive Vegetation Communities

Table 3.3-3 presents the amount and type of vegetation community/land cover type that would be impacted by development of the proposed project. As shown in Table 3.3-3, and shown on Figure 3.3-1, the entire 2.44-acre project site is expected to be permanently impacted. This would result in permanent impacts to 2.13 acres of Diegan coastal sage scrub, permanent impacts to 0.12 acres of non-native grassland-broadleaf dominated, and permanent impacts to 0.20 acre of disturbed lands. Permanent impacts to the disturbed habitat totaling 0.20 acre would not be significant because this land cover is not considered sensitive, it is non-native, and provides little biological resource value. **Table 3.3-3** includes required mitigation ratios and acreage.

Table 3.3-3. Vegetation Community/Land Cover Impacts

Habitat Group	Vegetation Community/ Land Cover Type	Total Onsite (Acres)	Sensitive?	Project Impact (Acres)	Mitigation Ratio	Required Mitigation (acres)
C	Diegan Coastal Sage Scrub	2.13	Yes	2.13	1:1	2.13
D	Non-Native Grassland-Broadleaf Dominated	0.12	Yes	0.12	0.5:1	0.06
F	Disturbed Habitat	0.20	No	N/A	N/A	0
Total[(1)]		**2.44**	**N/A**	**2.25**	**N/A**	**2.19**

Source: Dudek 2025 ~~2024~~.
Notes: (1) Numbers may not sum due to rounding
N/A = not applicable

Direct permanent impacts to Diegan coastal sage scrub and non-native grassland communities would be considered a significant impact (**Impact BIO-3**) and require mitigation.

- **Impact BIO-3** The proposed project would impact 2.13 acres of Diegan coastal sage scrub and 0.12 acres of non-native grassland-broadleaf dominated for a total of 2.25 acres of impact.

Critical Habitats

As discussed in Threshold #1, critical habitat was identified for thread-leaved brodiaea and spreading navarretia in proximity to the project site. However, no critical habitat for either plant species was identified on the project site, nor were they observed during focused surveys for special-status plants. Thread-leaved brodiaea and spreading navarettia were determined to have low to no potential to occur. Therefore, construction of the project would not result in significant impacts to thread-leaved brodiaea and spreading navarettia critical habitat.

San Diego Fairy Shrimp

San Diego fairy shrimp critical habitat designated in 2007 encompasses nearly the entire project site as well as a large portion of the existing Palomar Station development to the east and south. There is also San Diego fairy shrimp critical habitat designated within a vernal pool reference site southeast of the project site, as well as within two additional parcels west of South Las Posas Road, on opposite sides of Linda Vista Drive, within the one-mile vicinity of the project site, all designated in 2007.

In addition to the jurisdictional aquatic resource assessment that was conducted within the project site, site visits to check for the presence of surface water or ponding of at least 3 cm were conducted within 24 hours after each rain event (approximately 15 visits) during the 2022-2023 wet season. Visits to a nearby reference site (within one mile of the project site) where vernal pools were present were also conducted. While some minor ponding was observed within the project site during visits within 24 hours after rainfall events, during none of the visits did ponding meet the 3 cm threshold that would trigger initiation of wet-season protocol surveys for San Diego fairy shrimp. By comparison, the rainfall was sufficient to establish inundation (pools greater than 3 cm deep) at the nearby reference site where known vernal pools have filled and remained inundated beyond the 24-hour post-rainfall assessment period (Dudek 2025 ~~2024~~). Therefore, observations show that the site is not suitable for ponding or fairy shrimp, and no significant impacts to San Diego fairy shrimp would occur (Dudek 2025 ~~2024~~). Therefore, impacts would be **less than significant.**

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

Existing vegetation (disturbed habitat, coastal sage scrub, and non-native grassland) would be removed during project construction and new trees and landscaping would be planted. There is one existing pepper tree on the southwest corner of the project site that would be removed to prepare the site for development. General Plan Policy COS-2.6 requires that any removed trees be replaced at a 1:1 ratio. The proposed landscape plan includes 34 large parking lot trees, 10 medium site trees, 29 small accent trees and 7 pool area palm trees, which greatly exceeds the requirements of Policy COS-2.6. Proposed tree species to be planted per the landscape plan include golden rain tree, Chinese pistache, fern pine, African sumac, Japanese zelkova, Chitalpa, Marina strawberry tree, gold medallion, Desert Museum palo verde, Brisbane Box, Swan Hill fruitless olive, Mexican palo verde, tree aloe, Eastern redbud, Western redbud, crape myrtle and in the pool area: King Plam and Queen Palm. The landscape plan is included as Appendix A.3. The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As shown in Table 3.7-7, the project is consistent with the applicable goals and policies. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impacts would be **less than significant.**

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

The project is not located within a designated Biological Core Linkage Area or Focused Planning Area of the MHCP and therefore, it is consistent with the conservation policies of the Draft San Marcos Subarea Plan. The MHCP organizes vegetation into habitat group types: Wetland Communities, Rare Upland, Coastal Sage Scrub, Chaparral, Annual Grassland, and Other (SANDAG 2003). As discussed in Threshold #2, the project would impact 2.13 acres of Diegan coastal sage scrub (Habitat Group C) and 0.06 acres of non-native grassland – broadleaf dominated (Habitat Group D), which were identified in Impact BIO-2 and Impact BIO-3. Mitigation measures (MM-BIO-2 and MM-BIO-3) have been identified which would reduce potentially significant biological resource impacts to below a level of significance. With Therefore the project would be found in conformance with the MHCP and would not conflict with an adopted Habitat Conservation Plan, NCCP, or other habitat conservation plans. A **less than significant** impact is identified, and no mitigation is required.

3.3.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projects contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For the purpose of assessing the proposed project's cumulative impact with respect to biological resources the cumulative analysis is based upon a list approach. All of the cumulative projects within the city identified in Table 2-3 are considered in this cumulative analysis.

The biological cumulative impact analysis focuses on those projects that would have a similar type of biological resource impact as the proposed project. The project has the potential to impact nesting birds protected under the MBTA as well as sensitive habitat (Diegan coastal sage scrub and non-native grassland-broadleaf dominated).

The cumulative projects which remove trees or vegetation during the nesting season could also have the potential for impacts to species protected under the MBTA. These impacts are avoided through restrictions on construction timing, or the performance of pre-construction surveys to ensure that nesting birds would not be impacted. This is similar to the mitigation identified for the proposed project and would ensure that cumulative impacts are less than significant. The cumulative projects which remove Diegan coastal sage scrub, non-native grassland-broadleaf dominated, or other sensitive habitat would be required to mitigate their impacts at a ratio consistent with the MHCP and the City's Draft Subarea Plan. This is similar to the mitigation identified for the proposed project and would ensure that cumulative impacts are **less than significant**.

3.3.6 Mitigation Measures

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

Nesting Birds or Other Wildlife (Impact BIO-1)

MM-BIO-1a **Breeding Season Avoidance.** To the extent feasible, the applicant/developer shall only remove vegetation ~~The removal of coastal sage scrub~~ from the project impact footprint ~~shall only occur from~~ between September 1 through February 14 to avoid the bird breeding season. Further, to the maximum extent practicable, grading activities associated with construction of the project shall occur September 1 through February 14 to avoid the breeding season. If project construction must occur during the breeding season, mitigation measure MM-BIO-1b shall be implemented.

MM-BIO-1b **Nesting ~~Bird~~ Survey(s).** Take of birds protected under the Migratory Bird Treaty Act and California Fish and Game Code shall be avoided during the nesting season. To avoid any direct impacts on raptors and/or any migratory birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, removal of habitat that supports active nests on the proposed area of disturbance shall occur outside of the nesting season for these species (February 15 through August 31, annually). If construction occurs during the nesting season, pre-construction nesting bird surveys must be conducted within 72 hours of construction-related activities. If nesting birds are detected by the biologist, the following buffers shall be established: (1) no work within 300 feet of a non-listed nesting migratory bird nest, and (2) no work within 500 feet of a listed bird or raptor nest. However, the biologist may reduce these buffer widths depending on site-specific conditions (e.g., the width and type of screening vegetation between the nest and proposed activity) or the existing ambient level of activity (e.g., existing level of human activity within the buffer distance) in conjunction with consultation with the City of San Marcos. If construction must take place within the recommended buffer widths above, the project applicant shall contact the City of San Marcos and wildlife agencies (United States Fish and Wildlife Service [USFWS] and California Department of Fish and Wildlife [CDFW] to determine the appropriate buffer.

Additionally, take of a state candidate species is prohibited under the California Endangered Special Act (CESA). While Crotch's bumble bee has low potential to occur on site, the pre-construction surveys for Crotch's bumble bee shall be conducted within the construction footprint prior to the start of ground-disturbing activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include focused surveys, which shall be based on recommendations described in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, released by CDFW on June 6, 2023, or the most current version at the time of construction.

The surveys shall be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week, preferably spaced two (2) to four (4) weeks apart. Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least one (1) hour following rain. Optimal surveys are when there are sunny to partly sunny skies and a temperature greater than 60°F.

Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 miles per hour). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to five (5) minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five (5) minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them, depending on their proximity to one (1) another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point to determine which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation, if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee-identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation is required. The mere presence of foraging Crotch's bumble bees shall not require implementation of additional mitigation measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the project construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest because the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report shall be submitted to the City Planning Division Director within 30 days of the last survey pass. The report shall include survey methods,

weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and a detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If Crotch's bumble bee is detected within the project site, the applicant/developer shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this document.

In the event that an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through on-site preservation of suitable habitat and/or in accordance with CDFW guidance for off-site locations. The funding source shall be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount shall be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record shall take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement.

Indirect Impacts to Sensitive Wildlife Species (Impact BIO-2)

MM-BIO-2a **Construction Best Management Practices.** The project applicant shall ensure that the following conditions are implemented during project construction to minimize potential environmental impacts due to project implementation:

1. Impacts from fugitive dust shall be avoided and minimized through watering and other appropriate measures consistent with the Construction General Permit Order 2009-009-DWQ.

2. Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the project site.

3. To avoid attracting predators, the project site shall be kept clean of debris. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.

4. Pets of project personnel shall not be allowed on the project site.

MM-BIO-2b **Landscaping**. The applicant shall ensure that development landscaping habitat does not include exotic plant species that may be invasive to native habitats in the region. Exotic plant species not to be used include any species listed on the

California Invasive Plant Council's "Invasive Plant Inventory" List. In addition, landscaping should not use plants that require intensive irrigation, fertilizers, or pesticides.

MM-BIO-2c **Biological Monitor Requirements and Duties.** A qualified biologist shall be on site per the discretion of the City during initial clearing/grubbing and during grading to ensure compliance with all project-imposed mitigation measures. The biologist shall be available during pre-construction and construction phases to review grading plans, address protection of potential biological resources, monitor ongoing work, and maintain communications with the project's engineer to ensure that any issues are appropriately and lawfully managed.

The qualified biological monitor shall also be responsible for the following duties:

1. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.

2. Halt work, if necessary, and confer with the USFWS, CDFW, ~~U.S. Fish and Wildlife Service~~, and City of San Marcos to ensure the proper implementation of species and habitat protection measures. The biologist shall report any violation to USFWS and the City within 24 hours of its occurrence.

3. Submit a final report to the City within 60 days of project completion that includes the following:(1) as-built construction drawings for grading with an overlay of any active nests; (2) photographs of habitat areas during pre-construction and post-construction conditions; and (3) other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with the avoidance/minimization provisions were achieved.

Direct Impacts to Sensitive Vegetation Communities (Impact BIO-3)

MM-BIO-3 **Off-Site Mitigation**: The permanent loss of 2.13 acres of Diegan Coastal Sage Scrub will be mitigated at a minimum 1:1 ratio and the permanent loss of 0.12 acres of non-native grassland will be mitigated at a minimum 0.5:1 ratio. The amount of mitigation acreage required for non-native grassland may be reduced if up-tiered (i.e., coastal sage scrub) habitat is available for purchase. Section 5.2.1 of the Draft Subarea Plan for San Marcos references the preferred order of mitigation to be on-site mitigation, off-site acquisition, in-lieu fees, and mitigation credits. Since on-site mitigation is not an option due to the project design, the impacted 2.13 acres of Diegan coastal sage scrub and 0.06 acres of non-native grassland will be mitigated by the project applicant through off-site acquisition, in lieu fees, a purchase of credits from Buena Creek Mitigation Bank or another approved mitigation bank, or a combination thereof as approved by the City's Planning Division Director and wildlife agencies prior to issuance of the grading permit.

3.3.7 Conclusion

Based on the presence of suitable avian nesting habitat, pre-construction ~~clearance~~ surveys for nesting birds will ~~would~~ be conducted to ensure that no impacts on nesting birds that are afforded

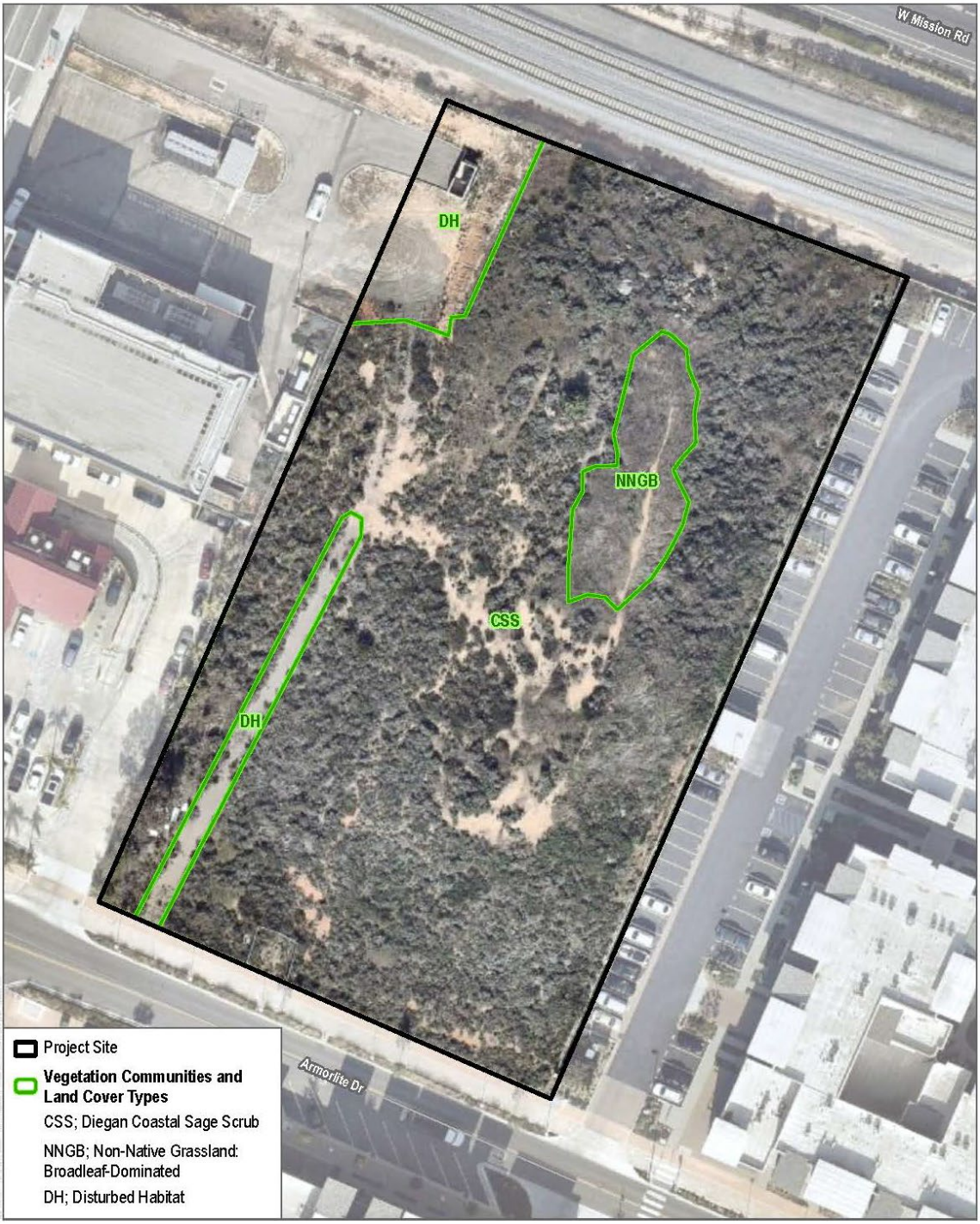
protection under the MBTA or the Fish and Game Code occur (see mitigation measures MM-BIO-1a and MM-BIO-1b). Mitigation measures MM-BIO-1a and MM-BIO-1b require a preconstruction survey if construction is proposed during the nesting season. If nesting birds are found, avoidance measures would be implemented to minimize impacts. With the implementation of mitigation measures MM-BIO-1a and MM-BIO-1b, direct impacts on nesting birds would be less than significant.

Indirect impacts during construction may include dust, anthropogenic trash, and accidental transport of non-native plant species into the project site by vehicles, equipment, or foot traffic. Implementation of mitigation measures MM-BIO-2a, which includes industry-standard best management practices (BMPs), including dust control, good housekeeping procedures, and measures to protect the site from establishment of invasive species would be required for the project to obtain a grading permit. Implementation of these measures during construction, including consistency with the Construction General Permit Order 2009-009-DWQ, would reduce any potential short-term indirect impacts to a level that is less than significant. In addition, the implementation of mitigation measure MM-BIO-2b, would ensure that the proposed project's landscaping plan does not include exotic plant species that may be invasive and/or harmful to native habitats in the region, as well as prohibit the use of plants that require intensive irrigation, fertilizers, or pesticides. Implementation of mitigation measures MM-BIO-2c will ensure compliance with all project-imposed mitigation measures with the presence of a biological monitor on site.

Direct permanent impacts to Diegan coastal sage scrub and non-native grassland communities would be significant and require mitigation. The proposed project would result in the purchase of 2.19 acres of sensitive upland vegetation communities (mitigation measure MM-BIO-3). Implementation of mitigation measure MM-BIO-3 would provide for the required 1:1 mitigation ratio for impacts to coastal sage scrub and 0.5:1 mitigation ratio for non-native grassland.

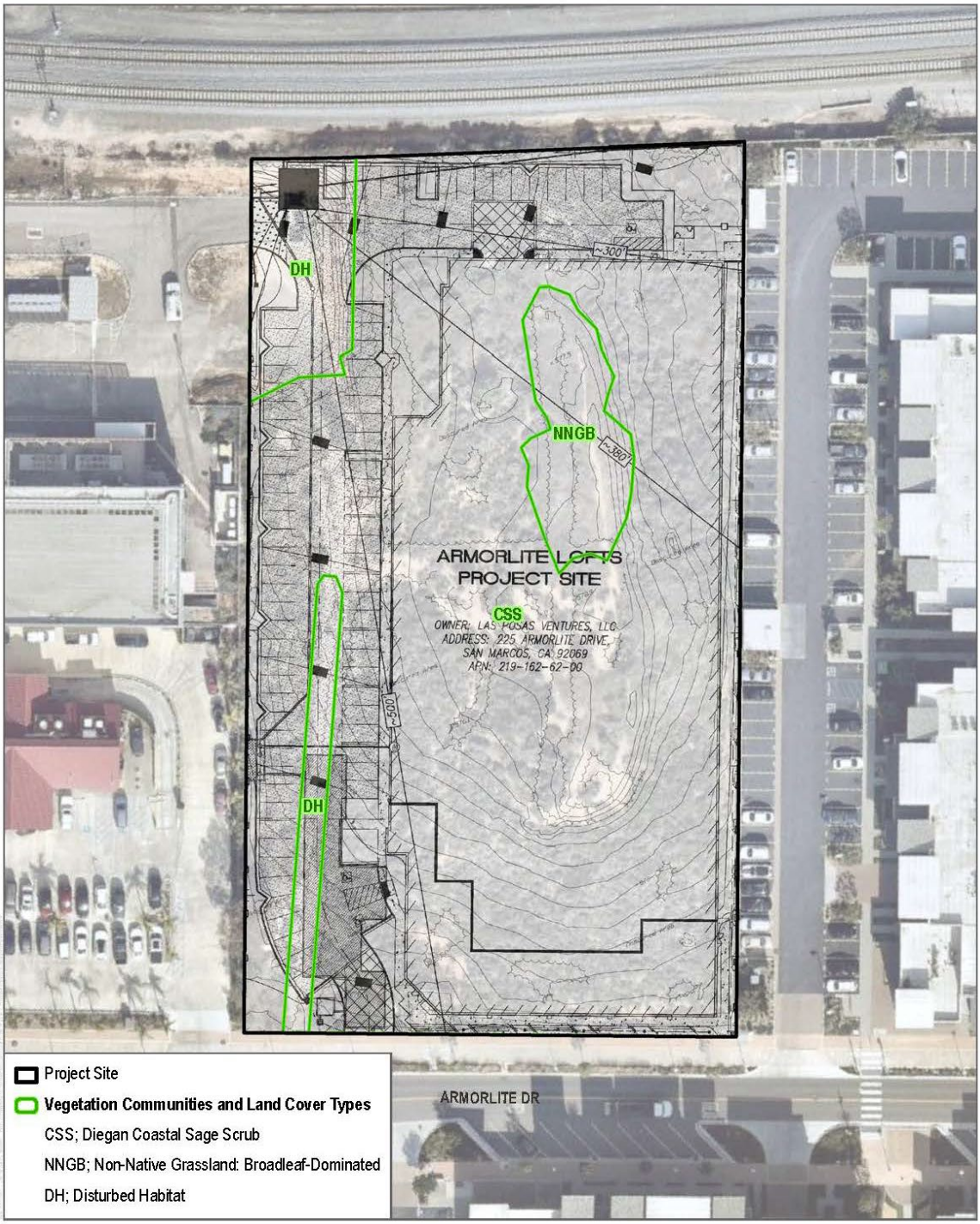
All other biological resources impacts were determined to be less than significant.

Figure 3.3-1. Vegetation Communities and Land Cover Types



Source: Dudek 2025 ~~2024~~.

Figure 3.3-2. Proposed Impacts to Vegetation Communities and Land Cover Types



Source: Dudek 2025 ~~2024~~.

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3.4 Cultural Resources

Introduction

This section identifies the cultural resources on the project site and analyzes the potential impacts of the proposed project on cultural resources. Cultural resources considered in this analysis include archaeological (precontact Native American [prehistoric] and non-Native American historic-era) resources, historical resources, unique archaeological resources, and human remains. Tribal Cultural Resources are analyzed separately in Section 3.12 of the Environmental Impact Report (EIR). [6]

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

- *Archaeological Survey Report for Armorlite Lofts Project, San Marcos, CA prepared by ASM Affiliates (July 2024).*

Due to the confidential nature of the archaeological report, it is not included as a technical appendix to the EIR. The archaeological resources inventory report included a record search, literature review, correspondence with Native American contacts, and field survey. The analysis also considers the *California Environmental Quality Act (CEQA) Guidelines Appendix G* and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.[7]

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

Table 3.4-1. Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – Cause substantial adverse change in the significance of a historical resource as defined in Section 15064.5	Significant Impact	Less than Significant	Less Than Significant With Mitigation
#2 – Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Significant Impact	Less than Significant	Less Than Significant With Mitigation
#3 – Disturb any human remains, including those interred outside of dedicated cemeteries.	Significant Impact	Less than Significant	Less Than Significant With Mitigation

3.4.1 Existing Conditions

This section provides information on the natural setting, archeological context, and ethnographic context of the project site. It also provides information on the outreach and consultation efforts with local Tribes, as required by existing regulations and the results of the site visit.

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

[7] http://www.san-marcos.net/work/economic-development/general-plan

Natural Setting

The project site lies on the coastal plain of San Diego County in the Coastal Province and western Peninsular Range Province. The coastal strip has a 130 kilometer (km) long shoreline and is comprised of raised Pleistocene marine and non-marine terraces ranging from 20 to 5 km in width. Cretaceous, Tertiary, and Quaternary marine and non-marine sedimentary deposits define these terraces, which have been extensively modified by erosion (ASM 2024).

Drainages of varied catchment size are closely spaced along the coast, and lagoons have formed at the mouths of many of these rivers. The southern third of the San Diego County coastline is dominated by Tijuana Lagoon, San Diego Bay, and Mission Bay, while the central portion includes six main drainages, mostly with small catchments and associated lagoons. The northern third of the county's coastline extends from the San Luis Rey River to San Mateo Creek and encompasses Marine Corps Base Camp Pendleton and three of the county's four largest drainage catchments. The San Marcos area is part of the central coastal plain.

The coastal plain is characterized by a Mediterranean semiarid steppe climate (Bowman 1973; Hines 1991:4). Precipitation ranges from 225 to 400 millimeters (mm) per year and is concentrated in the winter (from December to April). The prominent vegetation throughout the coastal plain area is coastal sage scrub (Munz 1974), and important associated species include buckwheat, black sage, white sage, sugar bush, squaw bush, and laurel sumac. In the valley floors, freshwater marsh species include cattail, spike-rush, and bulrush, while common salt marsh plants include pickleweed, salt grass, and sea lavender. Willow, cottonwood, and sycamore trees are common in valley floor riparian habitats.

Site-Specific Natural Setting

The project site is generally flat. Elevations range from 575 above meal sea level (amsl) in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive. Based upon the biological resources study prepared for the project (Dudek 2025 ~~2024~~), the project site contains Diegan coastal sage scrub, non-native grassland, and disturbed habitat. Rare plant surveys were conducted in 2023 and no rare plants were observed on the project site.

Archaeological Context

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

Paleoindian Period

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

the California coast. Despite intense interest and a long history of research, no widely accepted evidence of human occupation of North America dating prior to 15,000 B.P. has emerged (ASM 2024).

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

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

Archaic Period

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

Initial Archaic exploitation of the San Diego area littoral zone is generally considered to have entailed sizable semisedentary populations focused around resource-rich bays and estuaries. Shellfish were interpreted as a dietary staple; plant resources (both nuts and grasses) were also an important dietary component, while hunting and fishing were less important. This adaptive strategy remained largely unchanged for several thousand years. The La Jolla Complex reached its population and cultural climax between 7000 and 4000 years ago when there was a plentiful supply of shellfish in the lagoons along the coast. Major changes in human adaptations occurred after 4,000 years ago when estuarine silting was considered to have become so extensive as to cause a decline in associated shellfish populations. A major depopulation of the coastal zone has been postulated, with settlements shifting inland to a river valley orientation, intensifying exploitation of terrestrial small game and plant resources, possibly including acorns . The coast was abandoned or only seasonally occupied, with a possible slight increase in coastal occupation after 1,600-1,200 years ago (ASM 2024).

Late Prehistoric Period

The Late Prehistoric period is generally considered to have begun between 1,300 and 800 years ago or the equivalent of between A.D. 700 and 1250. Local regional cultural complexes have been

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

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

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

Ethnohistorical Context

The Post-Contact period began in A.D. 1769 with the Spanish establishment of the Mission San Diego de Alcalá. Yet Spanish explorers first encountered Native Americans in the San Diego area in A.D. 1542 when Cabrillo landed at Point Loma along San Diego Bay, and local inhabitants would have been negatively affected by protohistoric transmission of diseases via sea visits and through contact with Native Americans in the Baja California region. Portolá's A.D. 1769 expedition from San Diego to Monterey documented a series of Native American coastal villages in the San Diego area, typically situated along the region's major drainages. The subsequent establishment of the San Juan Capistrano Mission in 1776 and the San Luis Rey de Francia Mission in 1798 further impacted traditional coastal settlement systems. Acculturation, assimilation, and the introduction of Old World diseases greatly disrupted and reduced Native American populations, and by the early 1800s traditional coastal villages were largely abandoned. As a result, we know very little about traditional coastal life, except what can be gleaned from mission records. Nineteenth and twentieth-century ethnohistoric reconstructions provide only minimal insight into coastal adaptations – particularly with

respect to such issues as cultural complexity, population densities, and regional interaction – and are built from the perspective of remnant inland populations and their occasional seasonal exploitation of a littoral zone dominated and largely controlled by European settlers (ASM 2024).

From north to south, coastal San Diego was occupied by the Juaneño, Luiseño, and Kumeyaay Native American groups. The Juaneño and Luiseño are Uto-Aztecan speakers whose territory ranged from Agua Hedionda Lagoon (or possibly Batiquitos Lagoon) in the south to Aliso Creek in Orange County, to near Santiago Peak in the northeast, and to the Palomar Mountain area in the southeast. They are linguistically and culturally related to the Gabrielino and the Cahuilla. The terms Juaneño and Luiseño are derived from association with the San Juan Capistrano and San Luis Rey missions respectively, along the coast (ASM 2024).

During this period, the Luiseño people had a fairly rigid social structure and a moderately high population density. Maximum population estimates at Spanish contact range from 5,000 to 10,000. With a territory extending for almost 4,000 square kilometers (km^2), maximum population density estimates range from 1.25 to 2.5 persons per km^2. It is estimated that the Luiseño included approximately 50 villages of 200 individuals each, while others, using Portolá expedition observations, indicated that village size was closer to 60. Recent research with mission records suggests that village size varied significantly in the eighteenth century, with larger villages such as Topome along the Santa Margarita River consisting of multiple clans (ASM 2024).

The Luiseño are divided into several autonomous lineages or kin groups based on patrilineal descent groups and a patrilocal residential pattern. Each Luiseño lineage is based around an autonomous village that held collective ownership over a well-defined territory for hunting and gathering, and violations of trespass were punished. Village territories may have ranged from as little as 10 km^2 near the coast along major drainages such as the San Luis Rey River to as much as 100 km^2 elsewhere. A variety of shorter-term residential camps (such as for acorn gathering) and specialized localities occurred within each village territory. There are varied estimates for the length of the annual stay at the main village, and it has been suggested a bipolar pattern with two permanent base camps, one in a major valley and another in the mountain region (ASM 2024).

Notably, strong differences in social status, ascribed leadership roles, and elaborate ritual paraphernalia existed. Leadership includes hereditary chiefs and council members who have specialized knowledge and authority over specific religious, economic, and warfare issues. Leaders conduct elaborate ceremonies; ritual and ceremonial specialists maintained ceremonial knowledge in secrecy and passed on the knowledge to only one heir. These leaders and specialists made use of fenced-in ceremonial structures, located in the village center (ASM 2024).

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

gathering locations on the coast which they visited annually when the tides were low or when the inland resources were scarce, typically from January through March (ASM 2024).

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

Project-Specific Ethnohistoric Context

Villages were often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Along with being located near water sources, keeping in mind that modern development has drastically changed the presence and frequency of water sources. While no placenames or villages were identified as being directly associated with the project site there are several in the larger vicinity of the project site (Oxendine 1983). Many place names have multiple possible spellings and meanings derived from different sources. Nearby place names include Panakara and Mehel-om-pom-pauvo to the south and multiple habitation areas along the San Luis Rey River watershed to the north including Wiasamai, Wagauma, Kwalam and Tomkav (ASM 2024).

In addition to placenames there are several habitation areas in the larger vicinity of the project site. SDI-5633 was identified as a habitation or specialized area. A data recovery at SDI-5633 placed the occupation of the site circa A.D. 1170 to A.D. 1690. The site also contains evidence of an earlier occupation, likely during the Archaic Period, based on the presence of large milling tools and Coso obsidian. It was identified as a habitation area used primarily for hunting and for projectile point production and milling of plant seeds. W-1556 / SDI-5641, located nearly one mile east of the project site, is recorded as a habitation site consisting of an artifact laden midden soil overlooking the San Marcos Valley flood plain. The site contained an extensive artifact deposit with hearths, milling features, and human remains. SDI-11068A/B, located more than two miles northeast of the project site, contained large amount of shell fragments and fish bone, bedrock milling features, also contains a high number of ceramics and ceramic types, bow pipes, effigies and a wide variety of milling implements (ASM 2024).

Other major habitation areas within the region include SDI-9822 located more than four miles northeast of the project site included a red pictograph that also contained pecking. SDI-12,209, located nearly five miles to the southeast contains a habitation area with significant subsurface deposits and a rock art panel, showing this habitation area was an important location (ASM 2024).

Historical Context

Although the earliest historical exploration of the San Diego area can be traced to 1542 with the arrival of the first Europeans, particularly the exploration of San Miguel Bay by Juan Rodriguez Cabrillo, the widely accepted start of the historical period is 1769 with the founding of the joint Mission San Diego de Alcalá and Royal Presidio. On July 20, 1769, Father Juan Crespí arrived in the San Luis Rey River Valley with the Portolá expedition to Monterey. His report back to his superiors declaring it an ideal location for a mission led to the eventual founding of Mission San Luis Rey de Francia, the eighteenth California mission. The mission was formally dedicated June 13, 1798. Named for King Louis IX of France, this mission became known as the ‘King of Missions’ due to its size and success. At its height, San Luis Rey became one of the most populous and successful of the missions. In 1824, it had an

Indian neophyte population of 3,000, and the extensive mission lands supported 1,500 horses, 2,800 sheep and 22,000 cattle (ASM 2024).

Mexico won independence from Spain in 1821, and, with it, the process of dismantling of the mission system began to unfold. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to the Indians and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented because of several factors that conspired to prevent the Indians from regaining their patrimony. By 1835, the missions, including Mission San Luis Rey, were secularized. The remaining lands of San Luis Rey were sold in 1846 to José Cota and José A. Pico by Pío Pico, Governor of California, and the Luiseño converts who had lived around the mission were removed to nearby Pala (ASM 2024).

Before secularization of the missions, San Marcos was one of the cattle-grazing tracts claimed by Mission San Luis Rey. During the 1840s, when many land grants or ranchos were issued, Governor Juan Bautista Alvarado granted the 8,877-acre Rancho Los Vallecitos de San Marcos (the Little Valleys of St. Mark) to Don José María Alvarado in 1840. Don José married Lugarda Osuna, daughter of the owner of San Dieguito Rancho, Don Juan María Osuna (ASM 2024).

In 1846, shortly after the Battle of San Pasqual, Don José and ten other rancheros were captured and taken to a ranchería at Agua Caliente where they were slain. Lugarda later married Luis Machado, the owner of Rancho Buena Vista. It is unclear who owned Rancho Los Vallecitos de San Marcos in the years following her marriage, but, in 1851, Lorenzo Soto filed a claim for the rancho with the newly established United States Land Commission. Soto officially acquired the 8875.83 acres on March 1, 1883. Cave J. Couts, a former Army officer and owner of the adjacent Rancho Guajome and Buena Vista, later came into possession of the ranch (ASM 2024).

The transcontinental railroad was completed in November 1885, resulting in an unprecedented real estate boom for San Diego City and the surrounding County. The population of San Diego soared in the mid-1880s from a total population of 5,000 in 1885 to 40,000 in 1889. Settlers poured into San Diego, lured by real estate promotions offering a salubrious climate, cheap land, and the potential to realize great profits in agriculture and real estate. Speculators formed land companies and subdivided townsites throughout the county. The real estate boom also stimulated demand for agricultural land in the county, and the number of farms increased from 696 to 2,747 between 1880 and 1890. This boom brought homesteaders to the San Marcos area. San Marcos was typical of the small agricultural communities that grew up in the hinterland of San Diego, characterized generally by widely dispersed settlements that were united by a common school district, post office, church, and general store (ASM 2024).

Major Gustavus French Merriam, from Topeka, Kansas, made the first permanent American settlement in the San Marcos area. Merriam homesteaded 160 acres in the north Twin Oaks Valley and began wine and honey production. German and Dutch immigrants began moving into the area in the early 1880s. In 1883, a few miles south of the settlement, John H. Barham founded the first town in the area, calling it Barham. By 1884, the town of Barham had a post office, blacksmith, feed store, and a weekly newspaper. William Webster Borden published the town's first newspaper called *Our Paper* and later *The Plain Truth* (ASM 2024).

In 1887, Cave Couts's widow sold San Marcos Ranch to O. S. Hubbell, and he sold it to the San Marcos Land Company headed by Jacob Gruendike, a San Diego Banker, and his associate W. G. Jacobs. The San Marcos Land Company had been formed with the intention of developing a townsite. The company laid out a townsite near the intersection of Grand Avenue and Rancho Santa Fe Road with 5- to 10-

acre plots. A number of houses were built in addition to a hotel, post office, and several stores. In 1892, there were 87 registered voters. In the late 1880s, the Santa Fe Railroad announced that it was going to lay tracks going through the valley. To the disappointment of the citizens, the tracks were laid one mile away from the center of the town. The old town was abandoned in 1901, and many of the buildings were moved to the intersection of Mission and Pico. By 1905, the new town had every convenience, including rural mail delivery and telephone service. In 1889, the first school in the area, which was started in Barham in 1880, moved to San Marcos. Later that same year, the Richland School was built, becoming the second school in San Marcos. San Marcos remained a quiet rural town through the first half of the twentieth century (ASM 2024).

Agriculture dominated the local economy from the late 1800s until the mid-1900s, and that economy was dependent on dairies and poultry production. However, during the late 1920s, a new business envisioned and created by northern Californians was developed in San Marcos. Donly Gray, an olive grower and nurseryman, sold Mulberry bushes at his nursery in Marysville. After studying the market for silk and its production using mulberry bushes, he sought out financial backing to develop a silkworm production operation. Glenn Hurst, a San Francisco businessman, and his collective of businessmen provided the financial capital for the silkworm project, and they organized as the American Silk Inc. in 1926. After considering locations within Southern California, they decided on San Marcos and purchased 367 acres of land at present-day Mission Road and Mulberry Drive. In 1926, Donly Gray led the efforts for planting 45,000 mulberry trees to feed ravenous silkworms. The following year the company opened its 50,000-square-foot silkworm mill, where workers incubated and hatched worm eggs imported from France, Italy, Turkey, Egypt, and Sudan. The facility was the largest building in San Marcos, and, at one point, 100 employees worked in the building. Although the company began making silk stockings in 1930, the effects of the Great Depression and competition from Asia and Europe meant the enterprise did not get much farther than an experimental phase. Despite an attempt to restart the operations in the mid-1930s, the operations were not revived, and the company was bankrupt Dairies and poultry farms continued to be the economic mainstay of the unincorporated area (ASM 2024).

Population growth in San Marcos, and many other unincorporated areas in the county, had been constrained by the lack of water resources in the region. The arrival of Colorado River water in the city in 1956, supplementing the existing local water supply, was a big boon to the area. After the arrival of water, several small businesses started, and the population rapidly increased to 2,500. In an effort to safeguard its water rights from Escondido, the town of San Marcos, with a population of 3,200 residents, was incorporated on January 28, 1963. Through the 1960s, the City grew by a few thousand new residents, but, in the 1970s, San Marcos was flourishing as the third-fastest growing city in the state with a population of 17,479 by 1980. During the 1980s, San Marcos almost doubled its population to 33,800.

Land-Use History of Project Area

The project site was part of the 8,877-acre Rancho Los Vallecitos de San Marcos (the Little Valleys of St. Mark) granted to Don José María Alvarado in 1840 and was confirmed to Lorenzo Soto on March 1, 1883 (General Land Office 1883). The earliest-available aerial images of the property, dating to 1938, appear to show undeveloped land southeast and southwest of a road in general the same alignment as North Las Posas Road and West Mission Road, respectively, and the railroad tracks south of West Mission Road. No changes appear until 1964, at which point three constructed buildings are present west of the property. Subsequent aerial photographs show development surrounding the Project area. Evidence of foot trails and possible grading appears in aerials from 2000 onwards and in 2014, buildings are present to the southeast of the project site. As of 2018, most of the project site

remains undeveloped except for a small northern portion near the rail line that parallels West Mission Road along its southwest side (ASM 2024).

Records Search

A records search request was submitted to the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) on May 31, 2023 in order to assess the presence or absence of cultural and historic resources within the project site and a one-mile radius. The records search results identified that 35 previous cultural resources studies have been conducted within one mile of the project area. Of the 35 previous studies, one cultural resource, CA-SDI-5633, was previously recorded within the project site, which is discussed in more detail below. Additionally, one historic address was previously recorded within the one-mile search radius. This historic address is outside of the project area.

CA-SDI-5633

SDI-5633 was originally recorded by the Museum of Man as W-1573. It was next recorded in 1977 as SDI-5633. The 1977 recording noted disturbances from cultivation, Mission Road, and the railroad. Information about the character of this resource is restricted from public distribution and is only generally summarized herein; however, the specific information that led to the impact assessment in this EIR was taken into account.

SDI-5633 was surveyed and tested in 1990 (Gallegos and Pigniolo 1990). This study covered the entire current project area. Gallegos and Pigniolo excavated 26 shovel test pits (STPs) and two 1x1 meter test units as well as completing a surface artifact distribution map in order to identify the site boundary and identify the presence of subsurface deposits. SDI-5633 was recommended as an important archaeological resource under CEQA under former Criteria B, D, and E, in that it can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential archaeological research questions, is at least 100 years old and possesses substantial stratigraphic integrity, and involves important research questions that historical research has shown can be answered only with archaeological methods (Gallegos and Pigniolo 1990: 5-2). It was recommended that the site should be avoided or mitigated with a data recovery program of 2 to 3 percent sample.

In 1996 additional testing within the railroad Right-Of-Way (ROW) at the northern edge of the site was conducted by Ogden Environmental, Inc. Seven STPs were excavated. Additional testing took place by Gallegos and Associates in 2001 and the site was recommended eligible for listing in the National Register of Historic Places (NRHP).

In 2002, Gallegos and Associates undertook a data recovery program (Gallegos and Associates 2002). Gallegos and Associates also noted a high level of disturbance for the site, likely from agricultural use, bioturbation, and the historic construction of the Northern San Diego Railroad.

The data recovery program was designed to address research questions. The data recovery methods included manual and mechanical excavation. Native American monitoring was provided by the San Luis Rey Band of Mission Indians. Archaeological monitoring also took place in SDI-5633 during construction of the SPRINTER Rail Project in 2005-2006 (Guerrero et al. 2007). This work was conducted within the railroad right-of-way only and no cultural materials were discovered during the monitoring.

In 2023, ASM Affiliates, Inc. (ASM 2023) resurveyed the project site. Based on a review of the reporting from the previous archaeological work within SDI-5633, ASM agreed with the previous evaluation, that SDI-5633 is eligible for the CRHR under Criterion 4, and that the site yielded important information to the prehistory of the local area. Previous documentation notes that the site has a high level of disturbance through agricultural use so would have little to no additional scientific value; however, the site was recommended as significant despite this disturbance due to the previous recovery of human remains at the site which are significant to Tribal values. Therefore, SDI-5633 is a historical resource under CEQA.

Archival Research

In addition to the SCIC records search, ASM conducted an on-line review of historical aerial photographs of the project area and general vicinity, to help determine the possible development and land use of the project area in the past. The earliest-available aerial images of the property, dating to 1938 show the presence of the railroad tracks and Mission Avenue to the north and Las Posas Road to the west. The project area appears undisturbed and bedrock may be present in the center of the project area. No changes are visible on the 1947 and 1953 aerial photographs. The 1964 aerial photograph shows development to the west and possibly grading or vegetation removal within the project area. Armorlite Drive to the south is present starting in 1981. Grading or vegetation removal may have taken place in 1989 and 1990 and in 2000. Modern development surrounds the project area.

Tribal Correspondence and Coordination

Following is a summary of the coordination between ASM and culturally affiliated tribes during information gathering.

On May 9, 2023, a Sacred Lands File search request was sent to the NAHC. The NAHC responded on June 15, 2023, and was negative, meaning that no sacred lands were recorded by Native American tribes or individuals on the property or in the vicinity. The NAHC response provided 33 Tribal contacts which may have more information on the Project area. ASM sent information requests letters to the Tribal contacts on June 16, 2023.

To date responses have been received from the Jamul Indian Village, Pechanga Band of Indians, the San Luis Rey Band of Mission Indians, the Rincon Band of Luiseño Indians, and the San Pasqual Band of Mission Indians.

On June 16, 2023, Lisa Cumper, Tribal Historic Preservation Officer of the Jamul Indian Village, responded that she requests all reports for the project and the exact address as the Tribal database shows that it is a sensitive area. She also defers to a closer tribe, specifically Cami Mojado of the San Luis Rey Band of Mission Indians.

On June 16, 2023, Cami Mojado of the San Luis Rey Band of Mission Indians responded that she requests the same information.

On June 16, 2023, Paul Macarro, Cultural Coordinator of the Pechanga Band of Indians responded that the Project area is within their Ancestral Territory, and are interested in participating in the Project. The Project area is within a mapped archaeological site and will result in direct impacts to Ancestral human remains and associated grave goods. The Tribe requested government to government consultation.

On July 6, 2023, Shuuluk Linton, Tribal Historic Preservation Office Coordinator, Rincon Band of Luiseño Indians, responded that the Rincon Band has specific concerns that the project may impact tangible Tribal Cultural Resources, the project site is culturally sensitive and the Rincon Band would like to consult directly with the lead agency.

On July 31, 2023, Angelina Gutierrez, Tribal Historic Preservation Office, Deputy THPO/ Monitor Supervisor, San Pasqual Band of Mission Indians, responded that they would like to engage in formal government-to-government consultation under CEQA so that San Pasqual can have a voice in the development of the site and mitigate any adverse impacts.

In addition to ASM reaching out to Tribes as part of the report preparation, the City provided notice to Tribes pursuant to AB 52 and consulted with Tribes. More information on the City's government-to-government consultation with Tribes is included in Section 3.12, Tribal Cultural Resources.

Archaeological Resources

An intensive-level survey of the project area was conducted on May 26, 2023, by ASM Associate Archaeologist Michelle Hamilton. Ms. Hamilton surveyed the entire project area in transects spaced approximately 15 m apart wherever possible. Saving Sacred Sites Native American monitor Cami Mojado assisted in the survey.

Ground surface visibility within the project area was poor due to dense vegetation consisting of black, white, and California sage, buckwheat, mustards, and a single pepper tree found in the middle of the project area. Modern trash was present across the project area. Evidence of previous grading and vegetation were visible. The project area is currently surrounded by modern development, including train tracks, roads, and residential and commercial development. As much of the survey area was covered in dense vegetation which limited movement and obscured the ground surface, efforts were primarily focused on examining bedrock outcrops for evidence of milling and available visible soils. Site recording included the definition of site boundaries and documentation of features. Detailed sketch maps were made, demonstrating the relationship of the site's locations to topographic features and other landmarks. ASM then completed California State DPR 523 site records for submittal to the SCIC and assignment of primary numbers and site trinomials. Recording efforts included the plotting of the site on a USGS 7.5-minute quad map. Digital photographs were taken to document specific features of the site, as well as the general character of the survey area.

3.4.2 Regulatory Setting

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

Federal/State

Native American Heritage Values

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

The category termed "Traditional Cultural Properties" in discussions of cultural resource management performed under federal auspices is also potentially relevant to prehistoric sites. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include the following:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;

2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;

3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;

4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and/or

5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

State

Native American Historic Cultural Sites

The Native American Historic Cultural Sites law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NRHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to one year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the California Register of Historic Resources (CRHR).

California Native American Graves Protection and Repatriation Act

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

Health and Safety Code 7050.5

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

Local

San Marcos General Plan Conservation and Open Space Element

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

- Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.
- Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.
    - Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.
    - Policy COS-11.2: Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.
    - Policy COS-11.3: Identify opportunities for adaptive reuse of historic sites and buildings to preserve and maintain their viability.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7, the project is/is not consistent with the applicable General Plan goals and policies pertaining to cultural resources.

San Marcos Archaeological and Historical Resources Consultant Guidelines

The City of San Marcos published guidelines for archaeological and historical resources consultants in January 2024. The guidelines are generally meant to aid third party consultants who prepare archaeological or architectural history inventories, surveys, evaluations, and other technical documents. These guidelines include information pertaining to the minimum qualifications, records searches, tribal outreach, pedestrian surveys, reporting, research design, findings, discussion and evaluations, management conclusions, references, and appendices of inventories, surveys, evaluations, and other technical documents (City San Marcos 2024). ASM prepared the archaeological resources inventory report in accordance with these guidelines.

3.4.3 Thresholds of Significance

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

- **Threshold #1:** Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- **Threshold #2:** Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

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

3.4.4 Project Impact Analysis

The project site is vacant, with indications of past agricultural use that has since gone fallow. The entire project site would be graded to prepare the site for future development. Grading depths are anticipated to range from 3 to 7 feet depending on the area of the project site. The grading plan is included in Appendix A.2. Ground disturbing activities can result in impacts to archaeological resources if they are present on the project site.

As part of the project design, an area would be set aside on the project site for repatriation of cultural resources. This area would be subject to a conservation easement and would be protected by a deed restriction.

The following analysis discusses the potential for the proposed project to impact cultural resources.

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

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

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 14 CCR, Section 4850 et seq.)

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code, or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

(E) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

Based on a review of the reporting from the previous archaeological work within SDI-5633, ASM concurred with the previous evaluation that SDI-5633 is eligible for the California Register of Historical Resources and that the site yielded important information to the prehistory of the local area. Therefore, SDI-5633 was determined to be a historical resource and unique archaeological resource under CEQA.

The proposed project would develop the entire project site, including the portion of the project site that overlaps with archaeological site SDI-5633. Grading activities would be required across the entire project site to prepare for utility infrastructure and building construction. Due to the small size of the property, avoidance and preservation in place are not feasible for the project. A No Project/No Development alternative and No Project/Reduced Development Footprint alternative are analyzed in Section 4.0 of this document.

Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. In 2002 a data recovery program was conducted to mitigate the adverse impact to SDI-5633 caused by development of the property, by excavating a 2-3% sample of the eligible portion of the site (Gallegos and Associates 2002). This previous data recovery program mitigated impact to the archaeological aspect of SDI-5633 (impacts to the tribal cultural resources aspect of the site are analyzed separately in Section 3.13 of this EIR). The previous data recovery efforts collected and documented the data that can provide important information in prehistory (CRHR Criterion 4 and NRHP Criterion D). Because development of the project would not differ from the impacts to site SDI-5633 that were mitigated through data recovery, impacts to historical resources by the proposed project would be **less than significant.**

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

As described above (Threshold #1), The 2002 data recovery program was considered to adequately mitigate adverse effects to the archaeological component of the resource. The level of disturbance from historic uses such as agriculture, construction activities of adjacent parcels, and construction of Mission Road and the railroad line over the years, as well as historic disturbances to the project site and the data recovery mitigation program, suggests that the site lacks integrity. However, should as yet identified human remains be uncovered, the site would be considered significant for Tribal values despite the lack integrity.

Future ground disturbing activities are likely to encounter additional cultural materials associated with Site SDI-5633 that would need to be appropriately treated. In addition, ground disturbing activities may reveal human remains or previously unknown archaeological resources that are not reasonably believed to be associated with site SDI-5633, such as archaeological materials associated with historic-era European American presence. Impacts to previously unknown archaeological resources could include damage or loss of integrity, and this may result in an adverse change to a historical

resource of an archaeological nature or to unique archaeological resources. In addition, in the event of the discovery of additional human remains, such an occurrence may cause an adverse impact to historical resource SDI-5633. These represent a **significant impact (Impact CR-1)** and mitigation is required.

- **Impact CR-1** Due to grading and ground disturbing activities, the proposed project may uncover previously unidentified archeological resources associated with SDI-5633 or may result in previously unknown archaeological resources associated with other time periods or cultures.

Threshold #2: Disturb any human remains, including those interred outside of dedicated cemeteries.

Gallegos and Associates (2002) and ASM (2023) determined that SDI-5633 has a potential to encounter human remains during project construction. The handling of unanticipated discovery of human remains is guided by Section 7050.5 of the California Health and Safety Code. If human remains are encountered during project construction, there is a potential for a **significant impact** (**Impact CR-2**) and mitigation is required.

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

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

3.4.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to cultural resources, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts on cultural resources. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

SDI-5633 covers a portion of the project site. Previous data recovery has mitigated impacts to the site, but the project has the potential to encounter other cultural resources. Mitigation was identified to reduce the impact to below a level of significance. Other cumulative projects would be required to assess the potential for impact to historical and archaeological resources and provide mitigation measures or avoidance measures to reduce significant impacts to cultural resources consistent with the requirements of CEQA and the City. Implementation of such measures ensure cultural historical and archeological resources are properly handled on a case-by-case basis. Additionally, the lead agency is required to consult with tribes pursuant to the requirements of SB 18 and/or AB 52. The City requires standard conditions of approval related to construction monitoring by an archaeologist to

ensure there are no inadvertent impacts to archaeological resources. Cumulative impacts would be **less than significant**.

3.4.6 Mitigation Measures

Archeological Resources (Impact CR-1)

The following cultural resources mitigation measures shall apply for ground disturbing activities during the project construction phase.

MM-CR-1a **Archaeological 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 has been retained at the Applicant/Owner or Grading Contractor's expense to monitor ground disturbing activities associated with project construction.

The Qualified Archaeologist 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 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. In areas of artificial paving, the Qualified Archaeologist shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb more than six (6) inches below the original pre-project ground surface to identify any evidence of potential archaeological 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 archaeological resources by the Qualified Archaeologist.

The Qualified Archaeologist shall maintain ongoing collaborative coordination with the Native American monitor(s) (mitigation measure TCR-1) 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, 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 Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Director 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 consulting Tribes. 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.

MM-CR-1b **Unanticipated Discovery Procedures**: The Qualified Archaeologist may temporarily halt or divert ground disturbing activities if previously unknown archaeological resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be associated with Native American culture, it will be considered a tribal cultural resource and subject to mitigation measures MM-TCR-4 and MM-TCR-5. Non-Native American resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource (subject to MM-TCR-4) and a potentially significant archaeological resource that is associated with Native American culture, then the Qualified Archaeologist, Tribes, Native American monitors, and City shall coordinate on appropriate treatment.

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

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

Human Remains (Impact CR-2)

MM-CR-2 **Human Remains**: As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner's Office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Medical Examiner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 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 two (2) business ~~working days~~ of being notified if the remains are subject to their authority. If the Medical Examiner recognizes the remains to be Native American, and not under their jurisdiction, then they 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 (6) or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendant are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

3.4.7 Conclusion

Site SDI-5633 covers a portion of the project site. Previous data recovery mitigated the potential for the project to significantly impacts the site. However, it is likely that additional resources associated with site SDI-5633 will be encountered during grading. This represents a significant impact. This impact would be mitigated to below a level of significance through implementation of mitigation measures MM-CR-1a, MM-CR-1b, and MM-CR-2. Specifically, implementation of these mitigation measures provides for the presence of archaeological monitors during ground disturbing activities that would be able to identify any previously unidentified cultural and/ or historical resources, to prevent inadvertent disturbance of any intact cultural deposits that may be present. Should any resources be identified, implementation of MM-CR-1a and MM-CR-1b would ensure proper handling and treatment of such resources by providing for a proper evaluation to determine whether additional archaeological work is necessary. To further ensure impacts to Native American archaeological resources are minimized, implementation of MM-CR-1a, MM-CR-1b and additional measures in Section 3.12, Tribal Cultural Resources, of this EIR provide additional protections for significant resources, and describes the process for proper treatment and handling to ensure impacts are minimized.

Potential impacts to human remains would be mitigated through implementation of mitigation measure MM-CR-2, which specifies that remains shall not be further disturbed until the San Diego County Coroner has determined origins of the remains and final treatment has been agreed to with input of the Most Likely Descendent as necessary. Therefore, with incorporation of these measures, potential impacts to cultural resources would be reduced to below a level of significance.

3.5 Energy

Introduction

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

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

The analysis is based on the following report, which is included as **Appendix G** of this document[8]:

- *Energy Usage Letter, Armorlite Lofts 225 Development (GPA23-0002, R23-0001, SDP23-0003, CUP23-0002)*, prepared by LDN Consulting, November 4, 2024 (LDN 2024).

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

Table 3.5-1. Energy Summary of Impacts

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

3.5.1 Existing Conditions

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

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

Electricity

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

San Diego Gas & Electric (SDG&E) provides electric and natural gas services to a population of 1.4 million business and residential accounts. SDG&E distributes energy service through 1.49 million electric meters and 905,000 natural gas meters in a 4,100-square-mile service area that includes San Diego County and southern Orange County (SDG&E 2024). SDG&E is a subsidiary of Sempra Energy and would provide electricity to the proposed project.

The Path to Net Zero: A Decarbonization Roadmap for California (*Roadmap*) examines the implications to the State and SDG&E service area of transitioning to a carbon neutral (net zero emissions) economy by 2045, as mandated in the California Climate Crisis Act (See Section 3.5.2 Regulatory Setting below). Electricity is expected to play a central role in decarbonization. Clear priorities include the need to expand electrification and supplies of solar and wind power, invest in a diverse set of electric generation resources that will help ensure the electric grid is reliable and lastly, to provide much larger volumes of clean fuels (SDG&E 2022a).

Electrification is central to decarbonizing the transportation and building sectors. As such, electricity usage and demand are expected to increase. According to the *Roadmap*, the State of California can expect a 96% projected increase in electric consumption between 2020-2045 and a 60% projected increase in net peak demand for the same period. SDG&E projects approximately a 100% increase in electric consumption for its service area between 2020 and 2045 and an 85% increase in net peak demand. California had 85 gigawatt (GW) total capacity in 2020 and is projected to need 356 GW of capacity by 2045 (SDG&E 2022b). As described in the California Air Resources Board (CARB) 2022 Scoping Plan for Achieving Carbon Neutrality, the scale of transformation needed over the next decade to avoid the worst impacts of climate change and meet ambitious climate goals is extraordinary. This is why Governor Newsom and the Legislature invested over $15 billion in climate action through the 2021/2022 California Comeback Plan, and why the 2022–2023 budget marks the beginning of the California Climate Commitment—the governor's multi-year plan to invest $54 billion in climate action. This plan includes $2.1 billion for clean energy investments, such as long duration storage, offshore wind, green hydrogen, and industrial decarbonization (CARB 2022). California is planning to expand and reinforce its electrical grid through investment and regional cooperation, increase in-state renewable energy as well as renewable energy imports, increase storage, particularly behind the meter PV storage, work toward changing consumer behavior (e.g., charging electric vehicles during the day when solar energy is available) and investing in development and implementation of technology that allow electric vehicles (EVs) to transmit energy back into the grid (SDG&E 2022a).

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

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

Natural Gas

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

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

Petroleum

California is the nation's second-largest consumer of refined petroleum products, after Texas, and accounts for about 8% of U.S. total consumption. In 2021, California was the nation's largest consumer of jet fuel and the second-largest consumer of motor gasoline, after Texas. The transportation sector used about 83% of the petroleum consumed in the state. The industrial sector accounted for about 13% of state petroleum use, and the commercial sector consumed about 3%. The residential sector, where about 1 in 27 California households heat with petroleum products, mostly propane, used about 1%. A minimal amount of petroleum is used for electricity generation. Total petroleum consumption was estimated to be 605 million barrels in 2021 (EIA 2023a).

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

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

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

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

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

3.5.2 Regulatory Setting

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

Federal

Federal Energy Policy and Conservation Act (1975)

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

Energy Independence and Security Act (2007)

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

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

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

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

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel, and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

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

State

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

State of California Energy Action Plan

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

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

Integrated Energy Policy Report

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

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

California Renewables Portfolio Standards

Senate Bill 1078 (2002)

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

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

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

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

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

Greenhouse Gas Reduction

Executive Order (EO) S-3-05 (2005), Assembly Bill 32 (2006) and Senate Bill 32 (2016),

In 2005, EO-03-05 set GHG reduction targets for California. The Legislature followed up on this EO by enacting AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, the California Air Resources Board prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies and the use of renewable resources and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

SB 375 Sustainable Communities and Climate Protection Act (2008)

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

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

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

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

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

The 2022 CARB Scoping Plan for Achieving Carbon Neutrality

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

California Title 24 Building Energy Efficiency Standards

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

Energy Code (Title 24, Part 6) Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Because homes and businesses use nearly 70 percent of California's electricity and are responsible for a quarter of GHG emissions, the CEC was mandated to periodically update and adopt building standards to increase energy efficiency of buildings and reduce GHGs. Part 6 of Title 24 implemented this mandate so that every three years the CEC updates the Energy Code for new construction and renovations to existing residential and non-residential buildings.

The 2022 Building Energy Efficiency Standards (Energy Code) improves upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 building code went into effect January 1, 2023 and focuses on four key areas in new construction: encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality (CEC 2021).

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

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

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

State Vehicle Standards

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

Assembly Bill 1007 (2005)

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

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

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 requires CARB to set GHG emission standards for passenger vehicles and Executive Order (EO) S-1-07 sets a declining Low Carbon Fuel Standard to reduce the carbon intensity of California passenger vehicle fuels. EO B-16-12 supports and facilitates the development and distribution of Zero Emissions Vehicles (ZEVs).

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

In January 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015 through 2025 that combined standards for smog producing pollutants and

greenhouse gases into one program. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide fuels for clean cars.

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

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

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

In addition to the Advanced Clean Cars II, the Clean Miles Standard regulation will also help enable the goal of 100 percent ZEV sales in 2035 by creating demand for ZEVs. This regulation has aggressive requirements for electric miles that will transition ride-hailing fleets to zero-emission operations starting in 2023 and ramping up through 2030.

<u>AB 2700, Transportation Electrification: Electrical Distribution and Grid Updates (2022)</u>

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

Local

SDG&E Integrated Resource Plan

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

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

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

While SDG&E's portfolio is primarily made up of solar and natural gas resources, SDG&E's modeling resulted in planned existing and new resources consisting primarily of solar, storage, and wind resources, with small amounts of demand response and firm, zero-emitting resources (e.g., geothermal). The total capacity of these planned existing and new resources in 2035 is 1,546 MW. SDG&E is fully compliant with RPS and long-term contracting requirements (SDG&E 2022b).

SDG&E Path to Net Zero: A Decarbonization Roadmap for California

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

Electrification is central to decarbonizing the transportation and building sectors under the *Roadmap*. It is estimated that electric generation capacity will need to increase to 356 gigawatts (GW) by 2045 in California to meet this increasing demand for clean electricity, approximately four times the capacity

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

City of San Marcos General Plan

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

Land Use and Community Design Element

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

Conservation and Open Space Element

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

Environmental Justice

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

The project's consistency with applicable General Plan goals and policies is discussed in Table 3.7-7 of Section 3.7, Land Use. As detailed in Section 3.7.4, the project is consistent with the applicable General Plan goals and policies pertaining to energy.

City of San Marcos Climate Action Plan

Consistent with AB 32, the City adopted a Climate Action Plan (CAP) in September 2013 as a long-range plan to reduce GHG emissions and mitigate climate change impacts associated with City government operations and with implementation of the City's General Plan. An updated CAP was adopted on December 8, 2020. The 2020 CAP builds on the efforts and strategies identified in the City's 2013 CAP, and establishes GHG emission targets and identifies achievable, locally-based actions to reduce GHG emissions from municipal and community activities. Section 3.6, Greenhouse Gas Emissions provides more details on the CAP as it pertains to specific GHG reduction targets.

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

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

- Strategy 4: Increase Building Energy Efficiency. Electricity and natural gas consumption in buildings account for a majority of GHG emissions from the energy sector. Although legislative reductions related to State actions will help reduce emissions associated with building energy, additional reductions are achievable by increasing building efficiency in the City. This strategy aims to reduce emissions by reducing energy used by residential consumers through increased energy efficiency. This strategy includes one measure that would reduce the City's emissions by approximately 1,280 metric tons of carbon dioxide equivalent ($MTCO_2e$) in 2030.
    - Measure E-1: Require New Residential Developments to Install Alternatively-Fueled Water Heaters. Starting in 2022, require all new single-family and multi-family residential projects to install non-natural gas water heaters. Non-natural gas water heater options include electric heat pump water heaters, , instantaneous electric, electric tank solar water heater with HPWH backup, or solar water heater with electric tank backup
- Strategy 5: Increase Renewable and Zero-Carbon Energy: Over a quarter of the City's GHG emissions in 2012 were generated through the consumption of fossil fuels for the purpose of electricity generation (i.e., natural gas-fired or coal power plants). Transitioning from fossil fuels to renewable energy electricity generation will reduce emissions and provide a more sustainable source of electricity. The City would reduce emissions by increasing renewable energy generated locally and participating in a community choice aggregation or similar program to increase the amount of grid supplied renewable energy. This strategy includes two

measures that would reduce the City's emissions by approximately 35,100 $MTCO_2e$ in 2030. Additional activities that would support this strategy would occur through partnerships with local and regional agencies.

- Measure E-2: Require Installation of PV systems at New Non-Residential Developments. Starting in 2022, require all new non-residential developments to install PV systems with a minimum of two watts per square foot of gross floor area.
- Measure E-3: Increase Grid-Supply Renewable and Zero-Carbon Electricity. Join a program to increase grid-supply renewables and zero-carbon electricity to 95% by 2030 with a maximum customer opt-out rate of 3%.

3.5.3 Thresholds of Significance

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

- **Threshold #1:** Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- **Threshold #2:** Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.4 Project Impact Analysis

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

The project proposes up to 165 multi-family residential units and 5,600 square feet (s.f.) of retail/ flex use within a five-story building situated on approximately 2.44 gross acres. Additionally, electric vehicle (EV) parking is incorporated in the project parking and includes 13 Level 2 EV spaces, 62 EV ready spaces, and 25 EV capable spaces[9]. The project seeks a General Plan Amendment and rezone of the project site from Public-Institutional (P-I) to Specific Plan Area (SPA).

The existing General Plan Land Use designation and zoning for the project site is Public Institutional (P-I). This use is typically used for any type of public use such as schools, hospitals, civic centers, and similar uses. The allowable use onsite per the zoning could have a maximum floor area ratio (FAR) of 3.0. Based on this, any facility which could be constructed onsite would be limited to approximately 318,000 s.f. The most likely alternative use for the project site due to its location adjacent to a telecommunications facility would be to construct a telecommunications data center, which would be consistent with the General Plan. Realistically, the site could be developed with a 160,000 s.f. data center or larger if multiple stories are constructed. Data centers are recognized as very high consumers of electrical energy. For example, a 413,000 s.f. data center in Santa Clara was found to consume 665,750 MWH or 1.61 MWH/SF/year and 410 daily vehicular trips (LDN 2024). Based on this, a 160,000 s.f. building would require at least 257,600 MWH annually.

[9] EV Capable means the building is considered to have the necessary infrastructure to install an EV charging station. EV Ready goes beyond EV capability, establishing the installation of a central wiring system to support multiple charging stations for multiple EVs.

The Energy Usage Letter prepared for the proposed project includes analysis of energy use during construction and operation of the proposed project as well as a comparison of energy use under the proposed project with energy use anticipated under the General Plan Buildout (Data Center) scenario (LDN 2024). As explained in more detail below, the Energy Usage Letter concluded that implementation of the proposed project would not result in wasteful, inefficient, or unnecessary impacts related to electricity, natural gas or petroleum during construction or operations and impacts would be **less than significant.**

Construction

Construction of the proposed project is expected to occur over a 12-month duration. Grading for the project will consist of approximately 6,950 cubic yards (CY) of cut material and 4,400 CY of fill material, requiring an export of approximately 2,250 CY of material once material shrinkage is considered. For the purposes of a conservative comparison, these construction assumptions are anticipated to be the same for the General Plan Buildout (Data Center) scenario.

Electricity

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

Natural Gas

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

Petroleum

The majority of the energy used during construction would be from petroleum. Energy usage for construction equipment is best estimated using total horsepower hours (HP-h) and an assumed thermal efficiency of 30%. The most common measure of the energy efficiency of a tractor is referred to as "specific volumetric fuel consumption" (SVFC), which is given in units of gallons per horsepower-hour (gal/hp-h.) SVFC for diesel engines was assumed to be 16.5 hp-h/gal (LDN 2024). Based on the equipment, quantity, work time, and horsepower, the project would require a total of approximately 489,450 HP-h as shown in **Table 3.5-2.** Based on 16.5 hp-h/gal, the project would consume roughly 29,663 gallons of diesel for construction. Proper maintenance of all construction equipment per manufacturer recommendations is included as a project design feature.

Construction energy from workers, vendors and haulage are based on the estimated VMT for the total construction duration which is 493,141 miles for the proposed project. In California, the average fuel economy for on-road vehicles is 24.1 miles per gallon or 0.0415 gallon per mile. Based on this, the vehicular trips would consume roughly 20,465 gallons during construction (LDN 2024).

In total, construction of the project is estimated to consume a total of 50,128 gallons of petroleum from off-road equipment (29,663 gallons) and worker vehicle and vendor truck trips (20,465 gallons)

during the construction phase. On-road vehicles are regulated by state and federal regulations and vehicular fleet efficiencies are improving each year. Additionally, all construction equipment shall be maintained as needed per manufacturer recommendations. The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. As noted above, for the purposes of a conservative comparison, these construction assumptions are anticipated to be the same for the General Plan Buildout (Data Center) scenario. Since the projected energy usage of the project and the General Plan Buildout (Data Center) scenario would be essentially the same, the project would not consume more energy than would otherwise be consumed through the construction of the General Plan Buildout scenario. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during project construction would be temporary and minimal and would not be wasteful or inefficient, impacts related to energy use during construction would be less than significant.

Table 3.5-2. Proposed Construction Phase and Duration Equipment

Equipment Identification	Construction Days	Quantity per Day	Hours per Day	Horsepower (HP)	Load Factor	Horsepower Hours (HP-h)
Site Preparation						
Graders	3	1	8	148	0.41	1,456.32
Scrapers		1	8	423	0.48	4,872.96
Tractors/ Loaders/ Backhoes		1	7	84	0.37	652.68
Grading						
Graders	20	1	8	148	0.41	9,708.80
Rubber Tired Dozers		1	8	367	0.4	23,488.00
Tractors/ Loaders/ Backhoes		2	7	84	0.37	8,702.40
Crushing/ Processing Equipment		1	6	310	0.41	15,252.00
Building Construction						
Cranes	220	1	8	367	0.29	187,316.80
Forklifts		2	7	82	0.2	50,512.00
Generator Sets		1	8	14	0.74	18,233.60
Tractors/ Loaders/ Backhoes		1	6	84	0.37	41,025.60
Welders		3	8	46	0.45	109,296.00

Equipment Identification	Construction Days	Quantity per Day	Hours per Day	Horsepower (HP)	Load Factor	Horsepower Hours (HP-h)
Paving						
Pavers	10	1	8	84	0.37	2,486.40
Paving Equipment		1	8	81	0.42	2,721.60
Rollers		1	8	89	0.36	2,563.20
Architectural Coating						
Air Compressors	80	1	6	37	0.48	8,524.8
					Total Horsepower Hours	489,449.96
					Total Diesel Fuel (Gal) @ 16.5 hp-h/gal	**29,663.63**

Source: LDN 2024.
Notes: The equipment list is based upon equipment inventory and estimates within CalEEMod 2022.1.

Operations

Electricity

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

The electrical energy usage expected to be utilized by the project was compared to the General Plan Buildout scenario in **Table 3.5-3**. Based on the results, the project would consume 907,007 kilowatt hours (kWh) per year, which is 257,600,000 kWH (257,600 MWH) less than would be consumed under the General Plan Buildout (Data Center) scenario. California consumed 251,869,136 MWH of electricity in 2022 (EIA 2023b) and consumption is expected to increase as a result of electrification of the building and transportation sectors needed to meet ambitious climate goals. To meet these goals, the State has created a multi-year plan to invest $54 billion in climate action including clean/renewable energy investments, expansion and reinforcement of the energy grid and increasing energy storage (CARB 2022). Reductions from Title 24 of the California Building Code (2019) were accounted for in the calculations and would improve the efficiency of the project in terms of energy consumption. The 2022 Title 24 standards have not yet been included into CalEEMod 2022.1 but would essentially further reduce energy consumption. The project would also implement applicable City CAP measures that would reduce operational electricity consumption, but those measures were not included in the estimates provided in Table 3.5-3.

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

Table 3.5-3. Annual Energy Use for Proposed Project and General Plan Buildout (Data Center) Scenario

Energy Source	Proposed Project	General Plan Buildout (Data Center) Scenario	Difference
Natural Gas Usage (kBTU/Year)	1,192,176	0	1,192,176
Electrical Usage (kWH)	907,007	257,600,000	-256,692,993

Source: LDN 2024.
Notes: kBTU = One thousand British Thermal Units
kWH= Kilowatt Hours

Natural Gas

The natural gas usage expected to be utilized by the project was compared to the General Plan Buildout (Data Center) scenario in Table 3.5-3. Based on the results, the project would be expected to consume 1,192,176 thousand British thermal units (kBTU) per year when compared to the General Plan Buildout scenario. As previously discussed, the project would be subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Prior to building permit application, the applicant would ensure that project plans would meet Title 24 requirements applicable at that time, as required by state regulations, through their plan review process. Additionally, the project would implement the City's CAP measure that reduces operational natural gas consumption.

In the event the project decides to go all electric, if it is assumed that the equivalent energy would be required and converted the natural gas energy usage estimated by CalEEMod for each land use from kBTU/year to electrical energy usage (in kWh/year) using a standard conversion rate of 3.412 kBTU/kWh an additional 349,406 kWH would be required. This would mean the project would still require 256,343,587 kWH less than a data center. Since there is not a requirement to use all electric, the natural gas discussion will be the basis of this analysis.

In summary, although natural gas usage would increase due to project implementation compared to existing conditions and the General Plan Buildout (Data Center) scenario, project design features such as installing electric heat pump water heaters within all residential units rather than natural gas water heaters would be implemented, and usage would be decreased through green building standards. For these reasons, the natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be less than significant.

Petroleum

Vehicle travel to and from the project site would be the largest contributor to petroleum use. The project would generate 1,214 average daily trips (ADT) (LLG 2024). Data centers do not generate many vehicular trips. A 161,000 s.f. data center could generate approximately 161 trips per day, which is 1,053 fewer ADT than the proposed project. Over the lifetime of the proposed project, the fuel efficiency of the vehicles being used by residents is expected to increase. As RPS increases and as electric vehicle operations become more standardized, energy consumption and efficiency will decrease. Additionally, EV parking is incorporated in the project parking plan and includes 13 Level 2 EV spaces, 62 EV ready spaces, and 25 EV capable spaces. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time.

In summary, although the project would increase petroleum use during operation compared to existing conditions and the General Plan Buildout (Data Center) scenario, the use would be a small fraction of the annual statewide use (605 million barrels in 2021) and due to efficiency increases, would diminish over time. Given these considerations, the petroleum consumption associated with the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be **less than significant.**

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

Construction

The majority of the energy used during construction would be from petroleum. On-road vehicles are regulated by state and federal regulations, and vehicular fleet efficiencies are improving each year. Additionally, all construction equipment shall be maintained as needed per manufacturer recommendations. The project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. Additionally, the project's consistency with applicable General Plan goals and policies is discussed in Table 3.7-7 of Section 3.7, Land Use. As detailed in Section 3.7.4, the project is consistent with the applicable General Plan goals and policies pertaining to energy. Therefore, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be **less than significant**.

Operation

Section 3.5.2 includes a description of all the federal, state, and local policies and programs that the project would be required to comply with. The proposed project would follow applicable energy standards and regulations during the construction phases. The proposed project would be built and operated in accordance with all existing, applicable building regulations at the time of construction, including Title 24 Building Standards, Building Energy Efficiency Standards (Energy Code), and California Green Building Standards. Furthermore, the proposed project would be consistent with all actions in the CAP Consistency Review Checklist, many of which reduce the usage of non-renewable energy, as discussed in detail in Section 3.7, Greenhouse Gas Emissions, and Appendix E of this EIR. **Table 3.5-4** describes the CAP measures that are applicable to a multi-family residential project and how the proposed project would comply. As shown, the project provides electric vehicle parking, including 13 spaces with Level 2 EV chargers, 25 EV capable spaces and 62 EV ready spaces, which will help meet state goals toward carbon neutrality and elimination of new internal combustion passenger vehicles. Additionally, the project's consistency with applicable General Plan goals and policies is discussed in Table 3.7-7 of Section 3.7, Land Use. As detailed in Section 3.7.4, the project is consistent with the applicable General Plan goals and policies pertaining to energy. For the reasons stated, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be **less than significant**.

Table 3.5-4. Project Consistency with Applicable CAP Checklist Measures

CAP Consistency Checklist Measures	Project Compliance
Electric Vehicle Charging Stations (Measure T-2) Will the project install electric vehicle charging stations (Level 2 or better) in at least five percent of the total parking space provided on-site?	The project proposes a total of 254 on-site parking spaces including 13 Level 2 EV spaces, 62 EV ready spaces, and 25 EV capable spaces. The project has been designed to meet the requirements of Measure T-2.

CAP Consistency Checklist Measures	Project Compliance
Transportation Demand Management (Measure T-9) Will the project develop and implement a Transportation Demand Management (TDM) plan that includes, at minimum, all of the TDM strategies listed below? • Provide discounted monthly transit pass or provide at least 25 percent transit fare subsidy to residents/employees. • Provide designated car-share, carpool, vanpool, and/or park-and-ride parking spaces. • Provide pedestrian connections between all internal uses and to all existing or planned external streets around the project site(s). • Provide secure bicycle parking spaces or bicycle racks, showers, and clothes lockers. • Encourage telecommuting for employees (allow one telecommute day per week or compressed work weeks) or provide a telecommute work center with common office space and equipment available to residents.	**Transit Discount:** The property manager will make transit passes available to residents and business of the building. **Designated Parking**: The project will provide designated carpool, vanpool, and/or park-and-ride spaces on site. **Pedestrian Connections:** The project provides a pedestrian connection from the building to Armorlite Drive. **Bicycle Spaces:** The project will provide bicycle racks for visitors. The project also includes 34 bicycle parking spaces. Residents will have shower facilities within apartments. **Telecommuting**: The project will have space available in the community room for residents to telecommute. The project has been designed to meet the requirements of Measure T-9.
Reduce Parking Near Transit (Measures T-12) For Multi-Family Residential, if the project is located within a half-mile of a major transit stop, would the project provide at least 27 percent fewer parking spaces than required for the same use based on the City's municipal code parking requirements?	Per the San Marcos Municipal Code Section 20.340 (Off-Street Parking and Loading) 339 spaces would be required for the residential use and 23 spaces would be required for the commercial use (362 total). However, per Measures T-12, the project is required to reduce its total required parking by 27% or 98 spaces (264 total) since the site is within one half mile of a major transit station. To meet the requirements of the CAP, the project would provide 247 spaces for residential use (69 garage standard spaces, 102 garage tandem spaces, 18 tuck under spaces and 58 open spaces) and 17 spaces for the commercial uses. Commercial parking requirements would be met by providing 7 open parking spaces, and 10 of the residential open spaces would be available for commercial use from 9:00 AM to 5:00 PM to meet the required 17 spaces. The project has been designed to meet Measure T-12.
Water Heaters (Measure E-1) Will the project install one of, or a combination of, the following water heater types in place of natural gas heaters?	The project will install electric heat pump water heaters within all residential units. Natural gas water heaters will not be used. The project has been designed to meet Measure E-1.
Photovoltaic Installation (Measure E-2) Will the project install photovoltaic systems with a minimum capacity of two watts per square foot of gross floor area?	The project will install a photovoltaic rooftop system. The project has been designed to meet Measure E-2.
Landscaping Water Use (Measure W-1) Will the project comply with the City's Water Efficient Landscape Ordinance?	The project will comply with the City's Water Efficient Landscape Ordinance. The project has been designed to meet Measure W-1.

CAP Consistency Checklist Measures	Project Compliance
Urban Tree Canopy (Measure C-2) For multi-family residential, if the project is providing more than 10 parking spaces, will the project plant at least one tree per five parking spaces provided?	The project includes a total of 66 outdoor uncovered sparking spaces. Therefore, the project is required to provide a total of 13 trees to meet the requirements of Measure C-2. Per the landscape concept plan, the project will plant 49 trees. The project exceeds the requirements of Measure C-2.

3.5.5 Cumulative Impact Analysis

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

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

3.5.6 Mitigation Measures

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

3.5.7 Conclusion

The Energy Usage Letter prepared by LDN (2024) included a comparative analysis of energy use that would be consumed by the proposed project and the General Plan Buildout (Data Center) scenario. The analysis demonstrated that energy use during construction would be temporary and minimal and would likely be the same under either land use scenario. The proposed project would comply with

regulatory requirements and building standards as well as ensuring that all construction equipment is maintained per manufacturer's specifications. As such, the proposed project would not result in the wasteful or inefficient use of electricity, and impacts would be less than significant.

The analysis concluded that while operations of the proposed project would consume more natural gas and petroleum at the project site under existing conditions and under the General Plan Buildout (Data Center) scenario, the project would be required to comply with Title 24 and the City's CAP by implementing energy efficiency measures, along with provision of EV chargers, EV capable spaces and EV ready spaces. Additionally, the project would use much less electricity when compared to the General Plan Buildout (Data Center) scenario. For these reasons, energy consumption of the project would not be considered inefficient, wasteful, or unnecessary, and impacts would be **less than significant.**

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

3.6 Greenhouse Gas Emissions

Introduction

This section analyzes the potential for the proposed project to have impacts related to greenhouse gas (GHG) emissions. This section analyzes short-term construction impacts and long-term operational impacts and determines whether the proposed project would conform to the City of San Marcos Climate Action Plan (CAP). This section is based upon the following report, which is included as **Appendix E** of the Environmental Impact report (EIR)[10]:

- *Greenhouse Gas Assessment, Armorlite Lofts Residential Development,* prepared by LDN Consulting, November 4, 2024 (LDN 2024)

The project's Climate Action Plan Consistency Review Checklist (CAP Checklist) is included as **Appendix G.** A discussion of the project's consistency with the requirements of the CAP Checklist is provided later in this section. The CAP is available on the City's web site.[11]

Table 3.6-1 summarizes the project- and cumulative-level GHG impacts, by threshold.

Table 3.6-1. Greenhouse Gas Emissions Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 - Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.6.1 Existing Conditions

Global Climate Change

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere.

The greenhouse effect is the trapping and build-up of heat in the atmosphere near the Earth's surface. This natural process contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs into the atmosphere increase

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

[11] http://www.san-marcos.net/departments/development-services/planning/climate-action-plan

the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect, and causing the Earth's surface temperature to rise.

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere and contribute to the greenhouse effect. GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. To simplify greenhouse gas calculations, both CH_4 and N_2O are converted to an equivalent amount of carbon dioxide, or CO_2e. CO_2e is calculated by multiplying the calculated levels of CH_4 and N_2O by a Global Warming Potential (GWP). GWPs for both CH_4 and N_2 are presented within the 2007 Intergovernmental Panel on Climate Change (IPCC) report as being 25 and 298, respectively (IPCC 2007)[12].

A brief description of each GHG relevant to the proposed project follows (LDN 2024):

Carbon Dioxide. CO_2 is widely reported as the most important anthropogenic greenhouse gas because it currently accounts for the greatest portion of the warming associated with human activities. Carbon dioxide occurs naturally as part of the global carbon cycle, but human activities have increased atmospheric loadings through combustion of fossil fuels and other emissions sources. Natural sinks that remove carbon dioxide from the atmosphere (e.g., oceans, plants) help regulate carbon dioxide concentrations, but human activities can disturb these processes (e.g., deforestation) or enhance them

Methane. CH_4 comes from many sources, including human activities such as coal mining, natural gas production and distribution, waste decomposition in landfills, and digestive processes in livestock and agriculture. Natural sources of methane include wetlands and termite mounds.

Nitrous Oxide. N_2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.

3.6.2 Regulatory Setting

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

Federal

The United States Environmental Protection Agency (USEPA) is the federal agency responsible for implementing the federal Clean Air Act (CAA). The Supreme Court of the United States ruled on April 2, 2007, that CO_2 is an air pollutant as defined under the CAA, and that USEPA has the authority to regulate emissions of GHGs.

[12] The IPCC 2007 report was updated in 2021 and now recommends adding a 100-year timeline to the GWP discussions (GWP-100). For CH_4 the GWP is between 27-30 and the GWP for N_2O is 273 (USEPA 2023). Since CalEEMod is the adopted computer model for calculating GHGs, the earlier GWPs within CalEEMod were utilized.

Proposed Endangerment and Cause or Contribute Findings for GHG under the CAA

On December 7, 2009, USEPA signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations; and
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These findings do not themselves impose any requirements on industry or other entities; however, this action is a prerequisite to finalizing USEPA's proposed GHG emission standards for light-duty vehicles, which USEPA proposed in a joint proposal including the Department of Transportation's (DOT) proposed Corporate Average Fuel Economy (CAFE) standards on September 15, 2009.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007, among other key measures, included the following goals, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

State

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, mobile sources, renewable energy procurement, water, solid waste, and water.

State Climate Change Targets

Executive Order (EO) S-3-05 (2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill (AB) 32: California Global Warming Solutions Act (2006) provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions to 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

California Air Resources Board's Climate Change Scoping Plan. Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and regulations necessary to achieve the GHG emissions reduction mandate of AB 32. Therefore, in furtherance of AB 32, CARB adopted regulations requiring the reporting and verification of GHG emissions from specified sources, such as industrial facilities, fuel suppliers and electricity importers (see Health & Safety Code Section 35830; Cal. Code Regs., tit. 17, §§95100 et seq.). CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons [MMT] CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (2008 Scoping Plan) in accordance with Health and Safety Code Section 38561. The 2008 Scoping Plan established an overall framework for the measures to be implemented to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The 2008 Scoping Plan evaluated opportunities for sector-specific reductions, integrated all CARB and Climate Action Team[13] early actions and additional GHG reduction features by both entities, identified additional measures to be pursued as regulations, and outlined the role of a cap-and-trade program.

In the 2008 Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level, i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" [BAU]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the 2008 Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework (First Update)* defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update found that California was on track to meet

13 The Climate Action Team is comprised of state agency secretaries and heads of state agencies, boards, and departments; these members work to coordinate statewide efforts to implement GHG emissions reduction programs and adaptation programs.

the 2020 emissions reduction mandate established by AB 32, noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In November 2017, CARB released *California's 2017 Climate Change Scoping Plan* for public review and comment. This update includes CARB's strategy for achieving the state's 2030 GHG target as established in SB 32. (discussed below). The strategy includes continuing the Cap-and-Trade Program through 2030,[14] inclusive policies and broad support for clean technologies, enhanced industrial efficiency and competitiveness, prioritization of transportation sustainability, continued leadership on clean energy, putting waste resources to beneficial use, supporting resilient agricultural and rural economics and natural and working lands, securing California's water supplies, and cleaning the air and public health. When discussing project-level GHG emissions reduction actions and thresholds, the *2017 Scoping Plan* states "[a]chieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." However, the *2017 Scoping Plan* also recognizes that such an achievement "may not be feasible or appropriate for every project … and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." CARB's Governing Board adopted the *2017 Scoping Plan* in December 2017.

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

EO B-30-15 (2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's *Scoping Plan* to express the 2030 target in terms of MMT CO_2e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016.

Senate Bill (SB) 32: California Global Warming Solutions Act and AB 197: State Air Resources Board (2016) are companion bills that set a new statewide GHG reduction target; make changes to CARB's membership and increase legislative oversight of CARB's climate change-based activities; and expand

[14] In July 2017, AB 398 was enacted into law, thereby extending the legislatively authorized lifetime of the Cap-and-Trade Program to December 31, 2030.

dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

AB 1279: California Climate Crisis Act (2022) requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85% compared to 1990 levels and directs CARB to work with relevant state agencies to achieve these goals.

SB 1020: 100% Clean Electric Grid (2022) creates clean electricity targets of 90% by 2035 and 95% by 2040 with the intent of advancing the state's trajectory to the existing 100% clean electricity retail sales by 2045 goal.

Energy Efficiency Standards

California Title 24 Building Energy Efficiency Standards serve to reduce wasteful, uneconomical, and unnecessary uses of energy for the state. While not initially promulgated to reduce GHG emissions, Building Energy Efficiency Standards are designed to ensure new buildings and alterations or additions to existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. They include requirements in the Energy Code (Title 24, Part 6) and voluntary energy efficiency provisions in the California Building Standards (Title 24, Part 11). The California Energy Commission (CEC) is responsible for adopting, implementing, and updating these standards every three years.

- **Energy Code (Title 24, Part 6) Standards** were established in 1978 and serve to enhance and regulate California's building standards. Because homes and businesses use nearly 70 percent of California's electricity and are responsible for a quarter of GHG emissions, the CEC was mandated to periodically update and adopt building standards to increase energy efficiency of buildings and reduce GHGs. Part 6 of Title 24 implemented this mandate so that every three years the CEC updates the Energy Code for new construction and renovations to existing residential and non-residential buildings. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

  The 2022 Building Energy Efficiency Standards (Energy Code) improves upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 building code went into effect January 1, 2023, and focuses on four key areas in new construction: encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar photovoltaic system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. The 2022 standards have mandatory requirements to reduce building envelope air leakage, improve roofing through Solar Reflectance and Thermal Emittance, improve on insulation, improve on space conditioning, water heating and plumbing, improve on lighting efficiency requirements, and others.

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

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

California Title 20 : Appliance Efficiency Regulations require manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include: refrigerators, refrigerator-freezers and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Mobile Sources

AB 1493: California's Greenhouse Gas Vehicle Emission Standards (2002) required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards were intended to result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards would result in a reduction of about 30 percent.

EO S-1-07: Low Carbon Fuel Standard (2007) set a declining Low Carbon Fuel Standard (LCFS) for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock

production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009 and began implementation in 2011. The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. In 2018, CARB approved amendments which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32.

SB 375: The Sustainable Communities and Climate Protection Act (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the original SB 375 targets for the regional metropolitan planning organizations. The targets adopted for the San Diego Association of Governments (SANDAG) in 2010 were a 7% reduction in per capita passenger vehicle GHG emissions by 2020 and a 13% reduction by 2035, measured relative to 2005 GHG emissions. In 2018, CARB adopted the second round of SB 375 reduction targets, and increased SANDAG's 2020 target to a 15% reduction in per capita passenger vehicle GHG emissions and the 2035 target to a 19% reduction, using the same 2005 baseline.

In December 2021, SANDAG adopted its 2021 Regional Plan, which contains the region's current SCS (Appendix D of the Regional Plan). The SANDAG's GHG emissions quantification analysis determined that the San Diego region reduced per capita CO_2 emissions by 17.9% in 2020 compared to 2005 baseline, which exceeds the 2020 target set for SANDAG of 15% reduction. It was noted that measurement data was significantly impacted by COVID-19 due to intermittent stay-home orders, changes in employment, employee work location, telework, tourism travel, package and food delivery, cross-border travel restrictions, declines in public transit ridership, and price of gasoline, among many other impacts. SANDAG estimated that implementation of the SCS would result in a 20% CO_2 emissions reduction for cars and light-duty trucks by 2035. The GHG reductions for the 2021 Regional Plan were calculated using the CARB model EMFAC 2014 and adjustment factors provided by CARB to account for differences in emissions rates between EMFAC 2007 (used to set the original targets in 2010) and EMFAC 2014.

The 2021 Regional Plan provides a big picture vision for how the San Diego region will grow through 2050 and beyond with an implementation program to help make the plan a reality. Within the Regional Plan, SANDAG introduced a transformative vision for transportation in San Diego County that

completely reimagines how people and goods could move throughout the region in the 21st century. The plan outlines the "5 Big Moves" which are: Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and the Next Operating System. This plan is the region's long-term plan which will be implemented incrementally through the Regional Transportation Improvement Program (RTIP) .

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's greenhouse gas emissions target set by CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. An Amendment to the 2021 Regional Plan removing the regional road user charge was adopted by SANDAG in October 2023. The 2025 Regional Plan is currently in development and also will not include a regional road user charge.

EO B-16-12: Zero Emission Purchasing Mandate (2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of zero emission vehicles (ZEVs). This EO also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80 percent less than 1990 levels by 2050.

Advanced Clean Cars Program (2012) was a new emissions-control program for model years 2015 through 2025 that combined standards for smog producing pollutants and greenhouse gases into one program. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB also has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. To reduce GHG emissions, CARB, in conjunction with the USEPA and the National Highway Traffic Safety Administration, also adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025.

Advanced Clean Cars II Program (2022). CARB's latest rule is known as Advanced Clean Cars II which continues the concept of increasing stringency for fuel-efficiency standards and increasing the number of ZEVs in the vehicle fleet starting with model year 2026 until model year 2035 when all new vehicles sold in the state must be ZEVs. The regulations are two-pronged. First, it amends the ZEV Regulation to require an increasing number of ZEVs, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 EO N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-Emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

In October 2023, staff launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe GHG standard and limited revisions to the Low-Emission Vehicle and ZEV regulations.

EO N-79-20: Zero Emission by 2035 (2020) calls for elimination of new internal combustion passenger vehicles by 2035. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's EO establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the EO focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they

already own. The primary mechanism for achieving the ZEV target for passenger cars and light trucks is the Advanced Clean Cars II Program.

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

The Clean Miles Standard Program (2022) is a regulation developed by CARB and implemented by the California Public Utility Commission that seeks to reduce GHG emissions from passenger-ride-hailing services operated by transportation networks companies (such as Uber and Lyft). This program will have aggressive requirements for electric miles that will transition ride-hailing fleets to zero-emission operations starting in 2023 and ramping up through 2030.

SB 350: Clean Energy and Pollution Reduction Act (2015) –establishes (among other things) a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets.

Renewable Energy Procurement

SB 1078: The Renewable Portfolio Standard (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB X1 2: California Renewable Energy Resources Act (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350: Clean Energy and Pollution Reduction Act (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030 be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency.

SB 100: 100% Clean Energy Act (2018) has further accelerated and expanded the RPS, requiring achievement of a 50% RPS by December 31, 2026, and a 60% RPS by December 31, 2030. SB 100 also established a new statewide policy goal that calls for eligible renewable energy resources and zero-carbon resources to supply 100% of electricity retail sales within the State of California by December 31, 2045.

Water

EO B-29-15: Statewide 25% Reduction in Potable Urban Water (2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of

the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939: Integrated Waste Management Act (1989) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. The Act was adopted to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25% of the solid waste sent to landfills by 1995, and 50% by the year 2000 through source reduction, recycling and composting, and environmentally safe landfill disposal and transformation. This law established the California Integrated Waste Management Board, later the California Department of Resources Recycling and Recovery (CalRecycle).

AB 1327: California Solid Waste Reuse and Recycling Act (1991) required adequate areas for collecting and loading recyclable materials within a project site.

SB 1016: Solid Waste Disposal Measurement Act (2008) introduced a new diversion measurement system, which was based on a City's population and disposal tons to calculate a per capita disposal rate expressed in pounds per person per day. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of the City's recycling performance. Under this measurement system, a city needs to annually dispose of an amount equal to or less than its "50 percent equivalent per capita disposal target" calculated by CalRecycle.

AB 341: Mandatory Commercial Recycling (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. This law requires California commercial or public entities that generate four or more cubic yards of solid waste per week, and multifamily dwellings of five or more units, to arrange for recycling services.

AB 1826: Mandatory Commercial Organics Recycling (2014) requires local governments to establish organic waste recycling programs. In addition, it requires businesses and multifamily residences of at least five units that generate four cubic yards or more of solid waste per week to arrange for organic waste recycling services.

SB 1383: Short-Lived Climate Pollutants: Organic (2016) is a statewide effort to reduce emissions of short-lived climate pollutants (SLCP). Specifically, the law sets the following targets: 1) Reduce statewide disposal of organic waste by 50% by January 1, 2020 and by 75% by January 1, 2025 (based on 2014 levels), and 2) rescue at least 20% of currently disposed of edible food for human consumption by 2025.

Increasing the amount of solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by 1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials and 2) using recyclable materials that require less energy than raw materials to manufacture finished products. Increased diversion of organic materials (green and food

waste) will also reduce GHG emissions (CO_2 and CH_4) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

Local

City of San Marcos Climate Action Plan

Consistent with AB 32, the City adopted a CAP in September 2013 as a long-range plan to reduce GHG emissions and mitigate climate change impacts associated with City government operations and with implementation of the City's General Plan. An updated CAP was adopted on December 8, 2020.

The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP (City of San Marcos 2020).

The CAP set the following citywide targets:

- 4% below 2012 levels (575,000 MT CO_2e) by 2020.
- 42% below 2012 levels (347,000 MT CO_2e) by 2030.

The City has also developed a Climate Action Plan Consistency Review Checklist (CAP Checklist), in conjunction with the CAP, to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Consistency Guidance Memo dated July 15, 2020 summarizes the methodology and application of a GHG screening threshold which is set at 500 metric tons of carbon dioxide equivalent [MT CO_2e] per year as outlined in the CAP.

City of San Marcos General Plan

Land Use and Community Design Element

- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
    - Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.
    - Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.
    - Policy LU-2.7: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce storm water runoff.

Conservation and Open Space Element

The Conservation and Open Space Element of the City of San Marcos General Plan identifies one goal and two policies regarding GHGs that are applicable to the proposed project:

- Goal COS-4: Improve regional air quality and reduce GHG emissions that contribute to climate change.
    - Policy COS-4.3: Participate in regional efforts to reduce GHG emissions.
    - Policy COS-4.4: Quantify community-wide and municipal 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.

Mobility Element

Additionally, the Mobility Element of the City of San Marcos General Plan identifies one goal and associated policy that addresses GHG emission reductions through minimized vehicle miles traveled and reduced fuel consumption:

- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
    - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and GHG emissions; and reinforces the role of the street as a public space that unites the City.

Environmental Justice Element

The following goal and policies in the City of San Marcos General Plan, Environmental Justice Element are applicable to greenhouse gas emissions:

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
    - Policy EJ-.1.5: Promote the installation of trees to reduce the urban heat-island effect and green infrastructure to reduce stormwater runoff (See Policy LU-2.7).
    - Policy EJ-1.6: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City. (See Policy M-1.3)
    - Policy EJ 1-8: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City. (See Policy M-3.1)
    - Policy EJ-1.11: Participate in regional efforts to reduce greenhouse gas emissions. (See Policy COS-4.3)
    - Policy EJ-1.12: Quantify community-wide and municipal greenhouse gas (GHG) emissions, set a reduction goal, identify and implement measures to reduce greenhouse gas emissions as required by governing legislation. (See Policy COS-4.4)

- Policy EJ-1.13: Encourage energy conservation and the use of alternative energy sources within the community. (See Policy COS-4.5)
- EJ-1.14: Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment. (See Policy COS-4.6)

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7 in Section 3.7, the project is consistent with the applicable goals and policies pertaining to greenhouse gas emissions.

3.6.3 Thresholds of Significance

Appendix G of the State CEQA Guidelines identifies two evaluation criteria to determine the significance of GHG emissions. A significant impact would be identified if the project would:

- **Threshold #1:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- **Threshold #2:** Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gases.

The City's CAP Checklist, in conjunction with the CAP, provides a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

The CAP Consistency Guidance Memo summarizes the methodology and application of a GHG screening threshold which is set at 500 MT CO_2e per year. Projects that are projected to emit fewer than 500 MT CO_2e annually 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. This screening threshold is for new development projects consistent with the City's General Plan. When such a project exceeds the screening threshold, the project would be required to demonstrate consistency with the CAP through the CAP Checklist.

In most cases, compliance with the CAP Checklist would provide a streamlined CEQA review path to allow project specific environmental documents, if eligible, to tier from and/or incorporate by reference the CAP's programmatic review of GHG impacts. Projects that are consistent with the General Plan and implement CAP GHG reduction measures may incorporate by reference the CAP's cumulative GHG analysis. The City's CAP meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects.

If a project is consistent with the existing General Plan land use designation(s), it can be determined to be consistent with the CAP projections and can move forward to Step 2 of the CAP Checklist, which is to evaluate a project's consistency with the applicable strategies and measures of the CAP.

For projects seeking a General Plan Amendment, such as the proposed project, the CAP Checklist requires a comparative analysis to determine if the amendment results in an equivalent or less GHG-intensive project when compared to the existing designations. In addition to providing evidence to support the conclusion that the project would generate fewer emissions than existing designations, these projects would demonstrate consistency with the CAP through completion of Step 2 of the CAP Checklist.

If a land use designation amendment results in a more GHG-intensive project, the project is required to prepare a quantitative GHG analysis based on applicable sections of the CEQA Guidelines.

3.6.4 Project Impact Analysis

The project site currently has a General Plan land use designation of Public Institutional (P-I). The project seeks a General Plan Amendment (GPA) and rezone to change the property from P-I to Specific Plan Area (SPA) for the proposed mixed-use development. Consistent with the requirements of the CAP Checklist, the GHG analysis focuses on a relative comparison between the proposed project and a likely scenario that could be constructed under the current General Plan land use designation. The P-I land use typically allows for any public type of use, including schools, hospitals, civic centers, telecommunication data centers, etc. The allowable use onsite per the zoning could have a floor area ratio (FAR) of 3.0. Based on this, any facility which could be constructed onsite would be limited to approximately 318,000 square feet (s.f.). Vehicular trip generations of public institutions like schools or hospitals would result in significantly more traffic than the 1,214 trips that would be generated by the proposed project and would therefore generate larger quantities of operational GHG emissions. Based on SANDAG's trip generation guide, a hospital can generate as many as 25 trips per 1,000 s.f. or over 7,000 trips for a project of this size (LDN 2024). One other approved use for the project site, and perhaps a more likely scenario given the project site's location adjacent to an existing data center, would be to install a 160,000 s.f. data center or larger if multiple stories are constructed. Therefore, the GHG analysis first focuses on a relative comparison between the proposed project and the General Plan Buildout (Data Center) scenario. Secondly, per the CAP Checklist, the analysis reviews whether the project would demonstrate consistency with the CAP through completion of Step 2 of the CAP Checklist.

GHGs related to construction and annual operation were calculated using the California Emissions Estimator Model (CalEEMod) 2022.1 GHG model. The construction module in CalEEMod was used to calculate the emissions associated with the construction of the project. The CalEEMod input/output model is shown in Attachments A and B of the GHG report in Appendix E of this document.

Threshold #1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The following analysis presents the anticipated emissions for the proposed project and the General Plan Buildout (Data Center) scenario. It was assumed that construction of the General Plan Buildout (Data Center) scenario would be very similar in terms of equipment and schedule to the proposed project. Therefore, a comparative analysis is not provided for construction emissions.

Proposed Project

Construction Emissions

The project would start grading some time in 2026 with construction to start shortly thereafter. Grading would consist of approximately 6,950 cubic yards (CY) of cut material and 4,400 CY of fill material requiring an export of approximately 2,250 CY of fill material when materials shrinkage is considered. The export material was manually added to CalEEMod.

Construction-related GHG emissions include emissions from site preparation, grading, building construction, paving and architectural coating, including truck traffic, soils export activities, and worker trips. During grading, blasting and rock crushing may be required and was manually added to CalEEMod. The rock crusher assumed to be used during blasting would be similar to the Terex 4242SR

310 HP unit and is further specified in Attachment C of the GHG report in Appendix E of this document. Emissions generated by earthwork activities associated with grading were analyzed within CalEEMod using a "Grading Equipment Passes" methodology which has been approved by the South Coast Air Quality Management District (SCAQMD) in consultation with building estimator references (LDN 2024). The contractor would use Tier IV rated diesel construction equipment to minimize diesel particulates from construction, which was manually updated in CalEEMod.

Table 3.6-2 presents the anticipated construction emissions for the proposed project. As shown, anticipated construction related GHG emissions for the proposed project are estimated at 494 $MTCO_2e$ over the construction life of the project. Given the fact that the total emissions would ultimately contribute to cumulative levels, construction emissions of GHGs were annualized to allow for inclusion in operational emissions estimates, consistent with the SCAQMD recommendations for construction GHG emissions. Construction emissions were annualized over a 30-year period, per SCAQMD recommendations, to account for emissions generated over the assumed project lifetime. (LDN 2024). As shown in Table 3.6-2, project construction would contribute 16.46 MT CO_2e per year.

Table 3.6-2. Proposed Project Expected Annual Construction Emissions Summary (MT/Year)

Year	Total CO_2	CH_4	N_2O	CO_2e (MT/Year)
2026	487	0.02	0.02	494
Yearly Average Construction Emissions (Metric Tons/year over 30 years)				16.46

Source: LDN 2024.

Notes: Expected Construction emissions are based upon CalEEMod modeling assumptions for equipment and durations listed in Table 4.1 of the GHG Report (LDN 2024, Appendix E of the EIR).

Operational Emissions

Once construction is completed, the proposed project would generate GHG emissions from daily operations, including sources such as area, energy, mobile, solid waste, and water uses, which are calculated within CalEEMod. Area sources include consumer products, landscaping, and architectural coatings as part of regular maintenance. Energy sources would be from electricity and natural gas use. Mobile sources are from vehicular traffic. Solid waste generated in the form of trash is also considered as decomposition of organic material breaks down to form GHGs. Water sources include standard residential and commercial uses including landscaping activities. GHGs from water are also indirectly generated through the conveyance of the resource via pumping throughout the state and as necessary for wastewater treatment. Also, no hearth (fireplace) options were included in the modeling. A design feature has been included in the project description to indicate exclusion of fireplaces from the project. Finally, the project traffic engineer estimated that the project would generate 1,214 daily trips (LLG 2024). These traffic numbers were utilized within the CalEEMod analysis. The project would be required to implement all CAP measures for this project type which would further reduce GHG emissions. Since the intent of this analysis is to compare the proposed project with the likely General Plan Buildout (Data Center) scenario, not all CAP measures were calculated for the comparison. However, CAP Measure T-2, which requires the project to install 13 Level 2 EV Chargers would be expected to reduce emissions by 21.45 MT CO_2e was included in the operational emissions summary (LDN 2024). **Table 3.6-3** presents the proposed project's operational emissions summary. As shown, project operations after construction and calculated CAP measures would generate 1,300.61 MT CO_2e per year.

Table 3.6-3. Proposed Project Operational Emissions Summary (MT/Year)

Source	Total CO_2	CH_4	N_2O	CO_2e (MT/Year)
Mobile	1,149.00	0.06	0.05	1,166.00
Area	3.23	< 0.005	< 0.005	3.24
Energy	81.80	0.02	< 0.005	82.80
Water	2.84	0.20	< 0.005	9.36
Waste	12.6	1.26	0	44.20
Operations Total				1,305.60
Construction Emissions (See Table 3.6-2)				16.46
Construction and Operations				1,322.06
CAP Measure T-2: EV Charger Reduction				-21.45
Project GHG Emissions				1,300.61

Source: LDN 2024.
Note: The data is presented in decimal format and may have rounding errors.

General Plan Buildout (Data Center) Emissions

Construction Emissions

The General Plan Buildout (Data Center) scenario is assumed to have a similar duration and intensity and would essentially generate the same or less GHG emissions during construction. For this reason, GHG emissions for construction were not estimated in this analysis. Instead, they are assumed to be 16.46 MT CO_2e annually over a 30-year duration, which is the same as the proposed project.

Project Operational Emissions

As discussed above, the General Plan Buildout (Data Center) scenario assumes construction and operation of a 160,000 s.f. telecommunications data center. Data centers are recognized as very high consumers of electrical energy, despite being minimally staffed. For example, a 413,000 s.f. data center in Santa Clara was found to consume 665,750 megawatt hours (MWh) or 1.61 MWh of electricity per square foot per year. Based on this, a 160,000 square foot (s.f.) building would require at least 257,600 MWh. (LDN 2024).

Based on the City's CAP, the total cumulative Photovoltaic (PV) system in San Marcos was 10.3 megawatts direct current (MWdc), which generated 17,585 MWh or 1,707.28 MWh per MWdc installed. Based on the CAP, a building of 160,000 s.f. would be required to install 0.322 MWdc (2 watts dc per s.f. * 160,000 s.f. / (1 million watts per megawatt) of solar which would generate 553 MWh of electricity per year. The data center would consume 257,600 MWh annually so the solar would provide less than one percent of the total energy required. Based on CalEEMod, the data center would generate 5,505 MT CO_2e just from electrical consumption alone (See Attachment B of the GHG report, which is Appendix E of this EIR). Therefore, the required solar would not reduce emissions sufficiently to reduce this alternative scenario to less than what would be expected by the proposed project.

In addition to emissions from energy use, a 160,000 s.f. data center would also generate emissions from vehicular trips, area sources such as landscaping, and waste management. As such, the 5,505

MT CO_2e estimate for operational emissions is conservative for comparison to the project, since it is emissions from energy use alone.

Comparison of the Proposed Project and the General Plan Buildout (Data Center) Scenario

When the proposed project's GHG emissions (1,300.61 MT CO_2e) are compared to the GHG emissions estimated under the General Plan Buildout (Data Center) scenario (5,505 MT CO_2e), the project would have an estimated 76 percent less intense carbon footprint than would otherwise be assumed in the City's General Plan based on an allowable 160,000 s.f. data center. As explained above, this is driven almost entirely by the reduced energy consumption of the project compared to a data center.

CAP Measure Consistency

Since the proposed project seeks a GPA, the proposed project's analysis is based on a comparison between estimated emissions from the proposed use(s) and what would otherwise be approved under the existing General Plan. If a project's proposed amendment to the General Plan would result in consistent or lower GHG emissions than development under the General Plan, the project would be required to implement the applicable CAP measures identified in Step 2 of the CAP Checklist (Appendix F of this EIR). Table 3.6-4 describes the CAP measures that are applicable to a multi-family residential and commercial project and how the proposed project would comply.

Table 3.6-4. Project Consistency with Applicable CAP Checklist Measures

CAP Consistency Checklist Measures	Project Compliance
Electric Vehicle Charging Stations (Measure T-2) Will the project install electric vehicle charging stations (Level 2 or better) in at least five percent of the total parking space provided on-site?	The project proposes a total of 254 on-site parking spaces including 13 Level 2 EV spaces, 62 EV ready spaces, and 25 EV capable spaces. The project has been designed to meet the requirements of Measure T-2.
Transportation Demand Management (Measure T-9) Will the project develop and implement a TDM plan that includes, at minimum, all of the TDM strategies listed below? • Provide discounted monthly transit pass or provide at least 25 percent transit fare subsidy to residents/employees. • Provide designated car-share, carpool, vanpool, and/or park-and-ride parking spaces. • Provide pedestrian connections between all internal uses and to all existing or planned external streets around the project site(s). • Provide secure bicycle parking spaces or bicycle racks, showers, and clothes lockers. • Encourage telecommuting for employees (allow one telecommute day per week or compressed work weeks) or provide a telecommute work center with common office space and equipment available to residents.	**Transit Discount:** The property manager will make transit passes available to residents and business of the building. **Designated Parking**: The project will provide designated carpool, vanpool, and/or park-and-ride spaces on site. **Pedestrian Connections:** The project provides a pedestrian connection from the building to Armorlite Drive. **Bicycle Spaces:** The project will provide bicycle racks for visitors. The project also includes 34 bicycle parking spaces. Residents will have shower facilities within apartments. **Telecommuting**: The project will have space available in the community room for residents to telecommute. The project has been designed to meet the requirements of Measure T-9.

CAP Consistency Checklist Measures	Project Compliance
Reduce Parking Near Transit (Measures T-12) For Multi-Family Residential, if the project is located within a half-mile of a major transit stop, would the project provide at least 27 percent fewer parking spaces than required for the same use based on the City's municipal code parking requirements?	Per the San Marcos Municipal Code Section 20.340 (Off-Street Parking and Loading) 339 spaces would be required for the residential use and 23 spaces would be required for the commercial use (362 total). However, per Measures T-12, the project is required to reduce its total required parking by 27% or 98 spaces (264 total) since the site is within one half mile of a major transit station. To meet the requirements of the CAP, the project would provide 247 spaces for residential use (69 garage standard spaces, 102 garage tandem spaces, 18 tuck under spaces and 58 open spaces) and 17 spaces for the commercial uses. Commercial parking requirements would be met by providing 7 open parking spaces, and 10 of the residential open spaces would be available for commercial use from 9:00 AM to 5:00 PM to meet the required 17 spaces. The project has been designed to meet Measure T-12.
Water Heaters (Measure E-1) Will the project install one of, or a combination of, the following water heater types in place of natural gas heaters?	The project will install electric heat pump water heaters within all residential units. Natural gas water heaters will not be used. The project has been designed to meet Measure E-1.
Photovoltaic Installation (Measure E-2) Will the project install photovoltaic systems with a minimum capacity of two watts per square foot of gross floor area?	The project will install a photovoltaic rooftop system with a minimum capacity of two watts per square foot of gross floor area. The project has been designed to meet Measure E-2.
Landscaping Water Use (Measure W-1) Will the project comply with the City's Water Efficient Landscape Ordinance?	The project will comply with the City's Water Efficient Landscape Ordinance. The project has been designed to meet Measure W-1.
Urban Tree Canopy (Measure C-2) For multi-family residential, if the project is providing more than 10 parking spaces, will the project plant at least one tree per five parking spaces provided?	The project includes a total of 66 outdoor uncovered sparking spaces. Therefore, the project is required to provide a total of 13 trees to meet the requirements of Measure C-2. Per the landscape concept plan, the project will plant 49 trees. The project exceeds the requirements of Measure C-2.

Summary

Based on the comparison analysis of the proposed project and the General Plan Buildout (Data Center) Scenario, the project would have an estimated 76 percent less intense carbon footprint. As shown in Table 3.6-4, the project would comply with applicable CAP measures. Projects that propose a GPA but have GHG emissions that are less than would be anticipated for a project allowable under the General Plan, and that would implement all applicable CAP GHG reduction measures may incorporate by reference the CAP's cumulative GHG analysis. The City's CAP meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. The CAP Checklist provides a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. As such, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would be **less than significant**.

Threshold #2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHGs

The City's CAP is the applicable plan for reducing GHG emissions. As discussed under GHG Threshold #1, above, the proposed project's GHG emissions would be approximately 76% lower compared to the GHG emissions under the General Plan Buildout (Data Center) scenario (CAP Consistency Step 1). The project would also implement all applicable CAP GHG reduction measures (CAP Consistency Step 2), as demonstrated in Table 3.6-4. The City's CAP and the General Plan includes goals and policies related to GHG emissions, as detailed in Section 3.6.2. The City's CAP was prepared in 2013 and updated in 2020 to be consistent with state and regional goals and will continue to evolve as updates to those state and regional goals are made. Since the updated CAP was adopted, AB 1279 was adopted and requires the state to achieve net zero GHG emissions no later than 2045 and to reduce statewide GHG emissions by 85% compared to 1990 levels. Approving the project's land use change to a less intensive use moves the City in the right direction toward achieving the newly adopted AB 1279 goals.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7 in Section 3.7, the project is consistent with the applicable goals and policies pertaining to greenhouse gas emissions.

In summary, the project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHGs and impacts would be **less than significant**.

3.6.5 Cumulative Impact Analysis

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

The CAP outlines strategies and measures that the City will undertake to achieve its proportional share of State GHG emissions reduction targets. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP (City of San Marcos 2020). As presented in Section 3.6.4, the project complies with the City's CAP. Therefore, the project's incremental contribution to a cumulative GHG emissions effect is determined not to be cumulatively considerable and impacts would be **less than significant**.

3.6.6 Mitigation Measures

Based upon the analysis presented in Sections 3.6.4 and 3.6.5, project and cumulative greenhouse gas impacts would be less than significant. Therefore, no mitigation measures are necessary.

3.6.7 Conclusion

The analysis above considered the GHG emissions of the proposed project in comparison to the emission that would be anticipated from a project that was consistent with the existing General Plan (General Plan Buildout Data Center scenario). When the proposed project's GHG emissions (1,300.61 MT CO_2e) are compared to the GHG emissions estimated under the General Plan Buildout (Data Center) scenario (5,505 MT CO_2e), the project would have an estimated 76 percent less intense carbon footprint than would otherwise be assumed in the City's General Plan based on an allowable 160,000 s.f. data center. This is driven almost entirely by the reduced energy consumption of the project compared to the data center. The project would also implement all the CAP Checklist measures that are applicable to multi-family housing. The proposed project would be consistent with the City's CAP.

In addition to the City's CAP, the General Plan includes goals and policies related to GHG emission, as detailed in Section 3.6.2. The project's consistency with applicable General Plan goals and policies is discussed in Section 3.10, Land Use and Planning. As detailed in Table 3.7-7 in Section 3.7, Land Use and Planning, the project is consistent with the applicable goals and policies pertaining to greenhouse gas emissions.

In summary, the project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing GHGs and impacts would be **less than significant**.

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3.7 Land Use and Planning

Introduction

This section analyzes the potential for the proposed project to have impacts related to land use and planning. This section considers consistency with applicable land use plans and habitat conservation plans. The transportation portion of the analysis is based on the following report, which is included as **Appendix O** of the Environmental Impact Report (EIR)[15]:

- *Local Transportation Analysis (LTA) Armorlite Lofts*, prepared by Linscott, Law & Greenspan (LLG) (November 2024a).

Although not required under the California Environmental Quality Act (CEQA), the Local Transportation Analysis focuses on automobile delay/Level of Service (LOS), consistent with the City's *Transportation Impact Analysis Guidelines (*TIAG*)* (San Marcos 2020). The LOS analysis was conducted to identify roadway deficiencies in the project study area and to recommend project improvements to address such deficiencies. The Local Transportation Analysis is incorporated and addressed in this section as it relates to consistency with the City's Mobility Element policies in the General Plan. A vehicle miles traveled (VMT) analysis, which is required under CEQA, is included as Appendix R of the EIR and summarized in Section 3.11, Transportation.

In the Initial Study prepared for the proposed project (Appendix B.1), it was determined that there would be no potential for the project to have an adverse impact related to physical division of an established community. Therefore, this issue is not discussed further in this EIR section. Section 5.7, Environmental Effects Found not to be Significant - Land Use, provides additional information on this topic.

Table 3.7-1 summarizes the project- and cumulative-level land use impact analysis for the proposed project.

Table 3.7-1. Land Use Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.7.1 Existing Conditions

This section describes the existing planning context for the project site, including the General Plan and Zoning designations that currently apply to the site.

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

Project Site

The project site is currently undeveloped, vacant land enclosed by chain-link fencing along the north, south and western property boundary and open cable railing situated atop a small retaining wall along the eastern property boundary. A gated driveway onto the site is located on Armorlite Drive, and a second gated driveway in the northwestern portion of the property provides vehicular access via the adjacent AT&T facility to the west. Well-used foot paths and a hole in the chain-link fencing along the northern property limits indicate informal walk-through access across the property. The site is generally flat with two small, paved drive aisles and slopes downward along its edges. The project site is generally flat. Elevations range from 575 (above mean sea level (amsl) in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive.

Existing General Plan Designation

The project site has an existing General Plan Land Use designation of Public/Institutional (PI) which has a maximum floor area ratio (FAR) of 3.0. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation is for "facilities built and maintained for public use such as academic facilities, institutional uses, community service facilities, water and sewer facilities, detention and drainage facilities, cemeteries, police and fire stations, and other government buildings and properties. This designation may include privately owned facilities built and maintained for public use." (City of San Marcos 2012).

Existing Zoning Designation

The project site has a zoning designation of P-I (Public/Institutional). According to Section 20.240.020 of the City's Zoning Ordinance, this zone is intended to "To provide a district for the orderly and harmonious development of public facilities to adequately meet the needs of the San Marcos community. Appropriate P-I Zone uses may include maintenance, public buildings, recreation facilities, schools, and utility installations. The P-I Zone is intended to implement and be consistent with the Public/Institutional (PI) land use designation of the General Plan." (City of San Marcos 2021).

Surrounding Land Uses

The project site is in a developed portion of the City. The project vicinity includes a mix of multi-family residential and commercial uses. The site is bounded by North County Transit District (NCTD) right of way to the north, the Palomar Station mixed-use development to the east and south, and George Burgers and AT&T to the west. The Palomar College SPRINTER station is located approximately 0.1-miles from the project site, approximately 1,000 feet east of the intersection of Las Posas Road and W. Mission Road. SR-78 is approximately 0.25 mile south of the project site.

Roadway Circulation System

The study area includes ten intersections and four roadway segments based on guidance provided in the TIAG (City of San Marcos 2020). Per the City's TIAG, the study area was defined using the following criteria:

- Signalized and unsignalized intersection along and adjacent to the project site;
- Site access driveways; and

- Any classified (non-residential) roadway segments that are linked to the intersections that are being studied

Figure 3.7-1 shows the project study area roadway segments and intersections.

Study Intersections

- #1 - Mission Road/Rancho Santa Fe Road
- #2 - Mission Road/Pacific Street
- #3 - Mission Road/Las Posas Road
- #4 - Mission Road/Knoll Road
- #5 - Armorlite Drive/Las Posas Road
- #6 - Armorlite Drive/Project Driveway
- #7 - Las Posas Road/Descanso Avenue
- #8 - Las Posas Road/SR-78 Westbound Ramp
- #9 - Las Posas Road/Grand Avenue
- #10 - Grand Avenue/SR-78 Eastbound Ramp

Study Roadway Segments

- Mission Road, between Rancho Santa Fe Road and Las Posas Road
- Mission Road, between Las Posas Road and Knoll Road
- Las Posas Road, between Mission Road and SR-78 Westbound Ramp
- Las Posas Road, between SR-78 Westbound Ramp and Grand Avenue

Existing Level of Service for Intersections and Roadway Segments

Table 3.7-2 summarizes the LOS criteria for signalized intersections and **Table 3.7-3** summarizes the LOS criteria for stop-controlled unsignalized intersections. **Table 3.7-4** summarizes roadway segments daily capacity and LOS standards. Section 3.7.4 below provides additional information regarding the LOS analysis and methodology.

Table 3.7-2. Signalized Intersection LOS Operational Analysis Method

LOS	Average Stopped Delay Per Vehicle (Seconds)	Description
A	≤10	Operations with very low delay. This occurs when the progression is extremely favorable and most vehicles do not stop. Short cycle lengths may also contribute to low delay.
B	>10 and ≤20	Operations with generally good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

LOS	Average Stopped Delay Per Vehicle (Seconds)	Description
C	>20 and ≤35	Operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	>35 and ≤55	Operations with high delay, resulting in some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion, and individual cycle features is noticeable.
E	>55 and ≤80	The limit of acceptable delay. Individual cycle failures are frequent occurrences.
F	>80	Excessively high delays considered unacceptable to most drivers. Poor progression and long cycle lengths may also be major contributing factors to such delays.

Source: Highway Capacity Manual, 7th edition.

Table 3.7-3. LOS Criteria for Stop-Controlled Unsignalized Intersections

Average Stopped Delay Per Vehicle (Seconds)	LOS
≤10	A
>10 and ≤20	B
>20 and ≤35	C
>35 and ≤55	D
>55 and ≤80	E
>80	F

Source: Highway Capacity Manual, 6thth edition.

Table 3.7-4. Roadway Segment Daily Capacity and LOS Standards

Street Classification	LOS/ADT Threshold				
	A	B	C	D	E
Expressway (6-lane)	< 30,000	< 42,000	< 60,000	< 70,000	< 80,000
Prime Arterial (6-lane)	< 25,000	< 35,000	< 50,000	< 55,000	< 60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	< 45,000	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	< 35,000	< 40,000
Major Arterial (3-lane, one-way)	< 12,500	< 16,500	< 22,500	< 25,000	< 27,500
Major Arterial (2-lane, one-way)	< 10,000	< 13,000	< 17,500	< 20,000	< 22,500
Secondary Arterial / Collector (4-lane w/ center lane)	< 10,000	< 14,000	< 20,000	< 15,000	< 30,000
Collector (4-lane w/o center lane)	< 5,000	< 7,000	< 10,000	<13,000	< 15,000

Street Classification	LOS/ADT Threshold				
	A	B	C	D	E
Collector (2-lane w/ continuous left-turn lane)	< 5,000	< 7,000	< 10,000	< 13,000	< 15,000
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	< 9,000	< 10,000
Collector (2-lane w/ commercial fronting)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (2-lane w/ multi-family)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (3-lane, one-way)	< 11,000	< 14,000	< 19,000	< 22,500	< 26,000
Collector (2-lane, one-way)	< 7,500	< 9,500	< 12,500	< 15,000	< 17,500
Collector (1-lane, one-way)	< 2,500	< 3,500	< 5,000	< 6,500	< 7,500
Sub-Collector (2-lane single family)	-	-	< 2,200	-	-

Source: City of San Marcos Transportation Impact Guidelines (San Marcos 2020).
Note: Bold number indicates the ADT threshold for acceptable LOS.

Traffic Counts

The study area intersections and roadway traffic counts were conducted on either September 14, 2023 or October 2, 2023 when schools in the area were in session. Traffic count worksheets are provided in Appendix A of the LTA which is included as Appendix O of this EIR.

Intersections

Table 3.7-5 displays intersection LOS and average vehicle delay results for the key study area intersections under existing conditions. As shown in Table 3.7-5, all intersections are calculated to currently operate at LOS D or better during both the AM and PM peak hours with the exception of the following intersections:

- Las Posas Road/Descanso Avenue – LOS F (AM Peak Hour) and LOS E (PM Peak Hour)
- Las Posas Road/Grand Avenue – LOS E (AM and PM Peak Hours)

Roadway Segments

Table 3.7-6 shows the classification of each project area roadway and the current operating conditions for the study area roadway segment. As shown in Table 3.7-6, the study area segments are all operating at LOS C or better.

Table 3.7-5. Peak Hour Intersection LOS – Existing Conditions

#	Intersection	Control Type	Peak Hour	Existing	
				Avg. Delay (seconds)	LOS
1	Mission Road/Rancho Santa Fe Road	Signal	AM	29.3	C
			PM	30.3	C
2	Mission Road/Pacific Street	Signal	AM	28.2	C
			PM	46.0	D
3	Mission Road/Las Posas Road	Signal	AM	46.6	D
			PM	50.0	D
4	Mission Road/Knoll Road	Signal	AM	49.6	D
			PM	38.8	D
5	Armorlite Drive/Las Posas Road	Signal	AM	28.0	C
			PM	24.3	C
6	Armorlite Drive/Project Driveway	DNE(1)	AM	--	--
			PM	--	--
7	Las Posas Road/Descanso Avenue	Signal	AM	97.6	F
			PM	80.0	E
8	Las Posas Road/SR-78 Westbound Ramp	Signal	AM	28.5	C
			PM	20.0	B
9	Las Posas Road/Grand Avenue	Signal	AM	68.4	E
			PM	72.1	E
10	Grand Avenue/SR-78 Eastbound Ramp	Signal	AM	39.5	D
			PM	41.5	D

Source: LLG 2024a.
Notes: (1) DNE - Does not exist.

Table 3.7-6. Roadway Segment LOS Results – Existing Conditions

Roadway	Segment	Classification	Daily Volume	LOS Threshold (LOS E)	V/C(1)	LOS(1
Mission Road	Rancho Santa Fe Road to Las Posas Road	4-Lane Major Arterial with Enhanced Class II Bike Lanes	14,200	40,000	0.355	A
	Las Posas Road to Knoll Road	4-Lane Major Arterial with Enhanced Class II Bike Lanes	19,960	40,000	0.499	B
Las Posas Road	Mission Road to SR-78 Westbound Ramps	6-Lane Prime Arterial	29,710	60,000	0.495	B
	Mission Road to Grand Avenue	6-Lane Prime Arterial	38,610	60,000	0.644	C

Source: LLG 2024a.
Notes: (1) VC = Volume/Capacity
(2) LOS = Level of Service
(3) CLTL = Continuous Left-Turn Lane

3.7.2 Regulatory Setting

This section provides an overview of the regulatory setting related to planning and land use that apply to the project, including state, regional, and local regulation and planning documents.

State

California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is provided in the California Planning and Zoning Law, Government Code Sections 65000 et seq. Under state planning law, each city and county is required to adopt a General Plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (Section 65300). The California Supreme Court has called the General Plan the "constitution for future development." The General Plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private. A General Plan consists of several elements, including land use, circulation, housing, conservation, open space, noise, and safety; other elements may be included at the discretion of the jurisdiction that relate to the physical development of the county or city.

Senate Bill 743

California Senate Bill (SB) 743 mandated specific types of CEQA analysis of transportation projects effective July 1, 2020. Prior to implementation of SB 743, CEQA transportation analyses of individual projects typically determined impacts on the circulation system in terms of LOS roadway delay and/or capacity usage at specific locations, such as street intersections or roadway segments. SB 743, signed into law in September 2013, required changes to the guidelines for CEQA transportation analysis. The changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. The purpose of SB 743 is to

promote the reduction of greenhouse gas (GHG) emissions, the development of multimodal transportation networks, and a diversity of land uses.

Under SB 743, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS and other similar vehicle delay or capacity metrics may no longer serve as transportation impact metrics for CEQA analysis. The California Office of Planning and Research (OPR) has updated the CEQA Guidelines and provided a final technical advisory in December 2018, which recommends VMT as the most appropriate measure of transportation impacts under CEQA. The California Natural Resources Agency certified and adopted the CEQA Guidelines including the Guidelines section implementing SB 743. The changes have been approved by the Office of Administrative Law and are now in effect. Section 3.15, Transportation, of this EIR analyzes potential VMT impacts related to the proposed project.

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process. Cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside of CEQA.

To comply with the requirements of SB 743, the City of San Marcos has prepared its TIAG to provide guidance on conducting transportation impact analyses in the city as follows:

- CEQA Analysis Requirements: Requirements for conducting CEQA analysis, which consists of SB 743-consistent VMT analysis as well as assessing impacts to pedestrians, bicyclists, transit, hazards, emergency access, and other impacts (See Section 3.15 Transportation).
- Local Transportation Analysis Requirements: Requirements for conducting LOS analysis, site access assessments, and other local transportation analyses for non-CEQA purposes (Section 3.7 Land Use and Planning).

Regional/Local

SANDAG San Diego Forward: The Regional Plan

The Regional Plan, adopted in 2021 by the San Diego Association of Governments (SANDAG), provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies.

The Regional Plan combines the Regional Comprehensive Plan and the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS). By integrating land use and transportation plans, the Regional Plan is intended to achieve greenhouse gas emission reduction targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities Act.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from

the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments (GPAs) initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

The Regional Plan also supports other regional transportation planning and programming efforts, including overseeing which projects are funded under the Regional Transportation Improvement Program and the TransNet program. SANDAG is applying data-driven strategies, innovative technologies, and stakeholder input to create a future system that is faster, fairer, and cleaner. Part of this data-driven approach includes the implementation of five key transportation strategies referred to as the 5 Big Moves. These strategies provide the framework for the Regional Plan and consider policies and programs, changes in land use and infrastructure, take advantage of the existing transportation highway and transit networks, and leverage trends in technology to optimize use of the transportation system. Together, these initiatives will create a fully integrated, world-class transportation system that offers efficient and equitable transportation choices, meets state climate targets, and supports local jurisdictions' achievements of Climate Action Plan (CAP) goals.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. The amendment to the Regional Plan was approved by the SANDAG Board in late 2023.

SANDAG Smart Growth Opportunity Areas

The project site is located within the SM-3 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County. The "Smart Growth Concept Map" identifies locations in the region that can support smart growth, transit, walking, and biking. The map serves as the foundation for prioritizing transportation investments and determining eligibility for local smart growth incentive funds. The Smart Growth Concept Area data includes just over 200 existing, planned, or potential smart growth locations. Planning professionals from the region's jurisdictions — each of the 18 cities and the county — provided the recommendations for these specific locations. In addition to input from the cities and county, feedback from the public also was important in creating the data for inclusion in the Smart Growth Concept Map. The SANDAG Board of Directors accepted the initial Concept Map in 2006. The Board accepted the most recent technical update in 2016 (SANDAG 2016).

Multiple Habitat Conservation Program

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

The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999 and although the Subarea Plan has not yet been approved by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), the plan is a component of the

adopted MHCP and is currently being used as a guide for open space design and preservation within the city. The intent of the City's Draft Subarea Plan is to identify a citywide preserve system that meets local and regional biological goals while minimizing fiscal and economic impacts to the City and adverse impacts on private property owners. To help achieve this goal, certain areas, known as Focused Planning Areas (FPA), have been designated with parcel-level preserve goals which would contribute to achieving local and regional conservation goals while minimizing adverse effects on property rights and property values. The project site is not located within an FPA.

San Diego County Regional Airport Authority/Airport Land Use Commission

The nearest public airport is the McClellan-Palomar Airport, which is located approximately five miles southwest of the project site. The McClellan-Palomar Airport Land Use Compatibility Plan (ALUCP) contains policies to promote land use compatibility between the McClellan-Palomar Airport and adjacent and proximate land uses, to the extent these areas are not already developed with existing uses, and to protect the public health, safety, and welfare. Using airport-related forecasts and background data approved by the California Department of Transportation, Division of Aeronautics, the plan reflects anticipated growth of the airport over a 20-year horizon. The plan includes land use compatibility criteria and identifies policies applicable to the airport and surrounding land uses.

According to the McClellan-Palomar ALUCP, the project site partially lies within Review Area 2 of the airport influence area. The influence area is regulated by the Airport Land Use Commission (ALUC), which regulates land uses in the area to be compatible with airport-related noise, safety, airspace protection, and over-flight factors through review of development proposals within the airport influence area. Review Area 2 consists of limits on heights of structures in areas of high terrain. Residential development in Review Area 2 may be subject to annoyances commonly associated with proximity to airports, such as noise, vibration, and overflights.

City of San Marcos General Plan

The San Marcos General Plan consists of the following elements:

- *Land Use and Community Design Element* - Describes the desired future physical composition of the planning area in terms of location, type, and intensity of new development and open space to ensure balanced development that maximizes the long-term livability of the San Marcos community.
- *Mobility Element* - Describes the mobility strategy for the City, which identifies a network of options including streets, sidewalks, trails, and transit, that connects people with the City.
- *Conservation and Open Space Element* – Recognizes the habitat and scenic value of natural and cultural open spaces within the City and lists goals and policies that ensure long-term stewardship of these resources. This element also addresses climate change, water conservation, energy conservation, air quality, watersheds, and water quality.
- *Parks, Recreation and Community Health Element* – Identifies the recreational amenities and community service programs offered within the City and outlines goals for increased access to parks, trails, recreational facilities, and community service programs for all community members.
- *Safety Element* - Establishes policies and programs to protect public health, safety, and welfare of all residents and property. This element identifies and describes plans for response to natural and human-caused safety issues, including geologic, seismic, flood, and fire hazards.

- *Noise Element* - Identifies problematic noise sources within the City and outlines strategies to reduce overall ambient noise levels. This element also includes measures to strategically distribute land uses throughout the City.
- *Housing Element* - Describes the strategy for developing a variety of housing opportunities to accommodate all residents and preserve the quality of existing housing in order to promote safe, decent, and affordable housing within the 2021-2029 planning period.
- *Environmental Justice*- Addresses priorities related to a more equitable, safe, and healthy lifestyle for all City residents.

The City's Land Use and Community Design Element identifies five goals and associated policies to guide well-balanced land use planning in the city. The following goals and policies from the City of San Marcos General Plan, Land Use Element pertain to planning:

- Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.
    - Policy LU-1.1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.
    - Policy LU-1.3: Diversify land uses by providing mixed use land uses in strategic locations within the City that place housing adjacent to employment.
    - Policy LU-1.4: Maintain the natural integrity of open space preserves by ensuring development projects are sensitively integrated along the edges of preserved or protected areas.
- Goal LU-2: Promote development standards and land use patterns that encourage long-term environmental sustainability.
    - Policy LU-2.1: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.
    - Policy LU-2.2: Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.
    - Policy LU-2.3: Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.
    - Policy LU-2.5: Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.
    - Policy LU-2.7: Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.
- Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.
    - Policy LU-3.1: Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.
    - Policy LU-3.5: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.

  - Goal LU-5: Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.
  - Policy LU-5.4: Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.
  - Policy LU-5.6: Require a specific plan for strategic areas/properties that require high-quality design, orientation, and development due to their location or visibility within the community.
  - Policy LU-5.7: Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.
- Goal LU-7: Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.
  - Policy LU-7.2: Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the land use for the proposed project are identified below. Policies associated with Goals M-2 and M-3 are analyzed in **Table 3.7-7**, located at the end of this section, and discussed in Section 3.15, Transportation.

- Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.
  - Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map
  - Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
  - Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City.
  - Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:
    - LOS D or better for Vehicles as a prioritized mode
      - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
    - The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).

  - Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.
  - Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.
- Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.
  - Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods, while maintaining the City's desire to provide connectivity on the roadway network.
  - Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.
- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.
  - Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
  - Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.
  - Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.
  - Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.
  - Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

The General Plan includes goals and policies applicable to other areas, such as mobility, safety, noise, conservation, and environmental justice. The project's consistency with applicable General Plan goals and policies is presented in **Table 3.7-7**, at the end of this section.

San Marcos Municipal Code and Zoning Ordinance, Title 20

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. The Zoning Ordinance is based on the official Zoning Map of the City of San Marcos. The purpose of this Zoning Ordinance is to protect and promote the public health, safety, comfort, convenience, and general welfare of the San Marcos community; to implement the policies of the General Plan; and to

provide the physical, environmental, economic, and social advantages that result from the orderly planned use of land resources.

The project site has a zoning designation of Public Institutional (P-I). According to Section 20.240.020 of the City's Zoning Ordinance, this zone is intended to "To provide a district for the orderly and harmonious development of public facilities to adequately meet the needs of the San Marcos community. Appropriate P-I Zone uses may include maintenance, public buildings, recreation facilities, schools, and utility installations. The P-I Zone is intended to implement and be consistent with the Public/Institutional (PI) land use designation of the General Plan." (City of San Marcos 2021). The project proposes a zoning change to Specific Plan Area for the Armorlite Lofts Specific Plan.

3.7.3 Thresholds of Significance

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

- **Threshold #1:** Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

As identified above, impacts related to physical division of an established community are not discussed in this section. Section 5.0, Environmental Effects Found not to be Significant, provides additional information on this topic.

3.7.4 Project Impact Analysis

The project proposes 165 residential apartments on 2.44 acres for a proposed density of 67 dwelling units/acre. As proposed, 15% of units calculated from the base density would be affordable units at the very-low income level. Very-low income is defined by the U.S Department of Housing and Urban development as 50% of the Area Median Income or AMI)[16]. The proposed project is requesting approval of a Specific Plan, General Plan Amendment, Rezone, Site Development Plan, and Conditional Use Permit. Each of these actions is described in more detail below. The project plans are included as Appendix A.2.

- **Specific Plan (SP23-0001)** - The Specific Plan establishes the development rules and regulations of all land uses within the project site. Upon adoption of the Specific Plan by the City, all development within the project site must conform to the regulations of the Specific Plan. The Specific Plan would be required to be reviewed and approved concurrently with the Multi-Family Site Development Plan application.
- **General Plan Amendment (GPA23-0002)** - A General Plan Amendment would be required to change the existing PI (Public Institutional) designation to Specific Plan Area (SPA).
- **Rezone (R22-0001)** - A rezone would be required to change the existing Public-Institutional (P-I) zoning to Specific Plan Area (SPA).
- **Site Development Plan (SDP23-0003)** - The Site Development Plan approval would be required to construct 165 apartment units and 5,600 s.f. of commercial and address the details of the

[16] Area Median Income (AMI) is the midpoint of a region's income distribution- half of the families in a region earn more than the median and half earn less than the median. This can also be looked at as the median household income.

architectural style, building elevation, fencing, landscaping, among other criteria, within the development.

- **Conditional Use Permit (CUP23-0002)** - Conditional Use Permit approval would be required for potential use of a temporary rock crusher.

Threshold #1: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

Plans and policies considered in this analysis include the San Marcos General Plan, the City of San Marcos zoning ordinance and the MHCP.

San Marcos General Plan

As identified above, the project site has an existing General Plan Land Use designation of Public/Institutional (PI) which has a maximum floor area ratio (FAR) of 3.0. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation is for "facilities built and maintained for public use such as academic facilities, institutional uses, community service facilities, water and sewer facilities, detention and drainage facilities, cemeteries, police and fire stations, and other government buildings and properties. This designation may include privately owned facilities built and maintained for public use" (City of San Marcos 2012).

The project is proposing a General Plan Amendment to change the designation to Specific Plan. The Armorlite Lofts Specific Plan provides regulations for the development of the project site including the proposed development standards, design guidelines, utilities, infrastructure, and public services necessary to implement and support the future development.

Table 3.7-7 at the end of this section summarizes the applicable San Marcos General Plan goals and policies relating to land use. As shown in Table 3.7-7, the project is consistent with the applicable goals and policies.

Mobility Element Consistency – Level of Service Analysis

The following analysis focuses on automobile delay/LOS, consistent with the City's TIAG. The LOS analysis was conducted to identify roadway deficiencies in the project study area and to recommend project improvements to address such deficiencies. The LTA is incorporated and addressed in this section as it relates to consistency with the City's Mobility Element policies . A VMT analysis, which is required under CEQA, is included as Appendix O of the EIR and summarized in Section 3.11, Transportation.

Analysis Methodology - Intersections

The AM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 7:00 AM and 9:00 AM. The PM intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 4:00 PM and 6:00 PM. Tables 3.7-2 and 3.7-3 summarize the LOS criteria for signalized intersections and unsignalized stop-controlled intersections.

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the Highway Capacity Manual (HCM) 6th Edition signalized (Chapter 19) intersection analysis methodology. This method defines LOS in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time. This technique uses 1,900 vehicles per hour per lane (VPHPL) as the maximum

saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for the analysis of signalized intersections are described in Table 3.7-2, identifying the thresholds of control delays and the associated LOS. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

Unsignalized intersections were analyzed using the Highway Capacity Manual 6th Edition side-street stop (Chapter 20) and all-way stop (Chapter 21) intersection analysis methodology. The computerized analysis of intersection operations was performed utilizing the Synchro Version 11 traffic analysis software by Trafficware Ltd.

LOS was determined as follows:

- All-way stop intersections: Reported for the entire intersection as an average value.
- Side-street stop intersections: Reported for the worst-case movement.

The LOS criteria used for the analysis of unsignalized intersections are described in Table 3.7-3.

Analysis Methodology – Roadway Segments

Roadway segment LOS standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes. Table 3.7-4 presents the roadway segment capacity standards found in the City's TIAG. The actual capacity of a roadway facility varies according to its physical attributes.

Level of Service Standards

The City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards outlined in the General Plan Mobility Element. If the addition of the traffic generated from a proposed project results in any one of the following, improvements should be identified to increase performance to acceptable or pre-project conditions under each scenario:

- Triggers an intersection operating at acceptable LOS to operate at unacceptable LOS (LOS E or F) and increases the delay by more than 2.0 seconds.
- Increases the delay for a study intersection that is already operating at unacceptable LOS (LOS E or F) by more than 2.0 seconds.
- Triggers a roadway segment operating at acceptable LOS (LOS A, B, C, D) to operate at unacceptable LOS and increases the volume/capacity (V/C) ratio by more than 0.02.
- Increases the V/C ratio for a study roadway segment that is already operating at unacceptable LOS (LOS E or F) by more than 0.02.

Project Trip Generation

To determine the traffic generation of the proposed project, the April 2002 *SANDAG Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002) rates were applied to the proposed project. The "Multi-family Residential" (more than 20 DU/acre)" trip rate was used to

estimate the project residential trip generation. The "Specialty Retail/Strip Commercial" trip rate was used to estimate the commercial trip generation.

Table 3.7-8 presents the trip generation rates and forecasted project-generated trips for weekday conditions. As shown in Table 3.7-8, the project would generate approximately 1,214 average daily trips (ADTs), including 86 AM peak hour trips and 109 PM peak hour trips. The project trip distribution was manually developed based on the geographical location of the project, as well as the characteristics of the proposed and surrounding land uses. Additional considerations were taken for North Pacific Street and W. Mission Road, which allows for only right-in/right-out movements for the south leg.

Table 3.7-8. Project Trip Generation

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
		Rate	ADT			In	Out	Total			In	Out	Total
Apartments	165 units	6/DU	990	8%	20:80	16	63	79	9%	70:30	62	27	89
Commercial Mixed Use	5,600 SF	40/KSF	224	3%	60:40	4	3	7	9%	50:50	10	10	20
Total			1,214			20	66	86			72	37	109

Source: LLG 2024a.
Note: Trip generation rates were obtained from *the (Not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002 by SANDAG
DU = Dwelling Unit, ADT = Average Daily Traffic

Construction Trip Generation

Grading of the project site would consist of approximately 4,030 cubic yards (cy) of cut material and 12,270 cy of fill material requiring an import of approximately 8,240 cy of material. Grading would consist of approximately 6,950 cubic yards (CY) of cut material and 4,400 CY of fill material requiring an export of approximately 2,250 CY of material.

Assuming 20 work days for materials export and the use of a 15 cy truck, there would be approximately 8 truckloads per day. The grading phase of the project is not expected to generate trips above the trips associated with the 165 apartments and proposed commercial uses. Therefore, the grading phase would not result in any traffic related significant impacts or substantial effects above those associated with the project. No traffic related impacts are identified during construction.

Local Transportation Analysis of Near-Term (Year 2025) Conditions

The following section presents the analysis of study area intersections and street segments under Near-Term Year 2025 Base conditions and Near-Term Year 2025 Base + Project conditions.

To forecast future traffic volumes for Near-Term (Interim Year 2025) conditions, the SANDAG ABM2+ Year 2016 and Year 2025 models were utilized to obtain the growth per year percent. Year 2025 traffic volumes were then developed based on an extrapolation using the calculated growth per year percent and applying it to the Year 2023 existing traffic volume counts for 2 years. In addition, traffic volumes from potential Cumulative projects provided by City of San Marcos staff were manually added

onto the study area intersection and street segments. These Cumulative projects are listed in Table 7–1 below. Cumulative projects are other projects in the study area that will add traffic to the local circulation system by the Interim Year.

Near-Term Year 2025 Intersection Analysis

Table 3.7-9 summarizes the intersection operations through the study area for the Near-Term Year 2025 Base Condition and Base + Project conditions.

Table 3.7-9. Near-Term Year 2025 - Intersection Operations Without and With Project

#	Intersection	Control Type	Peak Hour	Year 2025 Base Conditions		Year 2025 Base + Project Conditions		Δ[3]	Consistent with City LOS Standards?[4]
				Avg. Delay (sec.)[1]	LOS[2]	Avg. Delay (sec.)[1]	LOS[2]		
1	Mission Road/ Rancho Santa Fe Road	Signal	AM	29.6	C	29.6	C	0.0	Yes
			PM	31.6	C	31.8	C	0.2	Yes
2	Mission Road/ Pacific Street	Signal	AM	29.6	C	29.8	C	0.2	Yes
			PM	50.3	D	50.8	D	0.5	Yes
3	Mission Road/ Las Posas Road	Signal	AM	49.7	D	50.0	D	0.3	Yes
			PM	52.5	D	53.2	D	0.7	Yes
4	Mission Road/ Knoll Road	Signal	AM	53.4	D	53.9	D	0.5	Yes
			PM	43.1	D	43.2	D	0.1	Yes
5	Armorlite Drive/ Las Posas Road	Signal	AM	28.2	C	43.4	D	15.2	Yes
			PM	25.2	C	31.6	C	6.1	Yes
6	Armorlite Drive/ Project Driveway[5]	DNE[1]	AM	--	--	10.1	B	--	Yes
			PM	--	--	9.7	A	--	Yes
7	Las Posas Road/Descanso Avenue	Signal	AM	116.5	F	117.1	F	0.6	Yes
			PM	112.0	F	113.2	F	1.2	Yes
8	Las Posas Road/ SR-78 Westbound Ramp	Signal	AM	34.8	C	36.2	D	1.4	Yes
			PM	30.1	C	32.2	C	2.1	Yes

#	Intersection	Control Type	Peak Hour	Year 2025 Base Conditions		Year 2025 Base + Project Conditions		Δ[3]	Consistent with City LOS Standards?[4]
				Avg. Delay (sec.)[1]	LOS[2]	Avg. Delay (sec.)[1]	LOS[2]		
9	Las Posas Road/ Grand Avenue	Signal	AM	112.6	F	113.9	F	1.3	Yes
			PM	130.8	F	132.1	F	1.3	Yes
10	Grand Avenue/ SR-78 Eastbound Ramp	Signal	AM	39.6	D	40.1	D	0.5	Yes
			PM	43.4	D	43.8	D	0.4	Yes

Source: LLG 2024a.
Notes: (1) Average Delay expressed in seconds per vehicle
(2) LOS = Level of Service
(3) Δ denotes the increase in delay due to project
(4) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.
(5) Intersection does not exist under Year 2025 Base condition

As shown in Table 3.7-9, in the Near-Term Year 2025 Base condition, all intersections are calculated to operate acceptably at LOS D or better during both the AM and PM peak hours with the exception of the following intersections:

- Las Posas Road/Descanso Avenue – LOS F (AM and PM Peak Hours)
- Las Posas Road/Grand Avenue – LOS F (AM and PM Peak Hours)

With the addition of project traffic (Base + Project condition) all intersections would continue to operate acceptably at LOS D except for the following intersections which will continue to operate below an acceptable level of service:

- Las Posas Road/Descanso Avenue – LOS F (AM and PM Peak Hours)
- Las Posas Road/Grand Avenue – LOS F (AM and PM Peak Hours)

The addition of traffic from the proposed project would result in an increase in delay at the Las Posas Road/Descanso Avenue intersection of 0.6 seconds in the AM peak hour and 1.2 seconds on the PM peak hour. At the intersection of Las Posas Road/Grand Avenue, the proposed project would increase the delay at the intersection by 1.3 seconds in both the AM and PM peak hours. It take a 2 second increase in delay for intersections operating at LOS E or F for the improvements to be required. Since the proposed project's increase in delay at these intersections is less than 2.0 seconds, no improvements are required.

Near-Term (Year 2025) Segment Analysis

Table 3.7-10 summarizes the segment operations throughout the study area for the Near-Term Year 2025 Base and Near-Term Year 2025 Base + Project conditions. As shown in Table 3.7-10, all of the study area segments are calculated to operate acceptably at LOS C without the project. With the

addition of project traffic, all of the study area segments would continue to operate at LOS C or better and no segment improvements would be required.

Table 3.7-10. Near-Term Year 2025 Roadway Segment Operations Without and With Project

Roadway	Segment	Capacity (LOS E) (1)	Year 2025 Base Condition			Year 2025 Base + Project Condition			Δ(5)	Consistent with City LOS Standards?
			ADT(2)	V/C(3)	LOS(4)	ADT	V/C	LOS		
Mission Road	Rancho Santa Fe Road to Las Posas Road	40,000	15,390	0.385	B	15,510	0.388	B	0.003	Yes
	Las Posas Road to Knoll Road	40,000	21,266	0.532	C	21,368	0.535	C	0.003	Yes
Las Posas Road	Mission Road to SR-78 WB Ramps	60,000	33,637	0.561	B	34,607	0.577	B	0.016	Yes
	Mission Road to Grand Avenue	60,000	43,651	0.728	C	44,261	0.738	C	0.010	Yes

Source: LLG 2024a.

Notes: (1) Capacities based on San Marcos Roadway Classification and LOS table. See Appendix B of EIR Appendix O.
(2) ADT = Average Daily Traffic
(3) V/C = Volume to Capacity
(4) LOS = Level of Services
(5) Denotes a project-induced increase in the volume to capacity ratio
(6) City of San Marcos strives to maintain roadway segments operations based on LOS standards (LOS D or better) as outlined in the General Plan Mobility Element.

Local Transportation Analysis of Horizon Year 2050 Conditions

Year 2050 Network Conditions

The Long-Term (Horizon Year 2050) street network in the SANDAG ABM2+ Year 2050 model includes the roadways built to their City Mobility Element Classification. For the Year 2050 analysis, no changes to the study area roadway geometry or intersection control were assumed.

To obtain future ADTs for Long-Term (Horizon Year 2050) conditions, the forecasted Year 2050 ADT volumes were used to calculate peak hour volumes based partially on the existing relationship between ADT and peak hour volumes.

Horizon Year 2050 Intersection Analysis

Table 3.7-11 summarizes the intersection operations throughout the study area for the Horizon Year 2050 Base and Horizon Year 2050 Base + Project conditions.

Table 3.7-11. Horizon Year (2050) Intersection Operations Without and With Project

#	Intersection	Control Type	Peak Hour	Year 2050 Base Conditions		Year 2050 Base + Project Conditions		Δ[3]	Consistent with City LOS Standards?[4]
				Avg. Delay (sec.)[1]	LOS[2]	Avg. Delay (sec.)[1]	LOS[2]		
1	Mission Road/ Rancho Santa Fe Road	Signal	AM	34.4	C	34.4	C	0.0	Yes
			PM	37.3	D	37.5	D	0.2	Yes
2	Mission Road/ Pacific Street	Signal	AM	35.3	D	35.6	D	0.3	Yes
			PM	75.0	E	76.4	E	1.4	Yes
3	Mission Road/ Las Posas Road	Signal	AM	58.9	E	59.4	E	0.5	Yes
			PM	75.0	E	75.7	E	0.7	Yes
4	Mission Road/ Knoll Road	Signal	AM	64.8	E	65.4	E	0.6	Yes
			PM	71.4	E	71.6	E	0.2	Yes
5	Armorlite Drive/ Las Posas Road	Signal	AM	32.1	C	46.9	D	14.8	Yes
			PM	29.0	C	35.4	D	6.4	Yes
6	Armorlite Drive/ Project Driveway[5]	DNE TWSC	AM	--	--	10.3	B	--	Yes
			PM	--	--	10.0	A	--	Yes
7	Las Posas Road/Descanso Avenue	Signal	AM	164.5	F	165.5	F	1.0	Yes
			PM	161.4	F	162.5	F	1.1	Yes
8	Las Posas Road/ SR-78 Westbound Ramp	Signal	AM	74.1	E	75.4	E	1.3	Yes
			PM	80.7	F	82.5	F	1.8	Yes
9	Las Posas Road/ Grand Avenue	Signal	AM	152.6	F	153.9	F	1.1	Yes
			PM	202.9	F	203.1	F	0.2	Yes
10	Grand Avenue/ SR-78 Eastbound Ramp	Signal	AM	47.8	D	52.5	D	4.7	Yes
			PM	52.4	D	54.5	D	2.1	Yes

Source: LLG 2024a.

Notes: (1) Average Delay expressed in seconds per vehicle
(2) LOS = Level of Service
(3) Δ denotes the increase in delay due to project
(4) City of San Marcos strives to maintain intersection and roadway segment operations based on LOS standards (LOS D or better) outlined in the General Plan Mobility Element.
(5) Intersection does not exist under Year 2025 Base condition

As shown in Table 3.7-11, in the Horizon Year 2050 Base condition, all intersections are calculated to operate acceptably at LOS D or better during both the AM and PM peak hours with the exception of the following intersections:

- Mission Road/Pacific Street – LOS E (PM Peak Hour)
- Mission Road/Knoll Road – LOS E (AM and PM Peak Hours)
- Mission Road/Las Posas Road – LOS E (AM and PM Peak Hours)
- Las Posas Road/Descanso Avenue – LOS F (AM and PM Peak Hours)
- Las Posas Road/SR-78 Westbound Ramps – LOS E (AM Peak Hour) and LOS F (PM Peak Hour)
- Las Posas Road/Grand Avenue – LOS F (AM and PM Peak Hours)

With the addition of project traffic (Base + Project condition) the following intersections would continue to operate at below an acceptable LOS:

- Mission Road/Pacific Street – LOS E (PM Peak Hour)
- Mission Road/Knoll Road – LOS E (AM and PM Peak Hours)
- Mission Road/Las Posas Road – LOS E (AM and PM Peak Hours)
- Las Posas Road/Descanso Avenue – LOS F (AM and PM Peak Hours)
- Las Posas Road/SR-78 Westbound Ramps – LOS E (AM Peak Hour) and LOS F (PM Peak Hour)
- Las Posas Road/Grand Avenue – LOS F (AM and PM Peak Hours)

The addition of traffic from the proposed project would increase the delay at these intersections, ranging from 0.2 to 1.8 seconds, depending on the intersection and the peak hour. It take a 2 second increase in delay for intersections operating at LOS E or F for the improvements to be required. Since the proposed project's increase in delay at these intersections is less than 2.0 seconds, no improvements are required.

Horizon Year 2050 Segment Operations

Table 3.7-12 summarizes the segment operations throughout the study area for the Horizon Year 2025 Base and the Horizon Year 2050 Base + Project conditions. As shown in Table 3.7-12, all of the study area segments are calculated to operate acceptably at LOS C without the project. With the addition of project traffic, all of the study area segments would continue to operate at LOS C or better and no segment improvements would be required.

Table 3.7-12. Near-Term Year 2025 Roadway Segment Operations Without and With Project

Roadway	Segment	Capacity (LOS E) (1)	Year 2050 Base Condition			Year 2050 Base + Project Condition			Δ(5)	Consistent with City LOS Standards?
			ADT(2)	V/C(3)	LOS(4)	ADT	V/C	LOS		
Mission Road	Rancho Santa Fe Road to Las Posas Road	40,000	16,160	0.404	B	16,280	0.407	B	0.003	Yes
	Las Posas Road to Knoll Road	40,000	22,330	0.558	C	22,450	0.561	C	0.003	Yes
Las Posas Road	Mission Road to SR-78 WB Ramps	60,000	35,320	0.589	B	36,290	0.605	B	0.016	Yes
	Mission Road to Grand Avenue	60,000	45,830	0.764	C	46,440	0.774	C	0.010	Yes

Source: LLG 2024a.

Notes: (1) Capacities based on San Marcos Roadway Classification and LOS table. See Appendix B of EIR Appendix O.
(2) ADT = Average Daily Traffic
(3) V/C = Volume to Capacity
(4) LOS = Level of Services
(5) Denotes a project-induced increase in the volume to capacity ratio
(6) City of San Marcos strives to maintain roadway segments operations based on LOS standards (LOS D or better) as outlined in the General Plan Mobility Element.

Community Facility District (Congestion Management) Participation

As a condition of project approval, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD2011-01 (Congestion Management).

Multiple Habitat Conservation Program

The project's consistency with the MHCP is analyzed in Section 3.3, Biological Resources, of this EIR. The analysis concludes that while the project is located within the MHCP, it is not located within a FPA as defined in the MHCP and Draft San Marcos Subarea Plan. Additionally, the project would not impact any sensitive habitat. The project, therefore, is consistent with the MHCP and Draft San Marcos Subarea Plan.

3.7.5 Cumulative Impact Analysis

As described in Section 3.7 of the EIR, while the project seeks approval of a General Plan Amendment and Rezone of the project site, the proposed project would be consistent with the overarching goals and policies of the City's General Plan (see Table 3.7-7). In addition to the City's General Plan, the proposed project would also be consistent with the City's Municipal Code, SANDAG Regional Plan, and

applicable plans and polices. Furthermore, as analyzed throughout Chapter 3, implementation of the proposed project would not result in any significant unavoidable impacts that could further impact land use.

All cumulative projects would be subject to similar criteria as the proposed project, which would ensure compliance with existing applicable land use plans with jurisdiction over the project area. Any cumulative projects that propose amendments to the General Plan or Zoning Ordinance would be required to show that proposed uses would not result in significant environmental impacts due to a conflict with applicable policies in a similar way as the proposed project. Since all current and future projects would be analyzed for compatibility and compliance with land use regulations prior to approval, cumulative impacts related to land use and planning are determined to be less than significant.

Regarding the LOS analysis for compliance with the City's Mobility Element, the preceding analysis of the proposed project in Section 3.7.4 is based on methodologies that incorporate the cumulative effects of traffic from general growth and anticipated development in the area. This reflects background traffic and traffic from area-wide growth already approved by the City of San Marcos plus the development of the proposed project. As discussed in Section 3.7.4, the project would not result in any required roadway or intersection improvements due to degraded LOS in the 2025 and 2050 time frames. Therefore, the project would not result in any inconsistencies with the goals and policies of the Mobility Element relating to LOS. Cumulative impacts would be **less than significant**.

3.7.6 Mitigation Measures

No land use impacts were identified; therefore, no mitigation measures are required.

3.7.7 Conclusion

The current General Plan land use and zoning designation is Public-Institutional (P-I). With the proposed GPA and Rezone to SPA, the proposed project would be consistent with the applicable goals and policies of the City's General Plan. The project would also be consistent with the MHCP. Based upon the analysis presented in Sections 3.7.3 and 3.7.4, including Table 3.7-7, implementation of the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The analysis also included a detailed analysis to determine the proposed project's consistency with the Mobility Element policies that address LOS. The proposed project would not result in any decreases in LOS to the studies roadways or intersection in the 2025 and 2050 timeframe. Impacts would be less than significant.

Figure 3.7-1. Existing Conditions – Traffic Analysis Area

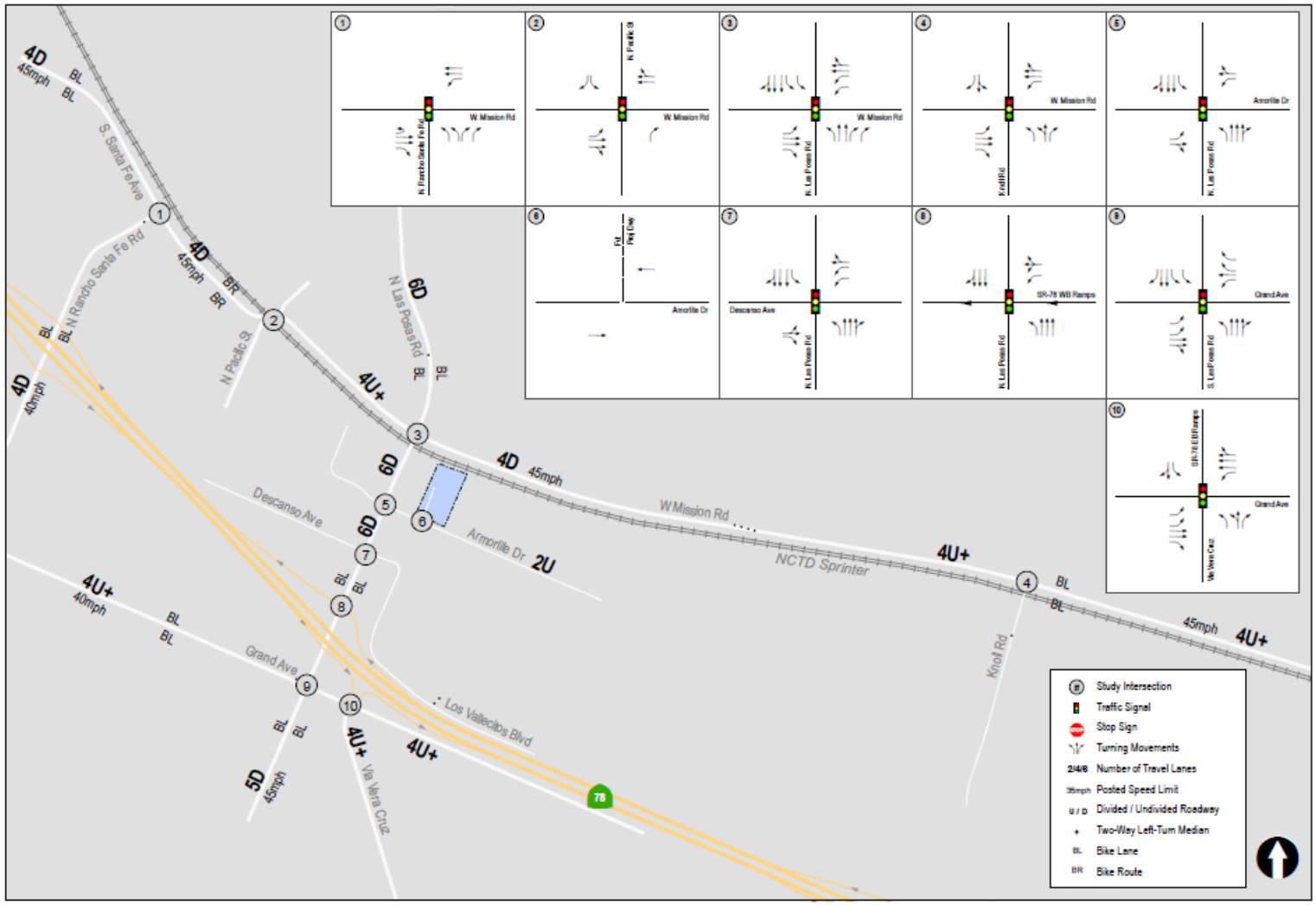

Table 3.7-7. Project Consistency with Applicable San Marcos General Plan Goals and Policies

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Land Use and Community Design Element		
Goal LU-1	Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.	The project would construct 165 residential apartments and 15% of the units would be affordable at the very low income level (30 to 50% of the Area Median Income or AMI). These units would add to the housing stock within the city and the greater North County area of San Diego and would meet the demand for future housing in the city, as contemplated by the City's General Plan. The proposed 5,600 s.f. of commercial use compliments the residential use and provides for a compatible mix of land uses. The project is consistent with this goal.
Goal LU-1, Policy LU-1.1/ Goal EJ-1, Policy EJ-1.1	Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.	The project area is developed with a mix of residential, commercial and institutional uses and is near the Palomar College SPRINTER station stop. The proposed project, which includes residential and commercial uses, would be consistent with the development type in the vicinity which includes both multifamily residential (Palomar College SPRINTER Station and Marc San Marcos multifamily, as well as commercial uses. The project's architectural design includes varied rooflines and facades to break up the bulk and scale of the building. Proposed materials include stucco walls, siding, stone veneer, metal and glass railings, metal or stucco awnings, decorative stucco frame and the use of decorative metal grills. The project is consistent with this policy.
Goal LU-1 Policy LU-1.3/ Goal EJ-1, Policy EJ-1.2	Diversify land uses by providing mixed use land uses in strategic locations within the City that place housing adjacent to employment.	The project proposes a mixed-use development with residential and commercial uses. The project would add housing in an area that has existing residential and is located within the vicinity of Palomar College, as well as other commercial land uses. The project places housing nearby an existing transit station, providing access to other areas with various employment opportunities. The project is consistent with this policy.
Goal LU-1, Policy LU-1.4	Maintain the natural integrity of open space preserves by ensuring development projects are sensitively integrated along the edges of preserved or protected areas.	The project site is a vacant, disturbed parcel, located in a developed portion of the city and is adjacent to development. There are no open space or protected areas adjacent to the project site. The project is consistent with this policy.
Goal LU-2	Promote development standards and land use patterns that encourage long-term environmental sustainability.	The project has been designed to maximize the residential density on a parcel in a developed portion of the city and adjacent to Las Posas Road and W. Mission Road which are served by bus service. The project is also adjacent to a SPRINTER rail

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		station. Developing housing near bus and transit stops encourages long-term environmental sustainability. The project complies with the City CAP, which includes measures to enhance project sustainability. Based upon the analysis in this EIR, the project would reduce all significant impacts to below a level of significance through the incorporation of mitigation measures. The project is consistent with this goal.
Goal LU-2, Policy LU-2.1/ Goal EJ-1, Policy EJ-1.3	Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use.	The project proposes a residential based density of 67 units/acre. The project site is located within the SM-6 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County and is adjacent to the SPRINTER Palomar College Station stop, bus stops, and pedestrian infrastructure. The proposed project is consistent with this policy.
Goal LU-2, Policy LU-2.2	Encourage new development to be sited to respond to climatic conditions, such as solar orientation, wind, and shading patterns.	The project would comply with the latest applicable Title 24 standards (e.g., installation of rooftop PV solar, use of electric tank water heater, EV charging stations, shade trees etc.). The 2022 Title 24 standards required that all low-rise residential buildings shall have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output is equal to or greater than the dwelling's annual electrical usage. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The project will comply with this policy.
Goal LU-2, Policy LU 2.3	Require the incorporation of green building practices, technologies, and strategies into development projects per code standards.	The project incorporates green features. As a design feature, the project would install 13 Level 2 electric vehicle (EV) spaces, 62 EV ready spaces and 25 EV capable spaces. The landscaping plan focuses on native, drought tolerant species and meets the City's Water Efficiency Landscaping Ordinance and Municipal Code, Title 20. This minimizes the use of water for irrigation. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal LU-2, Policy LU-2.5	Promote landscaping (e.g., native, drought-tolerant plants) that minimizes demands on water supply.	The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Proposed tree species include: golden rain tree, Chinese pistache, fern pine, African suman, Japanese zelkova, Chitalpa, king palm, queen palm, Marina strawberry tree, gold medallion tree, desert museum palo verde, Brisbane box, swan hill fruitless olive, Mexican palo verde, tree aloe, eastern redbud, western redbud and crape myrtle. The proposed project would also comply with the City's Model Water

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		Efficient Landscape Ordinance (WELO) and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-4 and the complete landscape plan and planting palette is included in Appendix A.3. The project is consistent with this policy.
Goal LU-2, Policy LU-2.7/ Goal EJ-1, Policy EJ-1.5	Promote the installation of trees to reduce the urban heat island effect and green infrastructure to reduce storm water runoff.	The proposed landscape plan includes a mix of trees, shrubs, grasses and groundcover and the plant selection emphasizes low and moderate water use species. Shade trees will reduce the urban heat island effect and help with stormwater runoff. Approximately 23% of the project site would be landscaped. Proposed tree species include: golden rain tree, Chinese pistache, fern pine, African suman, Japanese zelkova, Chitalpa, king palm, queen palm, Marina strawberry tree, gold medallion tree, desert museum palo verde, Brisbane box, swan hill fruitless olive, Mexican palo verde, tree aloe, eastern redbud, western redbud and crape myrtle. The proposed project would also comply with the City's WELO and Municipal Code, Title 20. The landscape concept plan is included as Figure 2-4. As discussed in greater detail in Section 5.6 (Hydrology/Water Quality) the project incorporates biofiltration features and source control and site design best management practices (BMPs) to reduce storm water runoff. The project is consistent with this policy.
Goal LU-3	Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.	The project's internal pedestrian circulation network would connect to the existing sidewalk along the project frontage on Armorlite Drive and would provide a connection between the project site and the Palomar College SPRINTER station and bus stops on Las Posas Road. There is a bicycle lane that runs along the project frontage and the site is adjacent to the SPRINTER transit stop at Palomar College. The project is consistent with this goal.
Goal LU-3, Policy LU-3.1	Require that new development and redevelopment incorporate connections and reduce barriers between neighborhoods, transit corridors, and activity centers within the City.	The project's internal pedestrian circulation network would connect to the existing sidewalk along the project frontage on Armorlite Drive and would provide a connection between the project site and the Palomar College SPRINTER station and bus stops on Las Posas Road. There is a bicycle lane that runs along the project frontage and the site is adjacent to the SPRINTER transit stop at Palomar College. The project is consistent with this policy.
Goal LU-3, Policy LU-3.4/ Goal EJ-5, Policy EJ-5.1	Provide non-motorized (pedestrian and bicycle) access/circulation within, and to, mixed-use centers to reduce reliance on the automobile.	The project includes internal walkways that would connect to sidewalk on Armorlite Drive and would provide a connection between the project site and the Palomar College SPRINTER station and bus stops on Las Posas Road. The commercial mixed-use component would provide additional commercial opportunities for area

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		residents. The project is also walkable to other mixed-use and commercial uses in the project vicinity. The project is consistent with the policy.
Goal LU-3, Policy LU-3.5/ Goal EJ-5, Policy EJ-5.2	Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.	The project incorporates 34,894 s.f. of common outdoor open space. The project incorporates pedestrian walkways which would connect to the City's larger pedestrian and bicycle network. There are no public use trails in the project vicinity. The project is consistent with this policy.
Goal LU-5	Promote community design that produces a distinctive, high-quality built environment with forms and character that create memorable places and enrich community life.	The project has been designed to incorporate architectural treatments, including varied rooflines to enhance the appearance of the project. This includes building articulation and setbacks and varied rooflines. Proposed materials include stucco walls, siding, stone veneer, metal and glass railings, metal or stucco awnings, decorative stucco frame and the use of decorative metal grills. The conceptual landscape plan provides for a mix of trees, shrubs, and groundcover to further enhance the look and feel of the project. The project is consistent with this goal.
Goal LU-5, Policy LU-5.4	Require building and site design that respects the natural topography and iconic ridgelines that serve as the visual backdrop for San Marcos.	The project has been designed to respect the existing topography on the site, which is relatively flat. No primary or secondary ridgelines are located within or adjacent to the project site. The nearest primary ridgeline is within the North City Area #1 map and includes Owens Peak and "P" Mountain. This primary ridgeline is located approximately 1.25 miles northeast of the project site. The project is consistent with this policy.
Goal LU-5, Policy LU-5.7	Architecture shall be enhanced with high-end building materials, varied roof lines, and decorative details.	The project incorporates high-quality design. The project design incorporates architectural treatments and design to break up the bulk and scale of the buildings. This includes building articulation and setbacks and varied rooflines. Proposed materials include stucco walls, siding, stone veneer, metal and glass railings, metal or stucco awnings, decorative stucco frame and the use of decorative metal grills. The project is consistent with this policy.
Goal LU-7	Direct and sustain growth and expansion in areas of San Marcos that can support a concentration of a variety of uses and are particularly suitable for multimodal transportation and infrastructure expansion and improvements.	The project site is within the City of San Marcos, surrounded by existing development including commercial and residential uses. Existing services and utilities are present in proximity to the project. The project is in proximity to transit and provides sidewalks to encourage non-motorized transportation. The project is consistent with this goal.

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Goal LU-7, Policy LU-7-2/ Goal EJ-5, Policy EJ-5.3	Coordinate pedestrian, transit and infrastructure upgrades with infill and redevelopment opportunities.	The project is in proximity to transit including the Palomar College Station SPRINTER station and the Palomar College Transit Center. The project will connect to existing pedestrian and bicycle infrastructure which provides access to these transit stations. The project is consistent with this goal.
Goal LU-8	Ensure that existing and future development is adequately serviced by infrastructure and public services.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for fire and police protection services would be offset with payment of appropriate development fees, including payment of Public Facility Fees (PFF) and annexation into and participation in applicable Community Facilities Districts (CFD). Impacts to parks would be offset through provision of on-site recreational facilities and payment of PFF. Additionally, as analyzed in Section 3.13 (Utilities and Service Systems) water and sewer services are available to serve the project and the project would either upgrade Vallecitos Water District (VWD) facilities, pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this goal.
Goal LU-8, Policy LU-8.1	New development shall pay its fair share of required improvements to public facilities and services.	As described further in Section 3.10 (Public Services), the project's demand for fire and police protection services would be offset with payment of appropriate CFD and PFF fees. The project is also required to pay appropriate statutory fees for schools, which would ensure impacts to schools are less than significant. Additionally, as analyzed in Section 3.12 (Utilities and Service Systems) water and sewer services are available to serve the project and the project would either upgrade VWD facilities, pay applicable Water and Wastewater Capital Facility Fees to VWD per Ordinances Nos. 175 and 176 or a combination of upgrades and fees at an equitable level. The project is consistent with this goal.
Goal LU-10	Fire protection, emergency services, and law enforcement: Provide effective, high-quality, and responsive services.	As described further in Section 3.10 (Public Services), the project impacts related to fire protection, emergency services and law enforcement were determined to be less than significant. The project's demand for fire and law enforcement services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this goal.
Goal LU-10, Policy LU-10.1	Provide demand-based firefighting and emergency medical services infrastructure,	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for

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	equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.	fire services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this policy.
Goal LU-10, Policy LU-10.2	Work closely with the County of San Diego Sherriff's Department to determine and meet the community needs for adequate personnel, equipment, and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands.	As described further in Section 3.10 (Public Services), the project impacts related to public services were determined to be less than significant. The project's demand for police protection services would be offset with payment of appropriate development fees, including payment of PFF and annexation into and participation in applicable CFDs. The project is consistent with this policy.
Goal LU-10, Policy LU-10.3	Continue to conduct Public Outreach and education regarding fire safety and crime prevention within San Marcos.	The San Marcos Fire Department public education program provides comprehensive fire education via presentations, informational demonstrations, health fairs, and station tours, among others. The San Diego County Sheriff's Department provides safety presentations to youth groups and community groups through their Community Oriented Policing and Problem Solving deputies. Deputies also attend Neighborhood Watch meetings. In addition, the Crime Prevention Unit focuses on community outreach regarding crime prevention techniques, current trends, and prevention education. The project's annexation into and contribution to the applicable CFD would aid in the continued provision of these services. The project is consistent with this policy.
Goal LU-11	Schools: Ensure all residents have access to high-quality education.	The project site is within the attendance boundaries of La Mirada Academy for grades TK-8 and San Marcos High School for grades 9-12. SMUSD allows for intra district transfers, and students could attend other schools. The project applicant would be required to pay all applicable development fees including payment of school mitigation fees, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050, The project is consistent with this goal.
Goal LU-11, Policy LU-11.1	Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning educational opportunities are provided in superior,	The project would generate 39 students for San Marcos Unified School District (SMUSD). The project developer would pay school mitigation fees to offset impacts to schools. The project is consistent with this policy.

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	accessible facilities that complement the surrounding land uses.	
Goal LU-11, Policy LU-11.2	Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.	The project would generate 39 students for SMUSD. The project developer/applicant would pay school mitigation fees to offset impacts to schools and provide a letter to the City showing proof of payment. The project is consistent with this policy.
Goal LU-12	Libraries: Provide library resources and services that meet the needs of the community.	While the proposed project does not include construction of any library facilities, this EIR has determined the project would not have a significant impact on library facilities (see Section 3.10, Public Services). The project is consistent with this goal.
Goal LU-12, Policy LU-12.1	Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.	While the proposed project does not include construction of any library facilities, this EIR has determined the project would not have a significant impact on library facilities (see Section 3.10, Public Services). Additional library resources are also available to the community through California State University San Marcos (CSUSM) and Palomar Community College. The project is consistent with this policy.
Goal LU-12, Policy LU-12.2	Accommodate technology needs of the community and locate accessible technology in the library.	While the proposed project does not include construction of any library facilities, project residents would have access to public computers through the existing library facilities. The project does not conflict with this policy.
Goal LU-13	Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.	The landscape plan for the project focuses on low-water use, native species. The Landscape Plan is presented in Figure 2-3. The proposed landscaping plan conforms to strict water conservation measures, including the City's WELO. Additionally, the project is required to pay Water Capital Facility Fees to VWD. The project is consistent with this goal.
Goal LU-13, Policy LU-13.1	Work closely with local and regional water providers to ensure high quality water supplies are available for the community.	VWD treats water to meet stringent state and federal standards. Ensuring quality at the source is cheaper than treatment. As described in Section 5.6 (Environmental Effects Found Not to be Significant - Hydrology/Water Quality), the project would not contribute significant polluted runoff due to the incorporation of bioretention and water quality BMPs. Therefore, the project would not impact any local or regional water supplies. The project is consistent with this policy.

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Goal LU-13, Policy LU-13.2	Actively promote water conservation programs aimed at reducing demand.	VWD promotes conservation and has issued drought alerts under drought conditions. While not currently in effect, future residential users within this district would be required to comply with any drought alerts and required conservation measures that would reduce demand. The project also incorporates low-water landscaping and would be required to comply with the City's WELO and CalGreen standards aimed at water conservation and the reducing the demand for water. The project is consistent with this policy.
Goal LU-14	Wastewater: Ensure an adequate wastewater system for existing and future development.	Based on the analysis in Section 3.13 (Utilities and Service Systems), there is currently adequate wastewater treatment capacity to serve the project. VWD periodically updates their master plan to ensure that long-term treatment capacity is available to match future demand For sewer service, the proposed project would connect to the existing 8- inch sewer main in Armorlite Drive. The project proposes to upsize approximately 539 feet of the existing 8-inch sewer main in Armorlite Drive to 10-inch diameter main (Pipe Segments AL-1 through AL-3). The project applicant would also pay VWD Wastewater Capital Facility Fees for portions of the improvements. The project is consistent with this goal.
Goal LU-14, Policy LU-14.1	Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.	Based on the analysis in Section 3.13 (Utilities and Service Systems), there is currently adequate wastewater treatment capacity to serve the project. VWD periodically updates their master plan to ensure that long-term treatment capacity is available to match future demand. For sewer service, the proposed project would connect to the existing 8- inch sewer main in Armorlite Drive. The project proposes to upsize approximately 539 feet of the existing 8-inch sewer main in Armorlite Drive to 10-inch diameter main (Pipe Segments AL-1 through AL-3). The project applicant would also pay VWD Wastewater Capital Facility Fees for portions of the improvements. The project is consistent with this policy.
Goal LU-14, Policy LU-14.2	Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.	Based on the analysis in Section 3.13 (Utilities and Service Systems), there is currently adequate water and wastewater treatment capacity to serve the project. VWD periodically updates their master plan to ensure that long-term treatment capacity is available to match future demand. The project proposes to upsize approximately 223 feet of 8-inch water main to a 10-inch diameter main and approximately 539 feet of the existing 8-inch sewer main in Armorlite Drive to 10-inch diameter main. The project would also pay Water Capital Facility Fees to VWD and Wastewater Capital Facility Fees to VWD. No circulation network improvements are required for the proposed project. The project is consistent with this policy.

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Goal LU-15	Flood control and storm water drainage facilities: ensure adequate flood control and storm water drainage is provided by the community.	As identified in Section 5.6 (Hydrology/Water Quality), off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. Therefore, implementation of the project would not impact flood control or storm water drainage facilities. The project is consistent with this goal.
Goal LU-15, Policy LU-15.1	Implement activities, practices, procedures, or facilities that avoid, prevent, or reduce pollution of the San Marcos Storm Water Conveyance System and receiving waters.	As identified in Section 5.6 (Hydrology/Water Quality), the project would utilize two proprietary treatment facilities (e.g., Modular Wetland System or approved equal) and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. The project is consistent with this policy.
Goal LU-15, Policy LU-15.2	Improve inadequate or undersized drainage/flood control facilities to solve both small neighborhood and large regional drainage and flood control problems.	As identified in Section 5.6 (Hydrology/Water Quality), off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. No inadequate or undersized drainage/ flood control facilities were identified that serve the project area. Therefore, implementation of the project would not impact flood control or storm water drainage facilities. The project is consistent with this policy.
Goal LU-15, Policy LU-15.3	Avoid, to the extent possible, development in floodplain and flood prone areas.	As identified in the Initial Study prepared for the proposed project (Appendix B.1), the project was determined to have no impact on 100-year flood hazards. The project does not propose development within a floodplain or flood prone area. The project is consistent with this policy.
Goal LU-15, Policy LU-15.4	Retain drainage courses in their natural condition, to the extent possible. Consider smaller-scale drainage improvements to protect the environment and avoid disturbing natural drainage courses; consider detention areas and raised building pads.	The project is adequately designed such that it would not substantially alter the existing drainage pattern of the site or area. The project detains and retains runoff through the site with combined water quality and hydromodification bioretention and BMPs. The project is consistent with this policy.
Goal LU-16	Solid waste: reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.	As discussed in Section 3.13. (Utilities and Service Systems), the City of San Marcos is in compliance with AB 939 and AB 341, which requires not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. The City is meeting these targets and the project would participate in the City's recycling and composting efforts. The project is consistent with this goal.

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Goal LU-16, Policy LU-16.1	Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.	Non-recyclable waste, including general trash and green materials, would be collected and transported for disposal by EDCO, a licensed hauler. The project is consistent with this policy.
Goal LU-16, Policy LU-16.2	Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.	The City of San Marcos is in compliance with AB 939, which requires 50% waste diversion through recycling. The project will provide recycling bins to facilitate recycling among future residents. The project is consistent with this policy.
Goal LU-17	Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective, and efficient services for San Marcos.	As discussed in Section 3.13 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. The project would be served by San Diego Gas & Electric (SDG&E) for electricity and gas service. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Armorlite Drive. The project is consistent with this goal.
Policy LU-17.2	Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.	As discussed in Section 3.13 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. The project would be served by SDG&E for electricity and gas service. The design for the dry utilities' connection is still under preparation, however the project proposes to connect to existing infrastructure within Armorlite Drive. The project is consistent with this policy.
Policy LU-17.3	The City shall prohibit above ground utility equipment within any of the pedestrian pathway and street frontage areas. All above ground utilities shall be placed either within; "wet closets" within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in	As discussed in Section 3.13 (Utilities and Service Systems) communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. However, no specific systems upgrades are proposed with this project, and the location and extent of future facilities is not known at this time. Any above-ground utilities would be placed within "wet closets" within the buildings or underground vaults, or behind buildings where they are not visible, per the requirements of this policy. The project is consistent with this policy.

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	advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.	
Mobility Element		
Goal M-1	Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.	Internal circulation within the project would connect to the existing sidewalk along Armorlite Drive. The proposed project does not require any offsite roadway improvements, and would not adversely affect the existing multimodal circulation system that serves the city land uses. The project is consistent with this goal.
Goal M-1, Policy M-1.1	Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.	Based upon the traffic analyses prepared for the project by LLG (2024a and 2024b), the project does not result in any transportation impacts, nor does it result in any safety concerns. The project is consistent with this policy.
Goal M-1, Policy M-1.2	Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.	The project has been designed to include an internal drive aisle. No private streets are proposed. The project does not result in any significant transportation related impacts and no improvements beyond what is already proposed as part of the project design are required. The project is consistent with this policy.
Goal M-1, Policy M-1.3/ Goal EJ-1, Policy EJ-1.6	Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the City. (See Policy M-1.3)	The project would be required to prepare a TDM plan consistent with the reports of Measure T-9 of the City's CAP Consistency Review Checklist. Per the CAP Checklist, the project will provide a transit discount, designation parking, pedestrian connections, bicycle space and a space for telecommuting. The project is consistent with this policy.
Goal M-1, Policy M-1.4	Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element: LOS D or better for Vehicles as a prioritized mode or the City shall allow for flexible LOS where	The location transportation analysis prepared for the project (Appendix O) relied on this LOS technique to determine project-related impacts to the circulation network. As summarized in Section 3.7.4 (Land Use and Planning) of this EIR, there would not be any degradation of LOS to below acceptable levels with implementation of the project. The project would be consistent with this goal/policy.

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	warranted (e.g., accepting a lower LOS than identified above).	
Goal M-1, Policy M-1.6/ Goal EJ-2, Policy EJ-2.10	Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.	The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network. There is an existing sidewalk along the project frontage on Armorlite Drive. The project is consistent with this policy.
Goal M-1, Policy M-1.7/ Goal EJ-2, Policy EJ-2.11	Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.	Complete streets balance the needs of all users, both motorized and non-motorized, in design and construction. Armorlite Drive in front of the project site is constructed as a complete street. The project includes pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project is consistent with this policy.
Goal M-2	Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.	Travel modes within and surrounding the project area include vehicular, pedestrian, and bicycle. The SPRINTER rail station is also located near the project site. The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project is consistent with this policy.
Goal M-2, Policy M-2.1	Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate within residential neighborhoods; while maintaining the City's desire to provide connectivity on the roadway network.	The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network on Armorlite Drive. The project is consistent with this policy.
Goal M-3	Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.	The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network on Armorlite Drive. The project site is also near the SPRINTER rail station. As a design feature the project would install EV chargers. The project is consistent with this goal.
Goal M-3, Policy M-3.1/ Goal EJ-1, Policy EJ-1.8	Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and	The placement of high density residential along a transit corridor would provide for convenient nearby transit access to future residents of the project. The project site fronts Class I multi-use path, and sidewalks are provided to the nearby bus stops and the SPRINTER rail station. Therefore, the project site is already served by integrated,

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	greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.	multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles. Therefore, the project is consistent with this policy.
Goal M-3, Policy M-3.2	Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.	The project would not impact any existing bicycle or pedestrian infrastructure. The project's circulation network would connect to the existing pedestrian and bicycle infrastructure on Armorlite Dive. Therefore, the project is consistent with this policy.
Goal M-3, Policy M-3.3	Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.	The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project is consistent with this policy.
Goal M-3, Policy M-3.5/ Goal EJ-5, Policy EJ-5.5	Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.	The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network. The project is consistent with this policy.
Goal M-3, Policy M-3.9/ Goal EJ-5, Policy EJ-5.6	Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.	The project includes internal pedestrian pathways that would connect to the existing pedestrian and bicycle network. The landscape concept plan includes street trees along the project's frontage with Armorlite Drive and internal to the project. The project is consistent with this policy.
Conservation and Open Space Element		
Goal COS-1	Identify, protect, and enhance significant ecological and biological resources within San Marcos and its adaptive Sphere of Influence.	A biological technical report (Appendix D) was prepared for the project and summarized in Section 3.3. (Biological Resources). The project site contains Diegan coastal sage scrub and non-native grassland. No sensitive species were identified on the project site. Implementation of mitigation measures MM-BIO-1 through MM-BIO-3

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		would reduce impacts to biological resources to below a level of significance. The project is consistent with this goal.
Goal COS-1, Policy COS-1.1	Support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.	A biological technical report (Appendix D) was prepared for the project and summarized in Section 3.3 (Biological Resources). The project will mitigation for impacts to Diegan coastal sage scrub and nonnative grassland through off-site acquisition, in lieu fees, a purchase of credits from Buena Creek Mitigation Bank or another approved mitigation bank, or a combination thereof. The project is consistent with this policy.
Goal COS-1, Policy COS-1.2	Ensure that new development, including Capital Improvement Projects, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.	No oak woodlands, jurisdictional wetlands, or habitat linkages occur on the project site (Dudek 2025 ~~2024~~). The project is consistent with this policy.
Goal COS-2	The City is committed to conserving, protecting, and maintaining open space, agricultural, and limited resources for future generations. By working with property owners, local organizations, and state and federal agencies, the City can limit the conversion of resource lands to urban uses.	The project site is an undeveloped parcel in a developed portion of the city and has been identified for development in the City's General Plan. The project site does not support any agricultural resources. The project is consistent with this policy.
Goal COS-2, Policy COS-2.1	Provide and protect open space areas throughout the City for its recreational, agricultural, safety, and environmental value.	A total of 47,375 s.f. of open space is proposed. This includes a mix of common open space and private open space. These areas would provide recreation for the future residents. The project is consistent with this policy.
Goal COS-2, Policy COS-2.2	Limit, to the extent feasible, the conversion of open space to urban uses and place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, water and agricultural resources protection, and overall community benefit.	The project site is an undeveloped parcel in a developed portion of the city and has been identified for development in the City's General Plan. The project would not result in the conversion of open space land. he project is consistent with this policy.
Goal COS-2, Policy COS-2.5	Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological,	The proposed project's potential impacts to cultural resources are detailed in Section 3.4 (Cultural Resources) and potential impacts to tribal cultural resources are addressed in Section 3.12 (Tribal Cultural Resources) of the EIR. A cultural resources

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	and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.	report was also prepared for the project. The City reached out to tribes consistent with the requirements of SB 18 and AB 52 and met with tribes that requested consultation. The project would implement cultural resources and tribal cultural resources mitigation measures to reduce impacts to below a level of significance. The project is consistent with this policy.
Goal COS-2, Policy COS-2.6	Preserve healthy mature trees where feasible; where removal is necessary, trees shall be replaced at a ratio of 1:1.	There is one existing pepper tree on the southwest corner of the project site that would be removed to prepare the site for development. The project will implement a landscape plan which would provide replacement trees. Proposed tree species include: golden rain tree, Chinese pistache, fern pine, African suman, Japanese zelkova, Chitalpa, king palm, queen palm, Marina strawberry tree, gold medallion tree, desert museum palo verde, Brisbane box, Swan Hill fruitless olive, Mexican palo verde, tree aloe, eastern redbud, western redbud and crape myrtle. The project is consistent with this policy.
Goal COS-3	Protect natural topography to preserve and enhance the natural beauty of San Marcos.	According to Section 3.1 (Aesthetics), the project has been designed to respect the existing topography on the site, which is relatively flat. Views of the surrounding hillsides would remain unobstructed from SR-78. The project site is not a protected scenic vista. The project also incorporates extensive design features that ensure that the visual character changes blend with the existing topography and surrounding development. The project is consistent with this goal.
Goal COS-3, Policy COS-3.1	Preserve scenic resources, including prominent landforms such as Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas through conservation and management policies.	None of the prominent landforms as identified in the General Plan are on-site. While implementation of the proposed project would result in changes in the viewshed, development would not alter or impede views of prominent landforms. Views to prominent landforms would remain unobstructed. In addition, the project site is not a protected scenic vista. The project is consistent with this policy.
Goal COS-3, Policy COS-3.2	Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the hillsides, ridgelines, canyons, and view corridors that comprise the visual character in San Marcos.	According to Section 3.1 (Aesthetics), the Specific Plan includes an overall architectural design theme to ensure a pleasant, orderly, and visually appealing development. The proposed architectural design includes elevation treatments, varied rooflines, and a mix of materials. The project has been designed to respect the existing topography on the site. Landscape materials would be used to enhance architectural elements and the provided street trees would enhance the pedestrian experience along the project frontages. The project is consistent with this policy.

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Goal COS-3, Policy COS-3.3	Continue to work with new development and redevelopment project applicants in designing land use plans that respect the topography, landforms, view corridors, wildlife corridors, and open space that exists.	The project has been designed to respect the existing topography. The project site is relatively flat and located in a lower-elevation portion of the city. There are no view corridors in the project vicinity nor are there any wildlife corridors on the project site. The project site is not identified as a scenic vista. The project is consistent with this policy.
Goal COS-3, Policy COS-3.4	Evaluate potential impacts to visual and aesthetic resources, including the potential to create new light sources, while still maintaining and being sensitive to rural lighting standards.	Development of the proposed project would create new sources of light at a site that is currently undeveloped. Lighting would be guided by the City of San Marcos Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080, Light and Glare Standards to aid in the preservation of dark sky conditions. Lighting impacts were determined to be less than significant (Section 3.1 Aesthetics). The project is consistent with this policy.
Goal COS-4	Improve regional air quality and reduce GHG emissions that contribute to climate change.	The project's impact to air quality would be less than significant as described in Section 3.2 (Air Quality) of this EIR. The project would not conflict with or obstruct implementation of any air quality plan or violate any air quality standard. Based upon the analysis in Section 3.6 (Greenhouse Gas), GHG emissions under the proposed project would be 77% less than if the project was built out under the current General Plan Designation of Public-Institutional with a 160,000 s.f. data center. The project would also implement all of the applicable CAP Consistency Review Checklist (CAP Checklist) measures. The project is consistent with this goal.
Goal COS-4, Policy COS-4.1/ Goal EJ-1, Policy EJ-1.9	Continue to work with the U.S. EPA, CARB, SANDAG, and the SDAPCD to meet State and federal ambient air quality standards.	Implementation of the proposed project would not exceed any air quality standard during construction or operation. Impacts are less than significant. The project is consistent with this policy.
Goal COS-4, Policy COS-4.3/ Goal EJ-1, Policy EJ-1.11	Participate in regional efforts to reduce GHG emissions.	The project is not anticipated to impair implementation of AB 32. Development of the project would not affect regional efforts to reduce GHG emissions. The City's updated 2020 CAP quantifies community emissions, identifies emission reduction targets, and specifies climate action measures to reduce GHG emissions. Based upon the analysis in Section 3.6 (Greenhouse Gas), GHG emissions under the proposed project would be 77% less than if the project was built out under the current General Plan Designation of Public-Institutional with a 160,000 s.f. data center. The project would also implement all of the applicable CAP Checklist measures. The project is therefore consistent with the City's CAP and the project would be consistent with the goals of AB 32. The project is consistent with this policy.

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Goal COS-4, Policy COS-4.4/ Goal EJ-1, Policy EJ-1.12	Quantify community wide and municipal GHG emissions, set a reduction goal, identify, and implement measures to reduce GHG emissions as required by governing legislation.	The City's updated 2020 CAP quantifies community emissions, identifies emission reduction targets, and specifies climate action measures to reduce GHG emissions. Based upon the analysis in Section 3.6 (Greenhouse Gas), GHG emissions under the proposed project would be 77% less than if the project was built out under the current General Plan Designation of Public-Institutional with a 160,000 s.f. data center. The project would also implement all of the applicable CAP Checklist measures. The project is therefore consistent with the City's CAP and the project would be consistent with the goals of AB 32. The project is consistent with this policy.
Goal COS-4, Policy COS-4.5/ Goal EJ-1, Policy EJ-1.13	Encourage energy conservation and the use of alternative energy sources within the community.	As discussed in Section 3.13 (Utilities and Service Systems), the proposed project includes various on-site features and measures to reduce the proposed project's energy consumption. Further, the proposed project would be required to be consistent with appropriate mandatory project design features in the CAP Consistency Review Checklist that would reduce operational electricity consumption. The project would be built-in compliance with Title 24 requirements applicable at that time. Additionally, as a design feature, the project would install EV spaces. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-4, Policy COS-4.6 Goal EJ-1, Policy EJ-1.14	Promote efficient use of energy and conservation of available resources in the design, construction, maintenance and operation of public and private facilities, infrastructure, and equipment.	As discussed in Section 3.13 (Utilities and Service Systems), the proposed project includes various on-site features and measures to reduce the proposed project's energy consumption. Further, the proposed project would be required to be consistent with appropriate mandatory project design features in the CAP Consistency Review Checklist that would reduce operational electricity consumption. The project would be built-in compliance with Title 24 requirements applicable at that time. Additionally, as a design feature, the project would install EV spaces. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.
Goal COS-4, Policy COS-4.8/ Goal EJ-1, Policy EJ-1.15	Encourage and support the generation, transmission, and use of renewable energy.	Development on the project site would meet the requirements of California's Building Energy Efficiency Standards, which focus on several key areas to improve the energy efficiency of newly constructed buildings. The project has also been designed to meet current California Building Code requirements as related to green building practices. The project is consistent with this policy.

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Goal COS-5	Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.	VWD promotes conservation and has issued drought alerts under drought conditions. Future residential users within this district would be required to comply with any issued alerts and required conservation measures that would reduce demand. The project proposes a landscape plan that emphasizes low water use species in adherence to the City of San Marcos Water Efficient Landscape Ordinance. The project is consistent with this goal.
Goal COS-6	Protect and restore appropriate surface water and groundwater beneficial uses through prioritizing the improvement of locally impaired water bodies within the City of San Marcos subwatersheds.	The project is located within a watershed with numerous impaired water bodies. The BMP Design Manual requires that pollutants of concern for each impaired water body in the watershed be treated by engineered treatment controls to a medium pollutant removal efficiency or better prior to leaving the project site. The project proposes treatment of storm water runoff by constructing two treatment facilities, and an underground vault. Any groundwater infiltration would likely reach surface flows before reaching groundwater due to the approximate depth to groundwater. Therefore, according to Section 5.6 (Hydrology/Water Quality), the project would not have a potentially significant adverse impact on groundwater quality or result in significant impacts to impaired water bodies. The project is consistent with this goal.
Goal COS-6, Policy COS-6.2	Promote watershed stewardship as the community norm.	The project includes a comprehensive water quality management approach, which incorporates two treatment facilities, an underground vault, and the use of BMPs, to ensure the project would not contribute any pollutants to area watersheds. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a Stormwater Pollution Prevention Plan, and implement BMPs in compliance with the National Pollution Discharge Elimination System (NPDES) permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would contribute to watershed stewardship. The project is consistent with this policy.
Goal COS-7	Achieve sustainable watershed protection for surface and ground water quality that balances social, economic, and environmental needs.	The project includes a comprehensive water quality management approach, which incorporates two treatment facilities, an underground vault, and the use of BMPs, to ensure the project would not contribute any pollutants to area watersheds. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare a Stormwater Pollution Prevention Plan (SWPPP), and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would contribute to watershed stewardship. The project is consistent with this policy.

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Goal COS-8	Focus watershed protection, surface and groundwater quality management on sources and practices that the City has the ability to affect.	Implementation of the project's comprehensive water quality management plan, which incorporates two treatment facilities, an underground vault, and the use of BMPs, would ensure that the project would treat runoff containing the pollutants of concern for locally impaired water bodies. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare an SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would reduce construction effects on receiving water quality and protect stormwater runoff. The project is consistent with this policy.
Goal COS-8, Policy COS-8.4	Require new development and redevelopment to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, BMPs, LID, hydromodification strategies consistent with the Current San Diego RWQCB Municipal Stormwater NPDES Permit, and all future municipal stormwater permits.	Implementation of the project's comprehensive water quality management plan, which incorporates two treatment facilities, an underground vault, and the use of BMPs, would ensure that the project would treat runoff containing the pollutants of concern for locally impaired water bodies. Additionally, the project proponent would obtain a General Construction Activity Stormwater Permit, prepare an SWPPP, and implement BMPs in compliance with the NPDES permit. Erosion and sediment control and non-stormwater management measures implemented as required under these permits would reduce construction effects on receiving water quality and protect stormwater runoff. The project is consistent with this policy.
Goal COS-10	Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.	As discussed in Section 3.13 (Utilities and Service Systems), the City of San Marcos is in compliance with AB 939 and AB 341, which requires not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. The City is meeting these targets and the project would participate in the City's recycling and composting efforts. The project is consistent with this goal.
Goal COS-10, Policy COS-10.1	Promote the curbside recycling program to divert residential refuse from the landfills.	As discussed in Section 3.13 (Utilities and Service Systems), the City of San Marcos is in compliance with AB 939 and AB 341, which requires not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter . The City is meeting these targets and the project would participate in the City's recycling and composting efforts. The project is consistent with this policy.

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Goal COS-11	Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.	A cultural resources report was prepared for the project site, summarized in Section 3.4 (Cultural Resources). Mitigation measures are incorporated (MM-CR-1a, MM-CR-1b and MM-CR-2) to reduce potential impacts to cultural resources to below a level of significance. The project would not have the potential to impact paleontological resources. The project is consistent with this goal.
Goal COS-11, Policy COS-11.1	Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.	A cultural resources report was prepared for the project site, summarized in Section 3.4 (Cultural Resources). Mitigation measures are incorporated (MM-CR-1a, MM-CR-1b and MM-CR-2) to reduce potential impacts to cultural resources to below a level of significance. The project is consistent with this policy.
Goal COS-11, Policy COS-11.2	Prohibit the demolition or removal of a historic structure without evaluation of the condition of the structure, the cost of rehabilitation, and the feasibility of alternatives to preservation in place including but not limited to relocation, or reconstruction offsite, and/or photo-preservation.	There are no historic structures on the project site, therefore the project would not have the potential to impact such resources. The project is consistent with this policy.
Parks, Recreation and Community Health Element		
Goal PR-1	Plan for, acquire, develop, and maintain a system of local parks connected through an integrated network of trails and high quality recreational facilities.	Section 5.12 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City in addition to what is provided on-site. The project includes 34,894 s.f. of common outdoor open space, 2,050 s.f. of common indoor space and 10,431 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.1/ Goal EJ-2, Policy EJ-2.6/ Goal EJ-5, Policy EJ-5.7	Develop and maintain a complete system of public parks and recreational amenities that provide opportunities for passive and active recreation at a minimum standard of 5 acres per 1,000 residents. Parks, trails, and recreational facilities will enhance community livability, public health, and safety; should be	Section 5.12 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City in addition to what is provided on-site. The project includes 34,894 s.f. of common outdoor open space, 2,050 s.f. of common indoor space and 10,431 s.f. of private open space. With payment of the

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	equitably distributed throughout the City; and be responsive to the needs and interests of residents, employees, and visitors.	PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.3/ Goal EJ-2,Policy EJ-2.7	Ensure that the development of parks, trails, and recreation facilities and services keeps pace with development and growth within the City.	Section 5.12 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City in addition to what is provided on-site. The project includes 34,894 s.f. of common outdoor open space, 2,050 s.f. of common indoor space and 10,431 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.4/ Goal EJ-5, Policy EJ-5.8	Promote increased access to parks and open spaces, pedestrian- and bike-oriented routes to parks and open space, greening of public rights-of-way, and a variety of active and passive uses of parks and open space.	Section 5.12 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City in addition to what is provided on-site. The project includes 34,894 s.f. of common outdoor open space, 2,050 s.f. of common indoor space and 10,431 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.5/ Goal EJ-5, Policy EJ-5.8	Require new development to be designed and constructed in accordance with the approved Parks Master Plan to meet or exceed the City's parkland standard of 5 acres per 1,000 residents.	Section 5.12 (Recreation) analyzed the project's impact on recreation. The proposed project would result in an increase in the City of San Marcos population by approximately 369 residents. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the City in addition to what is provided on-site. The project includes 34,894 s.f. of common outdoor open space, 2,050 s.f. of common indoor space and 10,431 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Goal PR-1, Policy PR-1.7	Promote park and facility design that discourages vandalism, deters crime, provides	Safety considerations of the proposed project are discussed in Section 3.10 (Public Services). As proposed, the proposed project, including development of park and

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	natural surveillance, and creates a safe and comfortable environment.	open space areas, does not present any unique public safety challenges. The proposed project is consistent with this policy.
Goal PR-2, Policy PR-2.2/ Goal EJ-5, Policy EJ-5.10	Implement the trail network per the Master Trails Plan to increase opportunities for physical activity (e.g., walking, biking), healthy lifestyles, and to reduce reliance on cars.	The City's Master Trail Plan does not indicate any trails along the project frontage. The closest trail is the Inland Rail Trail. The proposed project would be required to pay the City's PFF, which goes toward the acquisition and development of local and community park facilities throughout the city, in addition to what is provided on-site. The project includes 34,894 s.f. of common open space and 10,431 s.f. of private open space. With payment of the PFF and provision of on-site common open space and recreational amenities, impacts would be less than significant. The project is consistent with this policy.
Safety Element		
Goal S-1	Reduce risks to the community from earthquakes by regulating new development and redevelopment to prevent the creation of new geologic and seismic hazards.	The project would implement all recommendations from the geotechnical investigation (Appendix H of the EIR). Additionally, development on the project site would be subject to the requirements of the latest California Building Code (CBC) for resistance to seismic shaking and would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of the State of California Occupational Safety and Health Administration (Cal/OSHA) to minimize risks from earthquakes. The project is consistent with this goal.
Goal S-1, Policy S-1.1	Reduce the risk of impacts from geologic and seismic hazards by applying current and proper land use planning, development engineering, building construction, and retrofitting requirements.	The project would implement all recommendations from the geotechnical investigation (Appendix H of the EIR). Additionally, development on the project site would be subject to the requirements of the latest California Building Code for resistance to seismic shaking, and would be constructed in accordance with other CBC criteria, current seismic design specifications of the Structural Engineers Association of California, other applicable regulations, and all applicable requirements of Cal/OSHA to minimize risks from earthquakes. The project is consistent with this policy.
Goal S-1, Policy S-1.2	Investigate specific groundwater levels and geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture,	There is no known faulting at the project site so the potential for surface fault rupture is low. The project site is not located in a State liquefaction susceptibility zone and is mapped in an area with generally zero to low liquefaction. The project is consistent with this policy.

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	liquefaction, or other geologic hazards are suspected.	
Goal S-2	Minimize the risk to people, property, and the environment due to flooding hazards.	The project site is not located within a 100-year flood hazard area nor within the City's Flood Damage Prevention Overlay Zone. Additionally, off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. The project is consistent with this goal.
Goal S-2, Policy S-2	Require existing private development to take responsibility for maintenance and repair of structures to resist flood damage.	The project site is not located within a 100-year flood hazard area nor within the City's Flood Damage Prevention Overlay Zone. Additionally, off-site runoff is projected to be less than pre-development conditions with implementation of the project. No on-site or downstream flooding hazard has been identified. The project is consistent with this policy.
Goal S-3	Minimize injury, loss of life, and damage to property results from structure or wildland fire hazards.	Implementation of the proposed project would result in a developed area with roads, structures, and landscape vegetation. The project site is located in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. No impact is identified for this issue area. The proposed project is consistent with this goal.
Goal S-3, Policy S-3.1	Require development to be located, designed, and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility, and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.	The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. No impact is identified for this issue area. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.2	Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination	According to Section 3.10 (Public Services), the project would have a less than significant impact on fire protection services. Additional staff and resources would be provided via Community Facilities District No. 2001-01, which the project would

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	among fire protection and emergency service providers.	annex into and pay required mitigation fees. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.3	Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.	Access to the project site would be via one unsignalized driveways on Armorlite Drive. The driveway and internal drive aisles have been designed to allow for access by emergency response equipment including fire trucks. The Fire Marshal has reviewed the project plans. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.4	Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.	The Fire Marshal has reviewed the project plans. The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.
Goal S-3, Policy S-3.6	Protect communities from unreasonable risk of wildfire within very high fire hazard severity zones. a. Assess site constraints when considering land use designations near wildlands to avoid or minimize wildfire hazards as part of a community plan update or amendment. b. Identify building and site design methods or other methods to minimize damage if new structures are located in very high fire hazard severity zones on undeveloped land and when rebuilding after fire. c. Require ongoing brush management to minimize the risk of structural damage or loss due to wildfires. d. Provide and maintain water supply systems to supplies for structural fire suppression. e. Provide adequate fire protection.	The Fire Marshal has reviewed the project plans. The project site is located in a Local Responsibility Area with a Non-VHFHSZ designation per CALFIRE's San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding areas are not identified as a Fire Hazard Severity Zone. The proposed project is consistent with this policy.
Goal S-4	Protect life, structures, and the environment from the harmful effects of hazardous materials and waste.	During construction, there is a potential for accidental upset of fuels, lubricants, and other materials; however, there are existing federal and state standards in place for the handling, storage, and transport of these materials. During operation, the only

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		hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. The proposed project is consistent with this goal.
Goal S-4, Policy S-4.1	Promote and support the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials in accordance with applicable federal, State, and local regulations.	During construction, there is a potential for accidental upset of fuels, lubricants, and other materials; however, there are existing federal and state standards in place for the handling, storage, and transport of these materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.2/ Goal EJ-1, Policy EJ-1.21	Require areas of known or suspected contamination to be assessed prior to reuse or redevelopment. Plan for reuse of contaminated areas in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.	A Phase I ESA and a Phase 2 ESA were for the project (Appendix I and J). Based upon the Phase 1 ESA, Phase 2 ESA, and subsequent exploratory investigations, there are not any Recognized Environmental Conditions (RECs) or significant hazards on the project site which has the potential to create a significant hazard to the public or environment. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.3/ Goal EJ-1, Policy EJ-1.22	Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected.	The proposed project is not anticipated to generate, release, or use large amounts of hazardous materials. During operation, the only hazardous materials anticipated for transport, use, or disposal would be routinely used household products. Household hazardous waste programs are in place, which address the use, handling, and disposal of these items. The proposed project is not anticipated to impact any sensitive uses in the project vicinity. The proposed project is consistent with this policy.
Goal S-4, Policy S-4.4/ Goal EJ-1, Policy EJ-1.23	Avoid locating sensitive uses near established hazardous materials users or industrial areas where incompatibilities would result, except in cases where appropriate safeguards have been developed and implemented.	A Phase I ESA and a Phase 2 ESA were for the project (Appendix I and J). Based upon the Phase 1 ESA, Phase 2 ESA, and subsequent exploratory investigations, there are not any RECs or significant hazards on the project site. The proposed project would not place sensitive uses near any known hazardous materials users or industrial areas. The proposed project is consistent with this policy.
Goal S-5	Establish and maintain an effective emergency response program to respond to disasters and maintain continuity-of-life support functions during an emergency.	The Safety Element of the General Plan states that W. Mission Road is one of the east/west streets that should remain open and passable during an emergency. San Marcos is also included in the San Diego County Multi-Jurisdictional Hazard Mitigation Plan, which identifies risks posed by natural and human-caused disasters.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		The project has been reviewed by the Fire Marshal. According to Section 5,5 (Environmental Effects Found not to be Significant - Hazards and Hazardous Materials), the project would not impact any roadway or staging areas identified in any emergency planning documents. The project is consistent with this goal.
Goal S-5, Policy S-5.3	Develop, implement, and maintain an effective evacuation program for areas of risk in the event of a disaster.	The San Marcos Emergency Operations Plan identifies several main thoroughfares as primary evacuation corridors in an emergency. The project provides one driveway on Armorlite Drive. According to Section 5,5 (Environmental Effects Found not to be Significant - Hazards and Hazardous Materials), the project would not impact any roadway or staging areas identified in any emergency planning documents. The project is consistent with this policy.
Goal S-6	Provide neighborhood safety through effective law enforcement.	Current staff levels are adequate to meet current law enforcement demand; however, development of the proposed project would increase this demand. To supplement police protection services, the project would contribute to CFD 98-01 Improvement Area #1. The project is consistent with this goal.
Goal S-6, Policy S-6.1	Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity.	Current staff levels are adequate to meet current law enforcement demand; however, development of the proposed project would increase this demand. To supplement police protection services, the project would contribute to CFD 98-01 Improvement Area #1. The project is consistent with this policy.
Goal S-6, Policy S-6.2	Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention.	The San Diego County Sheriff's Department provides presentations to schools through their Community Oriented Policing and Problem Solving (COPPS) deputies. A school resource officer who handles all crimes relating to school students is also assigned to high schools within the City of San Marcos. The project's contribution to CFD 98-01 Improvement Area #1 would aid in the continued provision of these services. The project is consistent with this policy.
Goal S-6, Policy S-6.3/ Goal EJ-4, Policy EJ-4.12	Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.	The San Diego County Sheriff's Department provides CPTED reviews through their crime prevention unit. The project's required contribution to a CFD would aid in the continued provision of this service. The Sheriff's Department has reviewed all project plans. The project is consistent with this policy.
Goal S-7	Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.	The project site is located within Review Area 2 of the McClellan-Palomar airport influence area and may be subject to annoyances associated with noise, vibration, and overflights. Consistent with the ALUCP, recordation of overflight notification documents would be required as a condition of project approval. Review Area 2 also limits heights of structures in areas of high terrain. The project site is not

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
		characterized as high terrain and proposed development would remain below surrounding prominent topographic features. The project is consistent with this goal.
Goal S-7, Policy S-7.1	Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.	The project site is located within Review Area 2 of the McClellan-Palomar airport influence area and may be subject to annoyances associated with noise, vibration, and overflights. Consistent with the ALUCP, recordation of overflight notification documents would be required as a condition of project approval. Review Area 2 also limits heights of structures in areas of high terrain. The project site is not characterized as high terrain and proposed development would remain below surrounding prominent topographic features. The project is consistent with this goal.
Noise Element		
Goal N-1	Promote a pattern of land uses compatible with current and future noise levels.	The noise study prepared for the project (Appendix P) modeled ambient and future noise levels at the project site and compared with exterior and interior noise thresholds contained in the City's General Plan. The project would not result in any operational noise impacts and construction impacts will be mitigated to below a level of significance. Additionally, the project is not of a type that would generate excessive noise to neighboring uses during daily operation. Noise associated with increased traffic as a result of the project would not increase levels above the significance threshold of 3 dBA CNEL. Therefore, the project is consistent with this goal.
Goal N-1, Policy N-1.1	Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.	The noise study prepared for the project (Appendix P) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.8 (Noise), operational noise impacts would be less than significant and construction related noise impacts would be mitigated to below a level of significance. The project is consistent with this policy.
Goal N-1, Policy N-1.2	Ensure that acceptable noise levels are maintained near noise-sensitive uses.	The noise study prepared for the project (Appendix P) analyzed noise impacts to and generated from implementation of the proposed project. As summarized in Section 3.8 (Noise), operational noise impacts would be less than significant and construction related noise impacts would be mitigated to below a level of significance. Mitigation measures would ensure that adjacent residential uses would not be impacted. The project is consistent with this policy.
Goal N-1, Policy N-1.3/	Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design	The project design includes rooftop parapets and shielding to minimize noise from HVAC equipment. The project design also includes balcony shielding for units facing

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal EJ-4, Policy EJ-4.11	features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.	W. Mission Road to ensure private outdoor spaces do not have noise levels in excess of City standards. The project is consistent with this policy.
Goal N-1, Policy N-1.4	Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.	The project design includes rooftop parapets and shielding to minimize noise from HVAC equipment. The project design also includes balcony shielding for units facing W. Mission Road to ensure private outdoor spaces do not have noise levels in excess of City standards. The project is consistent with this policy.
Goal N-1, Policy N-1.5	Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.	A noise study was prepared for the project (Appendix P) and summarized in Section 3.8, (Noise), of the EIR. Operational noise impacts were determined to be less than significant. Construction noise impacts related to potential blasting and rock crushing would be mitigated to below a level of significance. The project would not exceed the Normally Acceptable levels in Table 7-3. The project is consistent with this policy.
Goal N-2	Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.	A noise study was prepared for the project (Appendix P) and summarized in Section 3.8, (Noise), of the EIR. Operational noise impacts were determined to be less than significant. Construction noise impacts related to potential blasting and rock crushing would be mitigated to below a level of significance. The analysis considered the influence of adjacent roadway noise and the SPRINTER rail line. The project is consistent with this goal. The project is consistent with this policy.
Goal N-2, Policy N-2.1	Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.	A noise study was prepared for the project (Appendix P) and summarized in Section 3.8, (Noise), of the EIR. For residential units with line-of-site to W. Mission Road, private outdoor spaces would have enhanced balcony shielding consisting of a minimum 3.5-foot barrier. The location where the enhanced shielding would be incorporated is shown on Figure 3.8-2. The project is consistent with this policy.
Goal N-2, Policy N-2.2	Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.	A noise study was prepared for the project (Appendix P) and summarized in Section 3.8, (Noise), of the EIR. Operational noise impacts were determined to be less than significant. Construction noise impacts related to potential blasting and rock crushing would be mitigated to below a level of significance. The analysis considered the influence of adjacent roadway noise and the SPRINTER rail line. The project is consistent with this policy.
Goal N-2, Policy N-2.3	Advocate the use of alternative transportation modes such as walking, bicycling, mass transit,	The project's internal pedestrian circulation network would connect to the existing sidewalk on Armorlite Drive. The project is adjacent to the NCTD SPRINTER rail line and near the Palomar College transit center. The project design incorporate bicycle

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
	and non-combustible engine vehicles to reduce traffic noise.	racks per the requirements of the City's CAP Checklist. The project would also require the property manage make transit passes available to residents and business of the building per the requirements of the CAP Checklist. The project is consistent with this policy.
Goal N-3	Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.	The nearest noise-sensitive land uses are the existing multi-family units to the south and east of the project site. As analyzed in Section 3.8, (Noise), operational noise impacts will be less than significant and construction noise impacts will be reduced to below a level of significance. HVAC equipment would be shielded with parapets as part of the project design. The project is consistent with this goal.
Goal N-3, Policy N-3.1	When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.	The nearest noise-sensitive land uses are the existing multi-family units to the south and east of the project site. As analyzed in Section 3.8, (Noise), operational noise impacts will be less than significant and construction noise impacts will be reduced to below a level of significance. Construction activities would comply with the City's Municipal Code requirement and all construction activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. Therefore, the project is consistent with this goal.
Goal N-3, Policy N-3.2	Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.	Construction activities would comply with the City's Municipal Code requirement and all construction activities would occur between 7:00 AM and 4:30 PM, Monday through Friday. No construction activities will occur on weekends or holidays. The project is consistent with this policy.
Housing Element		
Goal H-1	Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.	The project would construct 165 apartments and 15% of the units would be affordable units at the very-low income level. The project proposes a mix of one-bedroom and two-bedroom units ranging from 620 s.f. to 1,020 s.f. The project is consistent with this goal.
Goal H-1, Policy 1.1/ Goal EJ-4, Policy EJ-4.5	Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities.	The project would construct 165 apartments and 15% of the units would be affordable units at the very-low income level. The project proposes a mix of one-bedroom and two-bedroom units ranging from 620 s.f. to 1,020 s.f. The project site is adjacent to the SPRINTER rail line along W. Mission Road, which is a highly traveled transportation corridor. The project is in proximity to employment opportunities, including Palomar College. The project is consistent with this policy.

General Plan Element Goal or Policy	Goal/Policy Description	Project's Consistency with Goal/Policy
Goal H-2	Protect, encourage, and provide housing opportunities for persons of lower and moderate incomes.	The project would construct 165 apartments and 15% of the units would be affordable units at the very-low income level. The project is consistent with this policy.
Goal H-4, Policy 4.4	Balance the need to protect and preserve the natural environment with the need to provide additional housing and employment opportunities.	The project balances the provision of housing with the preservation of open space. The project would develop 165 apartments and 5,600 s.f. of commercial use. All impacts would be mitigated to below a level of significance. Additionally, Section 4.0, (Alternatives), of the EIR provides a range of alternative development scenarios, including a no development alternative, considered for the project site.

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3.8 Noise

Introduction

This section addresses the potential noise effects resulting from the construction of the project and analyzes the noise compatibility of the project site with surrounding land uses. The analysis is based on the following report, which is included as **Appendix P** of the Environmental Impact Report (EIR):[17]

- *Noise Assessment, Armorlite Lofts Residential Development GPA23-002, R23-0001, SDP23-0003, CUP23-002 City of San Marcos*, prepared by LDN Consulting, November 4, 2024 (LDN 2024).

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to have an adverse impact resulting from excessive noise levels from being located within the vicinity of a private airstrip or within two miles of a public airport. Therefore, this issue is not discussed further in this section. Section 5.9, Environmental Effects Found Not to Be Significant – Noise of the EIR provides additional information on this topic.

Table 3.8-1 summarizes the project- and cumulative-level noise impacts, by threshold.

Table 3.8-1. Noise Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.	Potentially Significant	Less than Significant	Mitigated to Less Than Significant
#2 - Generation of excessive groundborne vibration or groundborne noise levels.	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.8.1 Existing Conditions

This section provides background on noise analysis and a description of the existing noise environment on the project site and surrounding area and details the results of the ambient noise monitoring.

Background

Noise

Noise is generally defined as "unwanted sound" that interferes with normal activities. Excessive levels of noise can cause hearing loss, although the principal human response to environmental noise is annoyance. Noise is measured on a logarithmic scale of sound pressure level known as decibel (dB).

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

A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only frequencies audible to the human ear. Equivalent sound level (Leq) is the noise metric used to collect short-term noise level measurement samples. It represents a steady state sound level containing the same total energy as a time varying signal over a given sample period, with Lmax and Lmin as the maximum and minimum, respectively. Community receptors are more sensitive to unwanted noise intrusion during the evening and at night. State law requires that, for some planning purposes, an artificial dBA increment be added to quiet time noise levels in a 24-hour A-weighted average noise descriptor called the Community Noise Equivalent Level (CNEL). In general, a change of 10 dBA is perceived as twice as loud (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear), a 5 dBA change in community noise levels is clearly noticeable, and a 3 dBA change is the smallest increment that is perceivable by most people. Changes of 1 to 2 dBA are not usually detectable by the human ear.

The decibel level of a sound decreases (or attenuates) exponentially as the distance from the source of that sound increases. For a single point source, such as a piece of mechanical equipment, the sound level normally decreases by about 6 dBA for each doubling of distance from the source. Sound that originates from a linear, or "line" source, such as a heavily traveled traffic corridor, attenuates by approximately 3 dBA per doubling of distance, provided that the surrounding site conditions lack ground effects or obstacles that either scatter or reflect noise.

Surrounding site conditions, meteorological conditions, and the presence of manmade obstacles such as buildings and barriers may also reduce noise at the location of a receiver. For example, vegetation and loose soils may either absorb or scatter the sound from roadways, yielding sound attenuation rates in environments with these major ground effects that are as high as 4.5 dBA for each doubling of distance (compared to 3 dBA without major ground effects). In addition, barriers between a noise source and a receiver can substantially reduce noise levels at the receiver. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction. Taller barriers will provide increased noise reduction.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Human response to vibration is best approximated by the vibration velocity level.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration known as "structureborne/groundborne" vibration. Vibration in buildings is typically perceived as rattling of windows or items on shelves or the motion of building surfaces. The vibration of building surfaces can also be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings unless the receptors are in proximity to heavy equipment.

Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to rapidly decrease with distance away from the source. Soil properties also affect the propagation of vibration. Man-made vibration issues are, therefore, usually confined to short distances from the source (i.e., 50 feet or less).

Vibration amplitudes are usually described in terms of peak levels, as in peak particle velocity (PPV) in inches/second that correlates best with human perception. The particle velocity is the velocity of the soil particles resulting from a disturbance. Agencies such as the California Department of Transportation (Caltrans) use the PPV descriptor because it correlates well with damage or complaints. Caltrans estimates that the threshold of perception is approximately 0.006 inches/second PPV and the level at which continuous vibration begins to annoy people is approximately 0.010 inches/second PPV (Caltrans 2020).

Existing Noise Environment

The project site is located on Armorlite Drive, north of State Route 78 (SR-78) and east of Las Posas Road between W. Mission Road and Armorlite Drive. The project site is vacant and does not currently contain any sources of noise or vibration generation. The project vicinity is developed with existing commercial and retail uses to the west, existing multi-family residential units to the east, W. Mission Road, and the San Diego Northern Railroad (SPRINTER rail line) to the north, and Armorlite Drive to the south. Existing multi-family residential units are located across Armorlite Drive to the south.

Existing ambient noise measurements were collected for a 24-hour period by LDN Consulting from approximately 1:00 PM on Thursday, December 7, 2023 to 1:00 PM on Friday, December 8, 2023. The sound level meter and microphone were mounted on a tripod approximately five feet above the ground and equipped with a windscreen during all measurements. The monitoring location was determined based on site access and noise impact potential to the proposed sensitive uses. Long-term monitoring location 1 (LT-1) was located at the northern portion of the project site, as shown in **Figure 3.8-1**.

Table 3.8-2 provides the hourly noise levels along with Leq and CNEL values. As shown in Table 3.8-2, the overall sound level was found to be 61.8 dBA Leq and 67.6 CNEL.

Table 3.8-2. Measured Long-Term Noise Levels

Date	Time	Noise Levels (dBA)	
		Leq	CNEL
Thursday, December 7, 2023	2:00 PM	60.0	60.0
	3:00 PM	62.5	62.5
	4:00 PM	62.6	62.6
	5:00 PM	64.9	64.9
	6:00 PM	63.4	63.4
	7:00 PM	63.6	63.6
	8:00 PM	62.9	67.9
	9:00 PM	63.6	68.6
	10:00 PM	57.1	62.1
	11:00 PM	60.4	70.4
Friday, December 8, 2023	12:00 AM	51.7	61.7
	1:00 AM	50.6	60.6

Date	Time	Noise Levels (dBA)	
		Leq	CNEL
	2:00 AM	49.4	59.4
	3:00 AM	49.7	59.7
	4:00 AM	49.5	59.5
	5:00 AM	62.4	72.4
	6:00 AM	65.1	75.1
	7:00 AM	65.3	75.3
	8:00 AM	62.9	62.9
	9:00 AM	64.4	64.4
	10:00 AM	61.7	61.7
	11:00 AM	58.4	58.4
	12:00 PM	60.6	60.6
	1:00 PM	60.4	60.4
	Overall	61.8	67.6

Source: LDN 2024

3.8.2 Regulatory Setting

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

Federal

Federal Bodies

Title 49 Chapter 65 of the United States Code of Federal Regulations provides for the regulation of noise to protect the public health, safety, and welfare. The Federal Highway Administration (FHWA); Federal Rail Administration and Federal Transit Administration (FTA); and the Federal Aviation Administration, respectively, regulate roadway, rail, and aircraft.

Vibration and Groundborne Noise Impact Regulations

Publications of the FTA and Caltrans are two of the seminal works for the analysis of groundborne noise and vibration relating to transportation and construction-induced vibration. While the project is not subject to FTA or Caltrans regulations, these guidelines serve as a useful tool to evaluate vibration impacts. Caltrans guidelines recommend that a standard of 0.2 in/sec PPV not be exceeded for the protection of normal residential buildings, and that 0.08 in/sec PPV not be exceeded for the protection of old or historically significant structures. With respect to human response within residential uses (i.e., annoyance, sleep disruption), FTA recommends a maximum acceptable vibration standard of 80 vibration velocity (VdB).

State

State noise standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulatory guidelines governing noise levels generated by individual motor vehicles and guidelines governing occupational noise control are not applicable to planning efforts nor are these areas typically subject to California Environmental Quality Act (CEQA) analysis.

Office of Planning and Research General Plan Guidelines

The State of California General Plan Guidelines, published by the Governor's Office of Planning and Research (OPR), provides guidance for the acceptability of specific land use types within areas of specific noise exposure. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. General Plan guidelines are advisory in nature. Local jurisdictions, including San Marcos, have the responsibility to set specific noise standards based on local conditions.

State of California Code of Regulations Title 24

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or LDN) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or LDN) of at least 45 dBA [California's Title 24 Noise Standards, Chap. 2-35].

Local

City of San Marcos General Plan

The following are applicable goals and policies from the City of San Marcos General Plan, Noise Element:

- Goal N-1: Promote a pattern of land uses compatible with current and future noise levels.
    - Policy N-1.1: Address the potential for excessive noise levels when making land use planning decisions in accordance with Table 7-3 Land Use Compatibility Noise Standards.
    - Policy N-1.2: Ensure that acceptable noise levels are maintained near noise-sensitive uses.
    - Policy N-1.3: Incorporate design features into residential land use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls, and sound attenuating architectural design and construction methods.
    - Policy N-1.4: Require new development projects to provide barriers to reduce noise levels, or provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.

  - Policy N-1.5: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the Normally Acceptable levels identified in Table 7-3.

- Goal N-2: Control transportation-related noise from traffic, rail, and aviation sources near noise sensitive land uses.
  - Policy N-2.1: Encourage only noise-compatible land uses along existing and future roadways, highways, and freeways.
  - Policy N-2.2: Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.
  - Policy N-2.3: Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-combustible engine vehicles to reduce traffic noise.
- Goal N-3: Control non-transportation-related noise from commercial, industrial, construction, and other sources on noise sensitive land uses.
  - Policy N-3.1: When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.
  - Policy N-3.2: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

The following is an applicable goal and policy from the City of San Marcos General Plan, Safety Element:

- Goal S-7: Comply with the McClellan-Palomar Airport Land Use Compatibility Plan.
  - Policy S-7.1: Record an overflight notification document in association with the approval of any new residential land use within the AIA overflight notification area consistent with the ALUCP.

The following is an applicable goal and policy from the City of San Marcos General Plan, Environmental Justice Element:

- Goal EJ-4: Foster healthy living conditions for people of all backgrounds and incomes
  - Policy EJ-4.11: Incorporate design features into residential use projects that can be used to shield residents from excessive noise. Design features may include, but are not limited to: berms, walls and sound attenuating architectural design and construction methods.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7 in Section 3.7, the project is consistent with the applicable goals and policies.

City of San Marcos Municipal Code

Chapter 10.24 (Noise)

Chapter 10.24 of the San Marcos Municipal Code prohibits loud, annoying, or unnecessary noises. However, the Noise Ordinance does not specifically provide quantified property line noise level limits. Section 10.24.020 provides definitions for and examples of prohibited noise sources. Included in the list of prohibited noise sources is demolition and building construction activities that occur Monday

through Friday before 7:00 AM and after 6:00 PM or on Saturdays before 8:00 AM or after 5:00 PM. No grading, extraction or construction is allowed on Sundays or City holidays. The noise ordinance does not include a quantified noise level limit for construction noise. Section 10.24.030 describes the standards for how sound is assessed. Commonly, the City has utilized Section 36.409 the County of San Diego's Noise Ordinance noise limit of 75 dBA Leq (8-hour) for construction activities.

The Noise Element of the County of San Diego General Plan establishes limitations on sound levels to be received by various land uses. New development may cause an existing noise sensitive land use (NSLU) to be affected by noise caused by the new development, or it may create or locate a NSLU in such a place that it is affected by noise. The Noise Element identifies airports and traffic on public roadways as the major sources of noise. The County Noise Element establishes the exterior noise level standards and provides interior standards and definitions. If the exterior noise level would exceed 75 dBA CNEL, new development would not be approved.

Section 17.08.080 (Hours of Work)

The City of San Marcos Municipal Code (Section 17.08.080) restricts the hours of construction related activities to between 7:00 AM and 6:00 PM Monday through Friday, 8:00 AM. and 5:00 PM Saturdays, and no construction work is allowed on Sundays or City holidays.

Section 17.60.06 (Blasting Operations Procedures)

The City of San Marcos Section 17.60.06 of the City's Municipal Code states that all blasting operations within the City of San Marcos are prohibited unless a Certificate of Authorization is first obtained from the San Marcos Building Director and an Operations Permit issued by the Fire Chief. Additional relevant sections of the City's Code for Blasting are provided below:

- The general contractor or property owner/developer shall give reasonable notice in writing at the time of issuance of a building permit, grading permit or encroachment license to all residences or businesses within 600 feet of any potential blast location. The notice shall be in a form approved by the Building Director. Any resident or business receiving such notice may request of the Building Director that a notice of impending blasting be given by the blaster at the time of the 12-hour advance notice given to the Building Director. The general contractor or property owner/developer shall make all reasonable efforts to contact any and all parties requesting the second notice.
- The blaster shall file a written certification with the Building Director certifying that the general notice required by Section 17.60.060(b) has been given. The certificate shall include addresses and date(s) of notification. A copy shall be retained on file at the Building Division.
- Inspections of all structures within 300 feet of the blast site shall be made before blasting operations. The persons inspecting shall obtain the permission of the building owner to conduct an inspection. The inspections shall be done by a registered structural engineer employed by the blaster or project contractor. The inspection shall be only for the purpose of determining the existence of any visible or reasonably recognizable pre-existing defects or damage in any structure. Inspection refusal shall be at the discretion of the property owner.
- Blasting shall only be permitted between the hours of 9:00 AM and 4:00 PM during any weekday, Monday through Friday, exclusive of City recognized holidays unless special circumstances warrant another time or day and special approval is granted by the Building Director and Fire Chief.

Chapter 20.300 (Zoning Ordinance)

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. Section 20.300, Performance Standards, within the Zoning Ordinance identifies noise regulations to prohibit unnecessary, excessive, and annoying noises. Table 20.300-4, included below as **Table 3.8-3** identifies allowable noise levels (dBA) by zone type. For multifamily residential and commercial uses, the allowable noise level, as measured at the property line is 65 dBA from 7:00 AM to 10:00 PM. and 55 dBA from 10:00 PM to 7:00 AM. Increases in allowable noise levels listed in Table 3.8-3 may be permitted in accordance with the standards outlined in **Table 3.8-4.**

1. Noise shall be measured with a sound-level meter that meets the standards of the American National Standards Institute (ANSI) (Section S1.4-1979, Type 1 or Type 2). Noise levels shall be measured in decibels at the property line of the receptor property, and at least five (5) feet above the ground and ten (10) feet from the nearest structure or wall. The unit of measure shall be designated as an A-weighted decibel (dBA) Leq standard. A calibration check shall be made of the instrument at the time any noise measurement is made.
2. No person shall create or allow the creation of exterior noise that causes the noise level to exceed the noise standards established by Table 20.300-4 (shown as Table 3.8-3). Increases in allowable noise levels listed in Table 20.300-4 (shown as Table 3.8-3) may be permitted in accordance with the standards outlined in Table 20.300- 5 (shown as Table 3.8-4).
3. No person shall create nor allow the creation of noise that causes the interior noise level when measured within a dwelling unit to exceed forty-five (45) dBA at any time, except as permitted by Table 20.300-6 (shown as **Table 3.8-5**).
4. Use of compressors or other equipment, including vents, ducts, and conduits, but excluding window or wall-mounted air conditioners, that are located outside of the exterior walls of any building, shall be enclosed within a permanent, noncombustible, view-obscuring enclosure to ensure that the equipment does not emit noise in excess of the ANSI standards.

Table 3.8-3. Exterior Noise Standards by Zone

Zone	Allowable Noise Level (dBA Leq) Measured from the Property Line
Single-Family Residential (A, R-1, R-2)[1,2]	
7:00 AM and 10:00 PM (daytime)	60
10:00 PM and 7:00 AM (overnight)	50
Multifamily Residential (R-3) [(1)(2)]	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	55
Commercial (C, O-P, SR)[(3)]	
7:00 AM and 10:00 PM (daytime)	65
10:00 PM and 7:00 AM (overnight)	55
Industrial	
7:00 AM and 10:00 PM (daytime)	65

Zone	Allowable Noise Level (dBA Leq) Measured from the Property Line
10:00 PM and 7:00 AM (overnight)	60

Source: City of San Marcos 2023 (Table 20.300-4).

Notes: (1) For single-family detached dwelling units, the "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10 percent of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.
(2) For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.
(3) For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.

Table 3.8-4. Permitted Increase in Noise Levels

Permitted Increase (dBA)	Duration (cumulative minutes per hour)
5	15
10	5
15	1
20	Less than 1 minute

Source: City of San Marcos 2023 (Table 20.300-5).

Table 3.8-5. Permitted Increase in Interior Noise Levels

Permitted Increase (dBA)	Duration (cumulative minutes per hour)
5	1
10	Less than 1 minute

Source: City of San Marcos 2023 (Table 20.300-6).

3.8.3 Thresholds of Significance

According to Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, noise impacts are considered potentially significant if they cause:

- **Threshold #1:** Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.
- **Threshold #2:** Generation of excessive groundborne vibration or groundborne noise levels.

The term "substantial increase" is not defined by any responsible agency. Under ambient conditions, people generally do not perceive that noise has clearly changed until there is a 3 dBA difference. Therefore, a threshold of 3 dBA is commonly used to define "substantial increase," as it is noticeable to humans under typical ambient conditions.

As identified above, impacts related to being in the vicinity of a private airstrip or airport land use plan are not discussed in this section. Section 5.9, Environmental Effects Found Not to Be Significant – Noise, provides additional information on this topic.

San Marcos Noise Impact Thresholds

Construction Noise Standards

The City of San Marcos Municipal Code does not set noise limits on construction activities. Commonly, the City utilizes the County of San Diego's Noise Ordinance Section 36.409 noise limit of 75 dBA at any existing sensitive receptor for construction activities. Municipal Code Sections 10.24.020 and Section 17.08.080 limit the hours of grading, extraction, and construction activities to between the hours of 7:00 AM and 6:00 PM, Monday through Friday, 8:00 AM and 5:00 PM Saturdays, No grading, extraction or construction is allowed on Sundays or City holidays.

As mentioned, typically, the threshold for determining whether construction noise is significant is 75 dBA. However, in the past, the City of San Marcos has applied the operational noise standards to rock crushing activities when operating on a longer-term basis. The City's 65 dBA Leq operational noise-standard at the nearest multi-family residence and 70 dBA for commercial has been applied in the analysis.

City of San Marcos Ground Vibration Standards

The City of San Marcos does not have adopted vibration criteria for construction. The FTA provides guidelines for acceptable levels of groundborne vibration for various types of buildings that are sensitive to vibration and for potential human annoyance. While the project is not subject to FTA or Caltrans regulations, these guidelines serve as a useful tool to evaluate vibration impacts. For purposes of identifying potential project-related vibration impacts resulting from the proposed project, the FTA guidelines will be used. **Table 3.8-6** shows the FTA groundborne vibration and noise impact guidelines for human annoyance.

Table 3.8-6. Groundborne Vibration and Noise Impact Criteria (Human Annoyance)

	Groundborne Vibration Impact Levels (VdB re 1 microinch/second)			Groundborne Noise Impact Levels (dB re 20 micropascals)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[4]	N/A[4]	N/A[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* September 2018.

1. "Frequent Events" are defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.
2. "Occasional Events" are defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
5. Vibration-sensitive equipment is not sensitive to groundborne noise.

In addition to the vibration annoyance standards presented in Table 3.8-6, the FTA also applies the following standards for construction vibration damage. As shown in **Table 3.8-7**, structural damage is possible for typical residential construction when the PPV exceeds 0.2 inch per second (in/sec). This criterion is the threshold at which there is a risk of damage to normal dwellings.

Table 3.8-7. Groundborne Vibration Impact Criteria (Structural Damage)

Building Category	PPV (in/sec)	VdB
I. Reinforced-concrete, steel, or timber (no plaster)	0.5	102
II.Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* September 2018.
Note: RMS = Root Mean Square (RMS) velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Transportation Noise Standards

To control transportation-related noise sources such as arterial roads, freeways, airports, and railroads, the City of San Marcos has established guidelines for acceptable community noise levels in the Noise Element of the General Plan (Table 7-3 of the General Plan Noise Element). For noise sensitive rural and single-family residential uses, schools, libraries, parks, and recreational areas, the City Noise Element requires an exterior noise level of less than 60 dBA CNEL for outdoor usable areas, such as yard and patio areas. For multi-family developments, the standard is 65 dBA CNEL. A standard of 70 dBA CNEL is typically applied to commercial uses. The City has also established an interior noise limit of 45 dBA CNEL for all residential uses. Noise sensitive indoor spaces are subject to compliance with CCR Title 24 noise insulation standards demonstrating a 45 dBA CNEL interior noise level with all windows of the structure closed.

For this analysis, a direct roadway noise impact would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment.

Operational Noise Standards

The City noise regulations that apply to the proposed project are found in Chapter 20.300 Site Planning and General Development Standards of the City Municipal Code. These regulations aim to prohibit unnecessary, excessive, and annoying noises from all sources, as certain noise levels are detrimental

to the health and welfare of individuals. The standards of this section and of Chapter 10.24 Noise of the Municipal Code apply to all land uses unless otherwise specified. No person shall create or allow the creation of exterior noise that causes the noise level to exceed the noise standards established by Table 20.300-4 of the Municipal Code. See Table 3.8-3 earlier in this section.

The City Ordinance limits noise generation in commercial and multi-family zones to 65 decibels (dB) Leq (one-hour average) between the hours of 7:00 am and 10:00 pm and 55 dB Leq between the hours of 10:00 PM and 7:00 AM as measured at the project property line as shown above in Table 3.8-3. Per the City of San Marcos General Plan Noise Element (GPNE), noise standards for commercial, multi-family, and mixed-use land uses are the same, and are higher than single-family residential areas because they reflect a more urban environment (GPNE, pg. 7-10). Higher thresholds are permitted due to the integrated mix of residential and commercial activity and their usual location near major arterials (GPNE, pg. 7-9). Retail uses are located adjacent to the project to the west and are zoned Commercial. The existing AT&T lot located adjacent to the project to the west is zoned Public-Institutional (P-I). The nearest residential uses are the multi-family units located adjacent to the project to the east and to the south across Armorlite Drive, which are zoned under the Palomar Station Specific Plan Area for Mixed-Use. Therefore, the City Ordinance limits of 65 dBA hourly noise standard during the daytime hours between 7:00 AM and 10:00 PM and a 55 dBA standard during the nighttime hours between 10 PM and 7 AM would apply at all property lines.

3.8.4 Project Impact Analysis

Construction and operation of the project have the potential to result in short term and long term increases in noise on the project site in the project vicinity. As part of the project design, residential units with direct line-of-site to W. Mission Road and Las Posas Road would have enhanced balcony and patio shielding consisting of 3.5-foot barriers. The location where the enhanced shielding would be incorporated is shown on **Figure 3.8-2**. The shielding would be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials. Additionally, as part of the project design features, to ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces).

Threshold #1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.

Construction Noise

This section addresses the construction noise impacts associated with the project to determine if they would result in the exposure of persons to or generation of noise level in excess of applicable noise standards. Construction noise represents a short-term impact on the ambient noise levels, primarily from construction equipment. Grading activities typically represent one of the highest potential sources for noise impacts. The most effective method of controlling construction noise is through local control of construction hours and by limiting the hours of construction to normal weekday working hours. As stated above, the City of San Marcos Municipal Code does not set noise limits on construction activities. Commonly, the City utilizes the County of San Diego's Noise Ordinance Section 36.410 noise limit of 75 dBA at any existing sensitive receptor for construction activities.

The U.S. Environmental Protection Agency (USEPA) has compiled data regarding the noise generating characteristics of specific types of construction equipment. Noise levels generated by heavy construction equipment can range from 60 dBA to in excess of 100 dBA when measured at 50 feet. However, these noise levels diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 75 dBA measured at 50 feet from the noise source to the receptor would be reduced to 69 dBA at 100 feet from the source to the receptor and reduced to 63 dBA at 200 feet from the source.

LDN used a point-source noise prediction model to calculate the expected construction noise impacts. The essential model input data for these performance equations include the source levels of each type of equipment, relative source to receiver horizontal and vertical separations, the amount of time the equipment is operating in a given day, also referred to as the duty-cycle and any transmission loss from topography or barriers (LDN 2024).

The equipment needed for the most intensive grading activities would consist of a medium sized rubber tire tractor/backhoe, a large bulldozer, a medium sized front loader, a water truck, and a small to medium sized paver/blade. Based on the USEPA noise emissions, empirical data and the amount of equipment needed, worst case noise levels from the construction equipment for site preparation would occur during grading operations.

The potential noise sensitive uses are located adjacent or near the property lines. The affected land uses include the existing retail uses adjacent to the project to the west, and the existing multi-family residential uses to the east and south across Armorlite Drive. These uses would be on average over 100-feet from the center of the proposed construction activities. W. Mission Road and the railroad line are located to the north and are not considered sensitive uses. As shown in Table 3.8-2, existing ambient sound levels were found to be 61 dBA Leq and 67.6 CNEL.

Grading

The grading activities would consist of the preparation of parking, finished pads, and retaining walls. The grading equipment would be spread out over the project site from distances near the occupied property lines to distances of 200 feet or more away at the western property line. Based on the site plan, the majority of the grading operations, on average, would occur more than 100 feet from the property lines. This means that most of the time the average distance from all the equipment to the nearest property line is 100 feet.

As shown in **Table 3.8-8,** at an average distance of 100 feet from the construction activities to the nearest property line would result in a noise attenuation of 6.0 dBA without shielding. Given this, the noise levels would comply with the 75 dBA Leq (8-hour) standard at the property lines. Therefore, the construction noise impacts would be considered **less than significant,** and no mitigation is required during construction of the proposed project. Additionally, as a project design feature, all equipment would be properly fitted with mufflers and all staging and maintenance would be conducted as far away from the existing residences as possible.

Table 3.8-8. Construction Noise Levels

Equipment Type	Quantity Used	Source @ 50 Feet (dBA)	Cumulative Noise Level @ 50 Feet (dBA)
Tractor/Backhoe	1	72	72.0
Dozer D9 Cat	1	74	74.0
Loader/Grader	1	73	73.0
Water Truck	1	70	70.0
Paver/Blade	1	75	75.0
Cumulative Level			80.1
Distance to Sensitive Uses			100
Noise Reduction due to Distance			-6.0
Property Line Noise Level			74.1

Source: LDN 2024.

Grading Materials Export

Construction grading operations for the project are anticipated to include 6,950 cubic yards (cy) of cut material and 4,400 cy of fill material requiring an export of approximately 2,250 cy of fill material once materials shrinkage is considered. Assuming the use of 15 CY trucks and 15 work days, this equates to approximately 10 truck trips per day. Noise level changes greater than 3 dBA are often identified as audible and considered potentially significant, while changes less than 1 dBA would not be discernible to local residents. In the range of 1 to 3 dBA, residents who are very sensitive to noise may perceive a slight change. Community noise exposures are typically over a long time period rather than the immediate comparison made in a laboratory situation. Therefore, the level at which changes in community noise levels become discernible is likely greater than 1 dBA, and 3 dBA appears to be appropriate for most people. For the purposes of this analysis, direct and cumulative roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment. Typically, it requires a project to double (or add 100%) to the traffic volumes to result in a 3 dBA CNEL increase, which is considered a potential impact. Based on a current traffic volume of approximately 5,000 average daily traffic (ADT) or more on the roadways along the site and along the anticipated haul route, the additional trucks (10 per day) would add less than 0.5 dBA to the overall noise level. This is well below a 3 dBA increase that is considered a potential impact. No noise impacts are anticipated at the residential uses that are located along the roadway due to the low volume of trucks. Impacts would be **less than significant.**

Rock Drilling and Blasting

The project has been designed to avoid blasting; however, due to bedrock conditions on the project site, blasting and rock crushing may be required once grading commences. Should blasting be required, the project would comply with all provisions identified in the City's Municipal Code Section 17.60.06 as it relates to blasting and blasting shall only be permitted between the hours of 9:00 AM

and 4:00 PM during any weekday. Blasting also requires issuance of a Blasting Permit from the San Marcos Fire Department.

During project grading and site preparation activities, areas of the project site that require deeper cuts and where the native material is not easily rippable (graded) may require blasting and the use of a rock drill. The rock drill would be moved around the site on an as needed basis dependent upon the site characteristics. The use of a rock drill would occur independently of all other proposed equipment. The drilling and blasting activities would occur in one area and then the grading equipment would relocate or remove the debris. To determine the worst-case noise levels from the drilling operations, it was assumed that the noise level from the rock drill would be 85 dBA at 50 feet (FHWA 2006; OML 2016). Utilizing a 6 dBA reduction per doubling of distance, the rock drill would need to be located at an average distance of 160 feet from any property line to comply with the 75 dBA standard as shown in **Table 3.8-9**.

Table 3.8-9. Construction Noise Levels from Rock Drill

Construction Equipment	Quantity	Source Level @ 50 Feet (dBA)	Duty Cycle (Hours/Day)	Noise Level @ 50 Feet (dBA)
Rock Drill	1	85	8	85.0
Noise Reduction Needed to Comply				-10.0
Distance Required to Reduce Noise Levels				160
Nearest Property Line Noise Level				74.9

Source: LDN 2024.

Rock drilling and blasting would occur on an as-needed basis on site. In the event that the rock drill is staged within 160 feet of any occupied noise sensitive land use, a potentially significant impact (**N-1**) would occur.

- **Impact N-1** Due to temporary rock drilling and blasting activities during construction, the proposed project has the potential to create noise levels in excess of the 75 dBA standard if rock drilling equipment is staged closer than 160 feet to an occupied noise sensitive land use's property line.

Rock Crushing

The project's requested approvals include a Conditional Use Permit, which would allow for the use of a temporary rock crusher. Rock crushing would occur between the hours of 7:00 AM and 4:00 PM. The rock crushing equipment would be located in the northwest corner of the site in the proposed parking area, which is over 200 feet from the nearest residences to the east, over 500 feet from the residences to the south and over 200 feet from the nearest commercial use to the southwest. Based on empirical data collected at the existing Mission 316 residential development from a similar rock crusher, noise levels ranged between 70-72 dBA at 100 feet (LDN 2021). Therefore, a worst-case noise level of 72 dBA at 100 feet was used to analyze noise levels from rock crushing equipment (LDN 2024). The analysis assumed the project would use a Thunderbird Hazemag #CP300 or equivalent rock crusher. Typically, the threshold for determining whether construction noise is significant is 75 dBA. However, in the case of rock crushing, to be conservative, the City has applied the operational noise standard to rock crushing activities when operating on a longer-term basis. The operational noise standards of 65 dBA for multi-family residential and 70 dBA for commercial have been applied in the

analysis. Because the closest sensitive receptor to the rock crusher would be the multi-family residences located adjacent to the project site to the east, the daytime threshold of 65 dBA Leq is used to determine significance. The property directly to the west is zoned Public-Institutional (P-I) with minimal usage and would not be considered a sensitive use.

It was determined that the noise levels of the rock crusher would be reduced by a minimum of 6.8 dBA due to the topography blocking line of sight to the existing multi-family homes to the east. As can be seen in **Table 3.8-10**, based on the proposed location of the rock crusher, the anticipated noise levels at the eastern residential property line would be in compliance with the City's 75 dBA Leq construction noise standard and in compliance with the applied 65 dBA Leq operational noise standard for multi-family residential.

Table 3.8-10. Rock Crushing Noise Levels (Residential Receptors)

Equipment Type	Quantity Used	Source @ 100 Feet (dBA)	Duty Cycle (hours/day)	Cumulative Noise Level @ 100 Feet (dBA)
Thunderbird Hazemag #CP300	1	72	8	72.0
Distance to Sensitive Use				220
Noise Reduction Due to Distance				-6.8
Property Line Noise Level				65

Source: LDN 2024.

Additionally, the rock crushing equipment would be located over 200 feet from the nearest commercial use to the southwest. As can be seen in **Table 3.8-11,** at 220 feet, the noise levels would be reduced to 65 dBA and would not exceed the City's 75 dBA Leq construction noise standard or the applied 70 dBA Leq operational noise standard for commercial.

Table 3.8-11. Rock Crushing Noise Levels (Commercial Receptors)

Equipment Type	Quantity Used	Source @ 100 Feet (dBA)	Duty Cycle (hours/day)	Cumulative Noise Level @ 100 Feet (dBA)
Thunderbird Hazemag #CP300	1	72	8	72.0
Distance to Sensitive Use				220
Noise Reduction Due to Distance				-6.8
Property Line Noise Level				65

Source: LDN 2024.

However, in the event that the rock crusher is staged within 210 feet of multi-family residential uses or within 160 feet from commercial uses without shielding, noise levels may exceed the applied thresholds of 65 dBA for any multifamily use or 70 dBA at a commercial use (LDN 2024). This represents a potentially significant impact (**Impact N-2)** and mitigation is required.

- **Impact N-2** Due to temporary rock crushing activities, the proposed project has the potential to create noise levels in excess of the applied operational noise standards for multi-family residential (65 dBA Leq) and commercial use (70 dBA Leq) if the rock crusher is staged within 210 feet of a multi-family residential use or within 160 feet of a commercial use.

Operational Noise

This section addresses the operational noise associated with the project to determine if it would result in the exposure of persons to or generation of noise level in excess of applicable noise standards. Operational noise associated with the project would include traffic generated by the project that travels on area roadways, railway noise from the SPRINTER line, as well as noise that is generated on the project site. The modeled observer locations for the outdoor use areas are shown in **Figure 3.8-3**.

Future Onsite Roadway Noise

To determine the future noise environment and impact potential resulting from increased traffic associated with the proposed project, the FHWA model was utilized. **Table 3.8-12** presents the roadway parameters used in the analysis including the peak traffic volumes, vehicle speeds, and the hourly traffic flow distribution (vehicle mix). The vehicle mix provides the hourly distribution percentages of automobiles, medium trucks, and heavy trucks for input into the FHWA Model. The Buildout conditions for W. Mission Road, Las Posas Road, and Armorlite Drive include the future year 2050 traffic volume forecasts provided by the project traffic study by LLG (LLG 2024). In addition, the project is located over 1,000 feet north of SR-78. According to the City of San Marcos' General Plan Noise Element, background noise levels from future traffic along SR-78 is 60 dBA CNEL at approximately 800 feet. The noise contours for this area would also include traffic noise from W. Mission Road and Las Posas Road. SPRINTER noise may also contribute to that contour.

Table 3.8-12. Future Traffic Parameters

Roadway	Average Daily Traffic (ADT)[1]	Peak Hour Volumes[1]	Modeled Speeds (MPH)	Vehicle Mix %[2]		
				Auto	Medium Trucks	Heavy Trucks
Mission Road	22,450	2,245	45	96	2	2
Las Posas Road	36,290	3,629	45	96	2	2
Armorlite Drive	6,704	670	25	96	2	2

Source: LDN 2024.

Notes: (1) Peak hour volumes are Year 2050 volumes identified in the Local Transportation Analysis prepared by LLG, 2024.
(2) Typical City vehicle mix.

Onsite Rail Line Noise

The proposed project is located approximately 42 feet from the San Diego Northern Railroad consisting of SPRINTER service operated by the North County Transit District (NCTD). According to the City of San Marcos General Plan Noise Element, the 65 dBA CNEL noise contour from the rail activity, with no shielding, is located 130 feet from the centerline of the railroad.

Cumulative Roadway and Train Noise Levels

The noise levels determined for the roadway and train activities were combined to determine the overall cumulative noise levels at the proposed receptors. The modeling results for the adjacent roadways and the cumulative noise levels with the background noise from Las Posas Road, SR-78, and train noise are provided in **Table 3.8-13**. Additionally, three decibels of attenuation is allowed for the first row of buildings when they block 40 to 65% of the line of sight to the noise source, and five decibels of attenuation is allowed when the buildings obstruct more than 65% of the line of sight (LDN

2024). The line of sight to the roadways is blocked by the existing and proposed structures, therefore, a factor of 3 or 5 dBA was taken into account as shown in Table 3.8-13.

The modeling results for the future unmitigated exterior noise levels is shown in Table 3.8-13, including any noise reduction from the distance between the source and receptor. Based upon these findings, noise levels at the upper floor balconies along W. Mission Road and Las Posas Road would exceed the City's Noise Standard of 65 dBA CNEL if design features were not included. However, as part of the project design, residential units with direct line-of-sight to W. Mission Road and Las Posas Road would have enhanced balcony shielding consisting of 3.5-foot barriers, as shown on Figure 3.8-2. The shielding would be constructed of a non-gapping material consisting of masonry, ¼ inch thick glass, earthen berm, or any combination of these materials. To determine the required barrier heights at the balconies along W. Mission Road and Las Posas Road, the Fresnel Barrier Reduction Calculations was used to determine the barrier attenuation based on distance, source height, receiver elevation and the top of barrier were modeled. It was determined that 3.5-foot noise barriers located at the balconies would provide a 6.1 dBA noise reduction along the northern façade and a 5.3 dBA noise reduction along the western façade. **Table 3.8-14** shows that with incorporation of these design features, the sound level at the building façades along W. Mission Road and Las Posas Road would not exceed 65 dBA CNEL. It was also determined that noise levels at the common outdoor areas would comply with the City's 65 dBA CNEL noise standard with no design features. Additionally, the project is proposing minimum 3.5-foot barriers at the pool area which would further reduce noise levels.

It should be noted that the ground floor flex units along Armorlite Drive to the south could potentially be converted to residential units and would be required to comply with the City's 65 dBA CNEL noise standard. The units would comply with the City's 65 dBA CNEL noise standard without additional noise reduction measures.

Additionally, as part of the project design features described in Table 2-1, to ensure compliance with CCR Title 24, a final noise assessment is required prior to the issuance of the first building permit to identify the interior noise requirements based upon architectural and building plans. Interior noise levels of 45 dBA CNEL can be obtained with conventional building construction methods and providing a closed window condition requiring a means of mechanical ventilation (e.g., air conditioning) and upgraded windows for all sensitive rooms (e.g., bedrooms and living spaces). As shown in Table 3.8-14, with incorporation of design features, transportation related noise impacts would be **less than significant.**

Table 3.8-13. Future Exterior Noise Levels Before Balcony Design Features

Traffic Volumes, Distance and Speeds						
Roadway		**ADT**		**Speed (MPH)**	**Distance**	**Noise Level (dBA CNEL)**
Mission Road		22,450		45	50	72.7
Las Posas Road		36,290		45	50	74.8
Armorlite Drive		6,704		25	50	63.2
SR-78		--		--	800	60.0
SPRINTER		--		--	130	65
Noise Reduction due to Distance and Shielding (dBA CNEL)						
Receptor[1]	**Receptor Location**	**Roadway**	**Distance**	**Reduction from Distance**	**Reduction from Shielding**	**Resultant Noise Level**
1	Building Facades along Mission Road	Mission Road	200	-6.02	0.0	66.7
		Las Posas Road	338	-8.30	-3.0	63.5
		SPRINTER	100	1.14	0.0	66.1
					Cumulative Noise Level	**70.4**
2	Building Facades facing Las Posas Road	Mission Road	300	-7.78	-3.0	62.0
		Las Posas Road	288	-7.60	0.0	67.2
		Armorlite Drive	316	-8.01	-3.0	52.2
		SR-78	1,470	-3.96	-5.0	51.0
		SPRINTER	200	-1.87	-3.0	60.1
					Cumulative Noise Level	**69.1**
3	Internal Courtyard	Mission Road	370	-8.69	-10.0	54.1
		Las Posas Road	378	-8.79	-10.0	56.1
		Armorlite Drive	246	-6.92	-10.0	46.2
		SR-78	1,402	-2.44	-10.0	47.6
		SPRINTER	270	-3.17	-10.0	51.8
					Cumulative Noise Level	**59.6**
4	Pool Area	Las Posas Road	370	-8.69	-5.0	61.1
		Armorlite Drive	65	-1.14	0.0	62.0
		SR-78	1,220	-2.75	-5.0	52.3
					Cumulative Noise Level	**64.9**
5		Las Posas Road	412	-9.16	-5.0	60.7

Traffic Volumes, Distance and Speeds						
	Building Facades along Armorlite Drive	Armorlite Drive	48	0.18	0.0	63.3
		SR-78	1,200	-2.64	-5.0	52.4
					Cumulative Noise Level	**65.4**

Source: LDN 2024.
Notes: (1) See Figure 3.8-3

Table 3.8-14. Future Exterior Noise Levels with Balcony Design Features

Receptor Number(1)	Receptor Location	Noise Level @ Receptor (dBA CNEL)	Reduction Due to Shielding (dBA CNEL)	Resultant Noise Level (dBA CNEL)
1	Building Facades along Mission Road	70.4	-6.1	64.3
2	Building Facades facing Las Posas Road	69.1	-5.3	63.8
3	Internal Courtyard	59.6	-	59.6
4	Pool Area	64.9	-5.0	59.9
5	Building Facades along Armorlite Drive	65.4	-	65.4

Source: LDN 2024.
Notes: (1) See Figure 3.8-3

Project Related Offsite Transportation Noise

For the purposes for this analysis, direct and cumulative roadway noise impacts would be considered significant if the project increases noise levels for a noise sensitive land use by 3 dBA CNEL and if the project increases noise levels above an unacceptable noise level per the City's General Plan in the area adjacent to the roadway segment. To determine if direct or cumulative off-site noise level increases associated with the development of the proposed project would create noise impacts, the traffic volumes for the existing conditions were compared with the traffic volume increase of existing plus the proposed project. According to the project traffic study, the project is estimated to generate 1,214 daily trips with a peak hour volume of 109 trips (LLG 2024). As shown in Table 3.8-13, the existing traffic volume on W. Mission Road is 22,450 ADT, 36,290 ADT on Las Posas Road and 6,704 ADT on Armorlite Drive. Typically, it requires a project to double (or add 100%) the traffic volumes to have a direct impact of 3 dBA CNEL or be a major contributor to the cumulative traffic volumes. The project would not double the traffic volumes on any adjacent roadways. Therefore, no direct or cumulative impacts are anticipated. Impacts would be **less than significant**.

Operational Noise – HVAC Equipment

This section examines the potential operational noise source levels associated with the development and operation of the proposed project. Noise from a fixed or point source drops off at a rate of 6 dBA for each doubling of distance; for example, a noise level of 70 dBA at 5 feet would be 64 dBA at 10 feet and 58 dBA at 20 feet. A review of the proposed project indicates that noise sources such as the roof mounted mechanical heating, ventilation, and air conditioning (HVAC) system are the primary source of stationary noise.

Properties adjacent to the project site to the east and south are multi-family residential units zoned as mixed use under the Palomar Station Specific Plan Area. Therefore, the City Ordinance limits of 65 dBA hourly noise standard during the daytime hours between 7:00 AM and 10 PM, a 55 dBA standard during the nighttime hours between 10:00 PM and 7:00 AM would apply at all property lines.

Roof-mounted HVAC units would be installed at the proposed building. The project anticipates installing Carrier CA15NA (Series, 24-A) or equivalent HVAC units with a reference noise level of 71 dBA at 3-feet. The manufacturer's specifications and noise levels are provided in Attachment B of the Noise Report, which is Appendix P of this EIR. The HVAC units would cycle on and off throughout the day. Typically, HVAC units run for approximately 20 minutes each operating cycle to provide the necessary heating or cooling. It is anticipated that the HVAC units would operate twice in any given hour or run for 40 minutes in any given hour. Noise levels drop 3 decibels each time the duration of the source is reduced in half. Therefore, hourly HVAC noise level over a 40-minute period would be reduced approximately 2 decibels to 69 dBA based on operational time. To predict the property line noise level, a reference noise level of 69 dBA at 3-feet was used to represent the HVAC units (LDN 2024).

The HVAC units are located a minimum of 46 feet from the eastern residential property line and would be shielded by the parapet walls that would break the line of sight to the HVAC units and would provide a minimum 5 dBA reduction. The typical locations of the proposed HVAC units are shown in **Figure 3.8-4**. Up to 20 HVAC units would be clustered together closest to the nearest residential property line to the east. The remainder of the HVAC units would be separated by at least 80 feet and this separation would result in a 20 dBA difference between other HVAC clusters and would not cumulatively increase the noise levels. Therefore, the worst-case combined noise from the HVAC would occur from 20 units.

Utilizing a 6 dBA decrease per doubling of distance, noise levels at the nearest residential property line as described above were calculated for the HVAC units. The HVAC units are located a minimum of 46 feet from the nearest residential property line to the east. The noise level reductions due to distance and the building for the nearest property line is provided in **Table 3.8-15** below.

Table 3.8-15. Project HVAC Noise Levels (Eastern Residential Property Line)

Distance to Nearest Observer Location (Feet)	Hourly Reference Noise Level (dBA)	Noise Source Reference Distance (Feet)	Noise Reduction Due to Distance (dBA)	Reduction Due to Buildings (dBA)	Noise Level at Property Line (dBA)	Quantity	Property Line Cumulative Noise Level (dBA)(1)
46	69.0	3.0	-23.7	-5.0	40.3	20	53.3

Source: LDN 2024.
Note: (1) Complies with the nighttime noise standard of 55 dBA.

Additionally, the noise levels at the nearest retail uses adjacent to the project to the west were analyzed using the same methodology described above. Up to 20 units would be clustered closest to the western property line and would be separated by the remaining HVAC units by parapet walls and distance. Based on the distance to the property line to the west, noise associated with the operation of the HVAC units are expected to be 48.0 dBA or lower, which is below the 55 dBA nighttime threshold for commercial uses. The multi-family residential property line to the south is located further than the property line to the east, therefore, would also comply.

The noise levels from the proposed roof-mounted HVAC would be considered **less than significant** at the residential property lines to the east and south the commercial property lines to the west with the

proposed parapet walls and would be in compliance with the City of San Marcos Municipal Code Section 10.24.

In summary, the proposed project would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the location general plan or noise ordinance, or applicable standards of other agencies.

Threshold #2: Generation of excessive groundborne vibration or groundborne noise levels.

This section analyzes the potential for the project to expose a person to or generation of excessive vibration or groundborne noise. Proposed residential uses would not be characterized as creating excessive vibration during project operation. The noise modeling is based upon project construction details and schedule provided by the project applicant. As discussed above, the City does not have adopted vibration criteria. While the project is not subject to FTA or Caltrans regulations, the FTA guidelines serve as a useful tool to evaluate vibration impacts.

Grading

The nearest vibration-sensitive uses are the existing multi-family residential units to the east and to the south on the opposite side of Armorlite Drive. These units, are, on average, over 100 feet from the center of the proposed construction activities. **Table 3.8-16** lists the average vibration levels that would be experienced at the nearest vibration sensitive land uses from the temporary construction activities.

Table 3.8-16. Vibration Levels from Construction Activities (Residential Receptors)

Equipment	Approximate Velocity Level at 25 Feet (VdB)	Approximate PPV Level at 25 Feet (in/sec)	Approximate Velocity Level at 100 Feet (VdB)	Approximate PPV Level at 100 Feet (in/sec)
Small Bulldozer	58	0.003	40.0	0.0004
Jackhammer	79	0.035	61.0	0.0044
Loaded Trucks	86	0.076	68.0	0.0095
Large Bulldozer	87	0.089	69.0	0.0111
FTA Criteria			80(1)	0.2(2)
Significant Impact?			**No**	**No**

Source: LDN 2024.
Notes: (1) FTA criterion for infrequent vibration induced annoyance.
(2) FTA criterion for vibration induced structural damage.

The FTA has determined vibration levels that would cause annoyance to a substantial number of people and potential damage to building structures. The FTA criterion guideline for vibration induced structural damage is 0.20 in/sec for the PPV. Project construction activities would result in PPV levels below the FTA's criteria for vibration induced structural damage. Therefore, project construction activities would not result in vibration induced structural damage to residential buildings near the construction areas during regular construction activities. The FTA criterion for infrequent vibration induced annoyance is 80 VdB for residential uses. Grading activities would generate levels of vibration that would not exceed the FTA criteria for nuisance for nearby residential uses during regular construction activities. Short term grading impacts would be **less than significant.**

Blasting Vibration

Blasting for construction projects typically results in an RMS vibration velocity of about 100 VdB at 50 feet from the blast, based on FTA findings. This is equivalent to a PPV of about 0.4 inch per second. Given attenuation of vibration velocities with distance, if the blasting activity was located 200 feet from the nearest residence, the vibration and peak particle velocities at the nearest existing residence would be about 82 VdB and 0.05 inch per second, respectively. Based on the construction vibration damage criteria published by the FTA (Table 3.8-7), the threshold vibration levels for damage to "non-engineered timber and masonry buildings" are 94 VdB and 0.20 inch per second. Therefore, the effect of the blasting activity on nearby residential structures would be less than significant.

The FTA human annoyance criterion for Category 2 buildings, which are residences and buildings where people normally sleep is 80 VdB (for infrequent transit noise). As noted in Table 3.8-6, infrequent events are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines. This criterion would be slightly exceeded when blasting occurred within about 250 feet of existing residences. However, this project is not a transportation project and is not subject to FTA regulations. Additionally, the potential for short term annoyance would be minimized by following the City's blasting procedures as stated above in Section 3.8.2, including proper notice to residences and limited hours to between 9:00 AM and 4:00 PM on weekdays. With adherence to Section 17.60.06 of the City's Municipal Code and the required Blasting Permit from the San Marcos Fire Department, short term blasting vibration impacts would be **less than significant.**

3.8.5 Cumulative Impact Analysis

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

Cumulative construction noise and vibration could occur if there are other projects under construction in the vicinity of the proposed project. Based upon the location of the project and the timing for development and location of the cumulative projects included in Table 2-3, cumulative noise and vibration impacts are not anticipated and impacts would be less than significant.

Future traffic noise levels were analyzed comparing existing traffic with existing plus proposed project traffic levels. This analysis accounts for reasonably foreseeable cumulative traffic levels in the vicinity of the project. As discussed in Section 3.8.4, impacts would be **less than significant.**

3.8.6 Mitigation Measures

Noise Levels During Rock Drilling and Blasting (Impact N-1)

MM-N-1 Prior to issuance of a blasting permit, the project applicant or contractor shall provide the final location of the construction equipment, topography, and construction schedule to the Planning Division. If the rock drill is shown to be

located within 160 feet from a sensitive land use's property line, an acoustical engineer shall prepare a noise assessment to determine whether noise levels in excess of the 75 dBA standard would occur during construction.

If the rock drilling and blasting noise assessment determines noise levels at the affected property lines would exceed 75 dBA, the acoustical engineer shall develop a mitigation plan to ensure during rock drilling and blasting would be below 75 dBA at the property line. Potential measures to reduce drilling and blasting noise levels could include: 1) construction of a temporary noise barrier of solid non-gaping material ranging from 8 to 12 feet in height along any property line where the impacts could occur; 2) limits on usage of the equipment (amount of time used and/or the location in respect to the property line) or other measures to ensure the levels would be below 75 dBA. The mitigation plan shall be submitted to the Planning Division and implemented by the contractor.

Noise Levels During Rock Crushing (Impact N-2)

MM-N-2 Prior to issuance of a Conditional Use Permit for a rock crusher, the project applicant or contractor shall provide the final location and rock crusher type to the Planning Division. If the rock crusher is shown to be located within 210 feet of a multi-family residential use or within 160 feet of a commercials use without shielding, an acoustical engineer shall prepare a noise assessment to determine whether noise levels would be above the applied threshold of 65 dBA Leq for multi-family residential use and 70 dBA Leq for commercial use.

If the rock crushing noise assessment determines noise levels at the affected property lines would exceed the standards, the acoustical engineer shall develop a mitigation plan to reduced noise levels to 65 dBA at any existing multi-family use and 70 dBA at an existing commercial use. Mitigation may include sound barriers, sound absorbing materials and/or operational limits on the crusher equipment's usage. The mitigation plan shall be submitted to the Planning Division and implemented by the contractor.

3.8.7 Conclusion

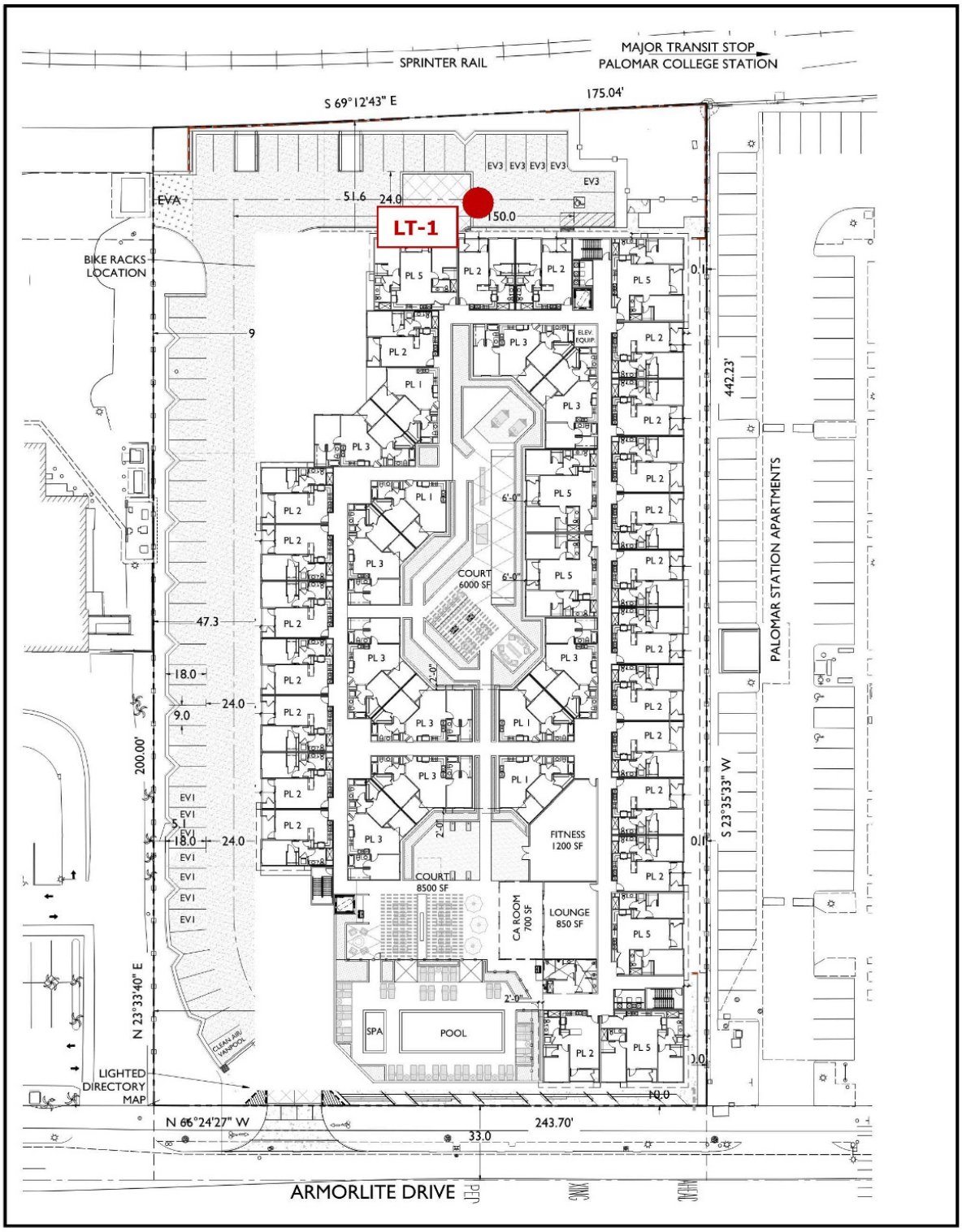
Based on the proposed location of construction equipment relative to surrounding land uses, the noise analysis prepared for the project (LDN 2024) concluded that noise impacts during construction would be below City standards and less than significant. However, the potential exists that construction equipment, specifically a rock drill and rock crusher, could be required and staged closer to sensitive uses than anticipated potentially resulting in noise levels exceeding the 75 dBA (8-hour) threshold for rock drilling and the applied operational thresholds of 65 dBA at multi-family uses and 70 dBA at commercial uses during operation of a rock crusher. These potentially significant impacts would be mitigated to below a level of significance through implementation of mitigation measures MM-N-1 through MM-N-2.

Specifically, implementation of mitigation measures MM-N-1 and MM-N-2 provide for preparation of a noise assessment to be prepared prior to issuance of a blasting permit for the rock drill and conditional use permit for the rock crusher to confirm that noise levels would not exceed applicable City standards. If noise levels would exceed standards, then noise mitigation plans would be prepared and implemented to ensure noise levels are in compliance.

With incorporation of project design measures, including enhanced balcony shielding consisting of 3.5-foot barriers for residential units with direct line of sight to W. Mission Road and Las Posas Road, operational noise impacts at the project site would not exceed the City's General Plan Noise Element 65 dBA exterior noise threshold nor increase roadway noise levels by more than 3 dBA. Therefore, impacts related to operational noise would be less than significant.

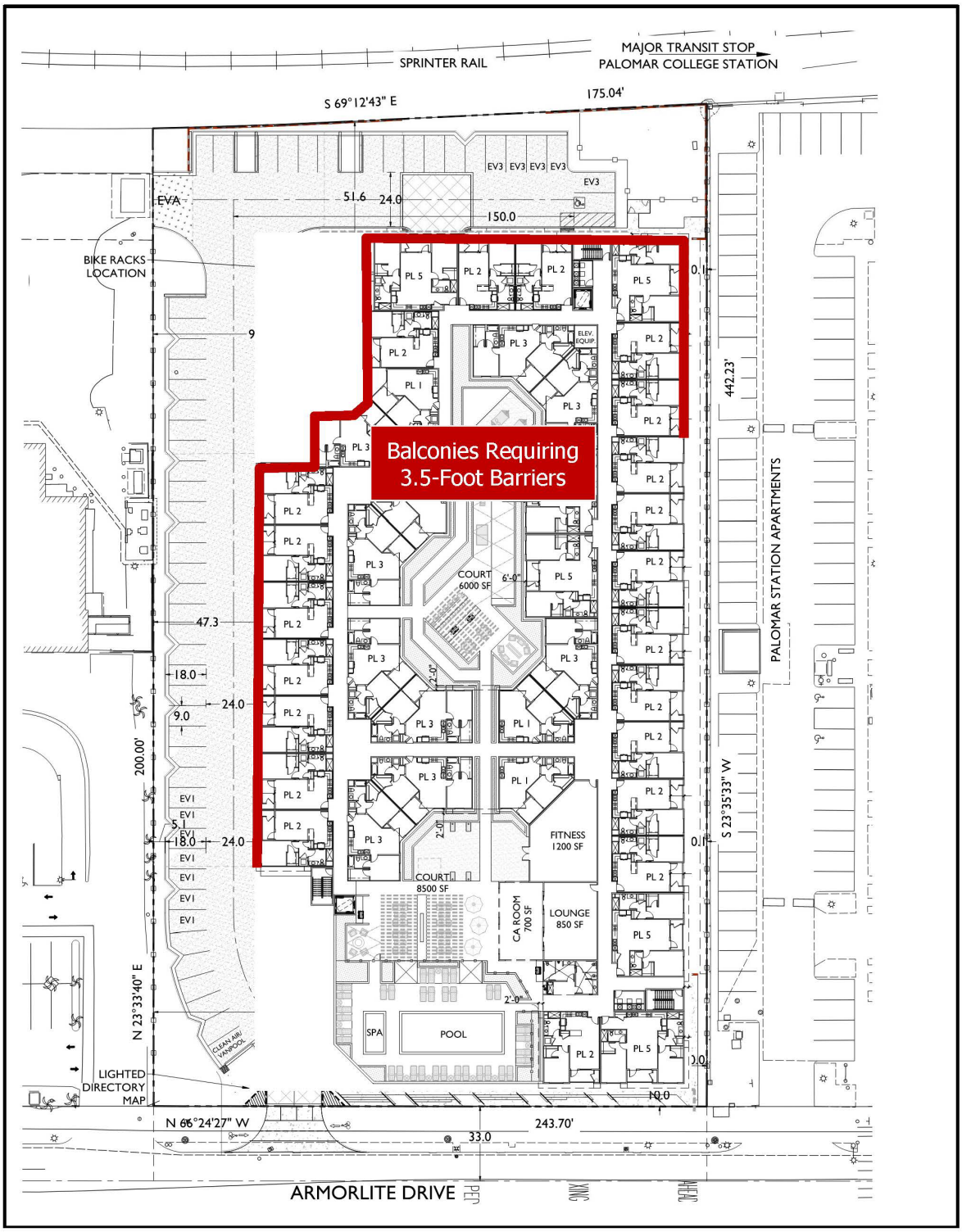
Construction activities would generate levels of vibration that would not exceed the FTA criteria for nuisance and structural damage for nearby residential uses. If blasting is required within 250 feet of existing residences, the FTA human annoyance criterion (for infrequent transit noise) would be slightly exceeded. However, this project is not a transportation project and is not subject to FTA regulations. Also, the potential for short term annoyance would be minimized by following the City's blasting procedures as stated above in Section 3.8.2, including proper notice to residents and limited hours to between 9:00 AM and 4:00 PM on weekdays. With adherence to Section 17.60.06 of the City's Municipal Code and the required Blasting Permit from the San Marcos Fire Department, short term blasting vibration impacts would be less than significant.

Figure 3.8-1. Ambient Monitoring Location



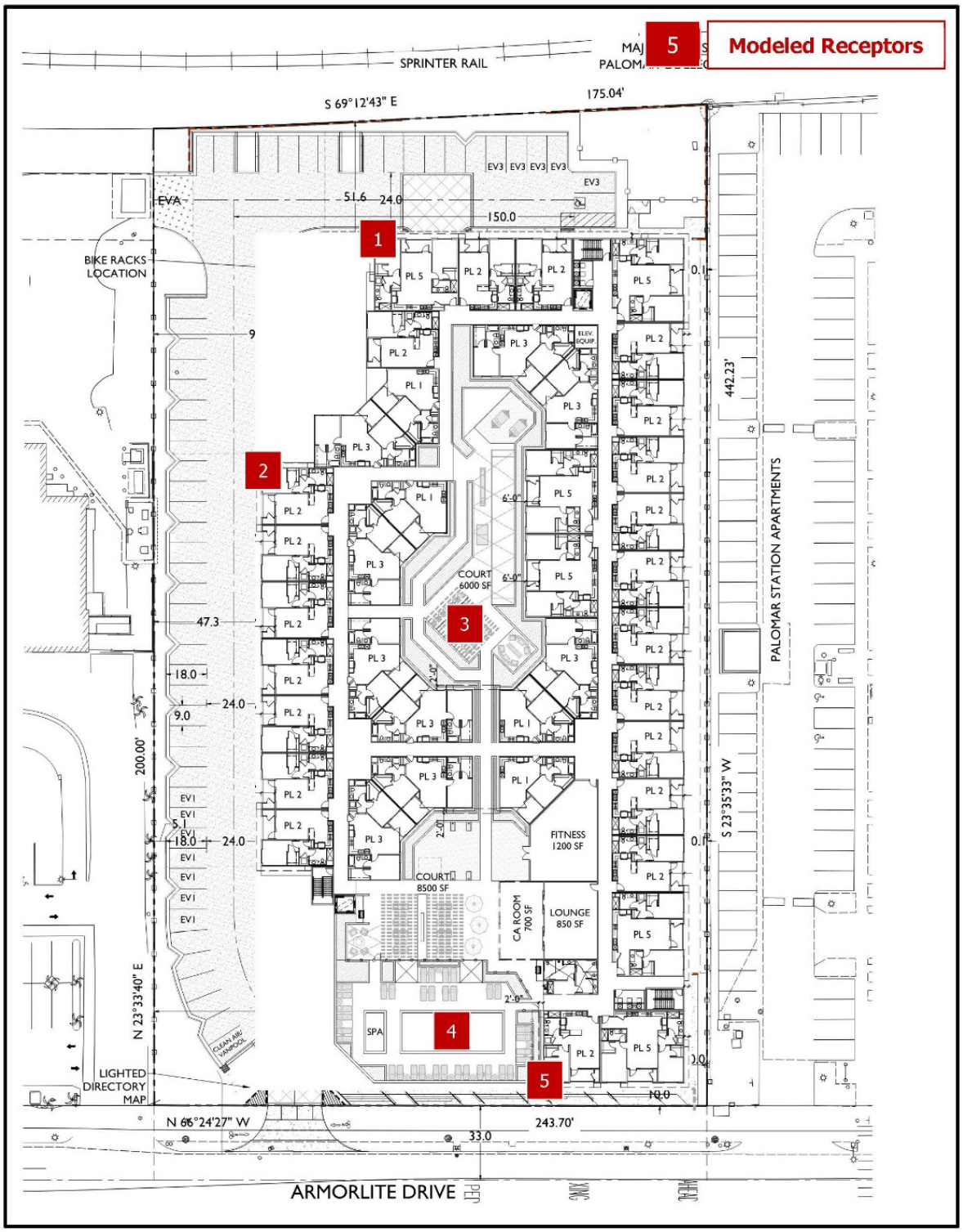
Source: LDN 2024.

Figure 3.8-2. Area of Enhanced Shielding on Patios and Balconies



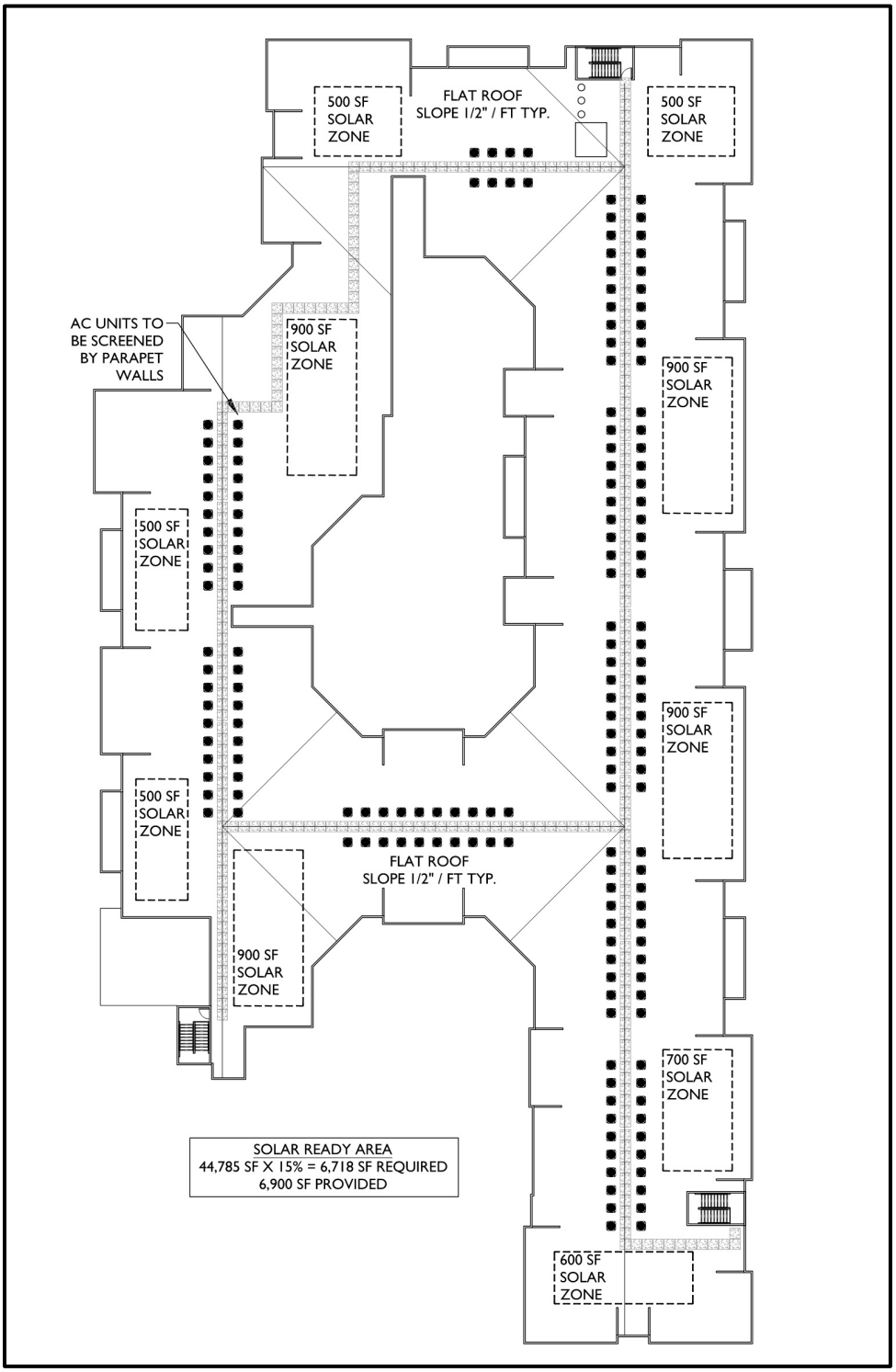
Source: LDN 2024.

Figure 3.8-3. Modeled Receptor Locations



Source: LDN 2024.

Figure 3.8-4. Locations of Proposed HVAC Units



Source: LDN 2024.

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3.9 Population and Housing

This section analyzes the potential for impacts related to population and housing resulting from development of the proposed project. This section considers population and housing characteristics in the area and discusses project consistency with regional growth projections.

In the Initial Study prepared for the proposed project (**Appendix B.1**), implementation of the proposed project was determined to have no impacts related to the displacement of housing or people. There is no existing housing on the project site and the site is vacant. The construction of the proposed project would not displace a substantial number of existing homes, necessitating the construction of replacement housing elsewhere, nor would it displace a substantial number of people. This issue is not discussed further in this section. Section 5.10, Environmental Effects Found Not to Be Significant – Population and Housing, of the Environmental Impact Report (EIR) provides additional information on this topic.

Table 3.9-1 summarizes the project- and cumulative-impact analysis by threshold for the proposed project.

Table 3.9-1. Population/Housing Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Threshold #1: 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	Less than Significant	Less than Significant Without Mitigation

3.9.1 Existing Conditions

This section provides background information regarding population and housing forecasts for the City of San Marcos based upon demographic information from the San Diego Association of Governments (SANDAG).

Population

As of January 1, 2023, the California Department of Finance (DOF) estimates the population of the City is 94,530 (DOF 2023). Based on growth projections provided by the Series 14: 2050 Regional Growth Forecast prepared by the San Diego Association of Governments (SANDAG), it is estimated that the City's population growth will reach 104,365 persons by 2035, and 119,098 persons by 2050 (SANDAG 2022).

Housing

As of January 1, 2023, the City of San Marcos had 32,339 housing units. The housing stock is comprised of approximately 59 percent single-family detached and attached units, 31 percent multi-family units, and 10 percent mobile homes (DOF 2023). Based on the Series 14: 2050 Regional Growth Forecast, the city is expected to have 42,050 housing units by 2050 (SANDAG 2022).

3.9.2 Regulatory Setting

This section describes the local regulatory setting as it relates to population and housing for the proposed project.

State

California Planning and Zoning Law

The legal framework within which California counties and cities exercise local planning and land use functions is provided in the California Planning and Zoning Law (Sections 65000 through 66499.58 of the California Government Code). Under that law, each county and city must adopt a comprehensive, long-term general plan. The law gives counties and cities wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. The requirements include seven mandatory elements described in the Government Code. Each element must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and implementation measures.

Once the general plan of a county or city is adopted, it should be construed as a dynamic document, for which adaptability is a key component. Each jurisdiction frequently reviews its general plan for consistency and to ensure it addresses growth-related issues in a comprehensive manner. State law allows up to four general plan amendments per general plan element per year, so each jurisdiction can make changes as justified.

Senate Bill 375

Senate Bill 375 (codified in the Government Code and Public Resources Code) took effect in 2008 and provides a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the greenhouse gas (GHG) reduction goals established in Assembly Bill 32. Senate Bill 375 requires metropolitan planning organizations to incorporate a Sustainable Communities Strategy (SCS) in their Regional Transportation Plans (RTPs) that will achieve GHG emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

Regional Housing Needs Allocation

A Regional Housing Needs Allocation (RHNA) is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. Communities use the RHNA in land use planning, prioritizing local resource allocation, and deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, and address social equity and fair share housing needs.

Regional

San Diego Association of Governments

SANDAG is a public agency, composed of 18 cities and the County of San Diego, which builds strategic plans guiding the San Diego region in land use, growth, economics, and the environment. SANDAG

also provides population and housing estimates for the region, which are based, in part, on local jurisdictional planning data and inform regional planning.

The SANDAG Regional Comprehensive Plan, adopted in 2004, provides a long-term planning framework for the San Diego region. The Regional Comprehensive Plan identified smart growth and sustainable development as important strategies to direct the region's future growth toward compact, mixed-use development in urbanized communities that already have existing and planned infrastructure, and then connecting those communities with a variety of transportation choices.

In 2011, SANDAG approved the 2050 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). This approval marked the first time SANDAG's RTP included a sustainable communities strategy, consistent with the Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375. This RTP/SCS provided a blueprint to improve mobility, preserve open space, and create communities, all with transportation choices to reduce GHG emissions and meet specific targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities and Climate Protection Act. In 2010, CARB established targets for each region in California governed by a metropolitan planning organization. SANDAG is the metropolitan planning organization for the San Diego region.

San Diego Forward: The 2021 Regional Plan

SANDAG is required by law to update its regional transportation plan every 4 years. In December 2021, SANDAG adopted the most recent update to its RTP/SCS. SANDAG's 2021 RTP/SCS, known as San Diego Forward: The 2021 Regional Plan (Regional Plan), provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies. Because the Regional Plan combines the RTP, SCS and Regional Comprehensive Plan, it must comply with specific state and federal mandates that achieves GHG emission reduction targets set by the CARB; compliance with federal civil rights requirements (Title VI); and environmental justice considerations, air quality conformity, and a public participation process.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan removing the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's GHG emissions target set by the CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. An Amendment to the 2021 Regional Plan removing the regional road user charge was adopted by the SANDAG Board, in October 2023. The 2025 Regional Plan is currently in development and also will not include a regional road user charge.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region,

including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

The project site is located within the SM-3 Mixed Use Transit Corridor as identified in SANDAG Smart Growth Concept Map for North County.

Regional Growth Forecast

SANDAG estimates future population, housing, land use, and economic growth throughout San Diego County and its comprising cities, including the City of San Marcos. In August 2022, SANDAG accepted the Series 14: 2050 Regional Growth Forecast. This forecast serves as the foundation for San Diego Forward: The 2021 Regional Plan and other planning documents across the region. SANDAG growth projections for the region and for the City of San Marcos are outlined in **Table 3.9-2** below.

Table 3.9-2. Forecasted Growth for the San Diego Region and the City of San Marcos

Jurisdiction		Year			Change 2016-2050	
	2016	2025	2035	2050	Numeric	Percent
Population						
San Diego Region	3,309,510	3,470,838	3,620,329	3,746,054	436,544	13.2%
City of San Marcos	94,258	101,707	104,365	119,098	24,840	26.4%
Housing Units						
San Diego Region	1,190,555	1,288,207	1,409,853	1,471,286	280,371	23.6
City of San Marcos	30,539	34,250	36,113	42,050	11,511	37.7%
Employment						
San Diego Region	1,629,948	1,788,970	1,935,565	2,094,017	464.069	28.5%
City of San Marcos	41,096	45,786	51,523	63,031	21,935	53.4%

Source: SANDAG 2022 Series 14: 2050 Regional Growth Forecast.

The City of San Marcos is expected to experience a higher growth rate for population, housing, and employment when compared to the entire region of San Diego. It should also be noted that the 2050 Regional Growth Forecast is not intended to be an exact formula utilized to determine growth in the region and comprising jurisdictions; rather it should be utilized as a starting point for regional planning.

Regional Housing Needs Allocation

Based on a methodology that weighs a number of factors (i.e., projected population growth, employment, commute patterns, and available sites), SANDAG determined quantifiable needs for housing units in the region according to various income categories. In its final RHNA figures, SANDAG allocated 3,116 housing units to the San Marcos area for the 2021– 2029 RHNA period. The City has already achieved approximately half of its overall RHNA with housing units constructed, under construction, or approved/entitled or under review (1,585 units). With these units taken into account, the City has fulfilled its allocation of moderate income units and has a remaining RHNA of 1,531 units (640 extremely low/ very low income units, 475 low income units, and 416 above-moderate income units after accounting for the surplus of moderate income units) (City of San Marcos 2021).

Local

City of San Marcos General Plan

The City's Housing Element identifies three goals and associated policies that pertain to population and housing:

- Goal H-1: Provide a broad range of housing opportunities with emphasis on providing housing which meets the special needs of the community.
    - Policy 1.1: Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities.
- Goal H-2: Protect, encourage, and provide housing opportunities for persons of lower and moderate incomes.
- Goal H-4: Reduce or remove governmental constraints to the development, improvement, and maintenance of housing where feasible and legally permissible.
    - Policy 4.4: Balance the need to protect and preserve the natural environment with the need to provide additional housing and employment opportunities.

The following goal and policy from the City of San Marcos General Plan, Environmental Justice Element pertain to population and housing:

- Goal EJ-4: Foster healthy living conditions for people of all backgrounds
    - Policy 1.1: Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops and in proximity to significant concentrations of employment opportunities (See Housing Policy 1.1).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Table 3.7-7 in Section 3.7, Land Use and Planning, of this EIR. As detailed in Section 3.7.4, the project is consistent with the applicable goals and policies pertaining to population and housing.

The City adopted its 2021-29 Housing Element on July 13, 2021. According to the 2021-29 Housing Element, the City had already constructed approximately 50 percent (approximately 1,585 units) of its RHNA allocation of 3,116 units with housing units constructed, under construction, or approved. Based on a residential sites inventory assessment, the City has the ability to adequately accommodate the remaining RHNA requirements within land that currently permits residential development (comprised of proposed applications, vacant residential sites, and vacant land in Specific Plan Areas). The project site is not identified within the City's 2021-29 Housing Element inventory assessment as a site that could contribute to the RHNA allocation (City of San Marcos 2021).

3.9.3 Thresholds of Significance

Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* provides thresholds for determining significant environmental impacts. A project may be deemed to have a significant impact to population and housing if it would:

- **Threshold #1:** 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).

3.9.4 Project Impact Analysis

Threshold #1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).

Increases in population, housing, and employment are generally considered to be social or economic effects, as opposed to physical effects, which are the focus of CEQA analysis. There are circumstances where social and economic changes could indirectly cause physical environmental impacts or result in changes to environmental resources, such as air quality, traffic, or noise levels. In other situations, lead agencies may evaluate social or economic change related to a physical change in determining whether the physical change is significant (CEQA Guidelines Section 15131).

The approximately 2.44-acre project site is located entirely within the City of San Marcos. A General Plan Amendment is required to re-designate the project site from its existing PI (Public Institutional) designation to Specific Plan Area (SPA). The General Plan Amendment and Rezone would allow the project to build 165 multi-family residential units and 5,600 s.f. of commercial use on the site. As proposed, 15% of the residential units would be affordable at the very low-income level (30 to 50% of the Area Median Income or AMI).

Construction of the proposed project would result in a temporary increase in construction employment. Given the relatively common nature and scale of the construction associated with the proposed project, the demand for construction employment would likely be met within the existing and future labor market in the City and North County San Diego area. The size of the construction workforce would vary during the different stages of construction, but a substantial quantity of workers from outside the local area would not be expected to relocate permanently. Therefore, project construction would result in a less than significant impact related to population and employment growth.

The proposed project would directly induce growth through the development of 165 multi-family residential dwelling units. Based on the City's population rate of 3.1 persons per household, the proposed project would directly induce population growth to the area and would potentially add an estimated 512 people to the area (SANDAG 2022). The proposed project would not, however, indirectly induce a growth in population as no extension of infrastructure is proposed beyond what is required to adequately serve the proposed project. The SANDAG population growth forecasts rely, in part, on individual jurisdiction's planning documents, such as the City's General Plan. Because the project proposes a General Plan Amendment and Rezone, the estimated population of 512 people would not have been accounted for in SANDAG's projections. Therefore, the project's induced population would exceed these projections. However, determination of impacts related to population growth are based upon whether the induced growth would be considered substantial.

The future commercial uses are anticipated to have approximately 6 employees. It is expected that these employees would come from the local job market and would not require workers to relocate from outside the area. The proposed commercial use would not induce population growth.

As shown in Table 3.9-2 above, the City's population is projected to grow from 94,258 people in 2016 to 104,365 people by 2035 (an increase of 10,107 people). The population increase of 512 people would account for approximately 5% of SANDAG's projected population growth.

There is no hardline number or percentage available to determine whether or not this estimated introduction of 512 people (5% of projected growth) could be considered a substantial increase in population. However, SANDAG's 2050 Regional Growth Forecast is intended to be used as a starting point for regional planning as opposed to a prescribed growth pattern. Although the City determined that there are adequate sites available with appropriate designations/zoning to accommodate the remaining RHNA allocation for the current Housing Element planning period, the City has the discretion to adjust allocated housing units/sites as necessary to balance proposed plans for residential development with approved/constructed residential development (City of San Marcos 2021). Therefore, while the proposed project would directly induce growth beyond current estimates and forecasts, it would not be considered substantially growth inducing, and impacts would be **less than significant**.

3.9.5 Cumulative Impact Analysis

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

The cumulative projects are listed in Table 2-3, and include single-family residential and multi-family (affordable and market rate). In addition, commercial, industrial, and institutional developments are proposed or approved. Collectively, the cumulative projects in Table 2-3 include 3,978 residential units, approximately 852,473 s.f. of commercial/industrial/office and 122 hotel rooms. When the proposed project is added into these totals it would be 4,143 residential units and approximately 858,073 s.f. of commercial/industrial/office use and 122 hotel rooms. These cumulative projects have the potential to either directly or indirectly induce population growth through development of new housing units and new employment opportunities. It is important to note that the introduction of new residential units and the associated population is not, in and of itself, a significant impact.

As discussed above, SANDAG determined quantifiable needs for housing units in the region according to various income categories. In its final RHNA figures, SANDAG allocated 3,116 housing units to the San Marcos area for the 2021–2029 RHNA period. After credits for constructed and approved units the City has a remaining 2021-2029 RHNA of 1,531nits. The development of the proposed project and the cumulative projects would assist the City in meeting its RHNA goals, including goals for affordable housing. Additionally, for the longer term as shown in Table 3.9-2, SANDAG has forecasted an increase of population (26.4% increase), housing (37.7% increase) and employment (53.4% increase) for the City from 2016 to 2050. The growth associated with the proposed project and the cumulative projects, combined, would be within the long-term forecasts from SANDAG. Therefore, cumulative impacts associated with population and housing would be **less than significant**.

3.9.6 Mitigation Measures

Based upon the analysis presented in Sections 3.9.4 and 3.9.5, impacts were determined to be less than significant. No mitigation measures are required.

3.9.7 Conclusion

Physical impacts related to population growth associated with the proposed project are addressed throughout the topic-specific chapters of this EIR. See Sections 3.1 through 3.13. When significant impacts were identified in the EIR, mitigation measures have been identified to reduce impacts to below a level of significance. All impacts would be mitigated to below a level of significance.

Construction of the proposed project would represent a temporary increase in construction employment. Given the relatively common nature and scale of the construction associated with the proposed project, the demand for construction employment would likely be met within the existing and future labor market in the City and North County San Diego area. The size of the construction workforce would vary during the different stages of construction, but a substantial quantity of workers from outside the local area would not be expected to relocate permanently. Impacts would be less than significant.

As discussed above, the proposed project would introduce an estimated 512 people resulting from the development of 165 multi-family residential units. Based upon regional projections, comparisons to current land use designations, and comparison with the RHNA planning periods, the introduction of the estimated 512 people would not be considered substantial. The future commercial uses are anticipated to have approximately 6 employees. It is expected that these employees would come from the local job market and would not require workers to relocate from outside the area. The proposed commercial use would not induce population growth. Impacts would be **less than significant.**

3.10 Public Services

Introduction

This section analyzes the potential impact of the proposed project on public services including fire protection services, police protection services, schools, and libraries. Please see Section 3.13, Utilities and Service Systems, for an analysis of water, wastewater, energy, telecommunications, stormwater, and solid waste services. The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.[18] Service provider letters are included in **Appendix Q** of the Environmental Impact Report (EIR). In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that with the provision of on-site recreational amenities and payment of Public Facility Fees (PFF), impacts to recreational facilities would be less than significant. Section 5.11, Environmental Effects Found Not to be Significant - Public Services, of the EIR provides additional information on this topic. **Table 3.10-1** summarizes the project- and cumulative-level public services analysis impact, by threshold of significance.

Table 3.10-1. Public Services Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:			
Fire protection services	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Police protection services	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Schools	Less than Significant	Less than Significant	Less than Significant Without Mitigation
Other public facilities (Libraries)	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.10.1 Existing Conditions

This section details the existing service providers and resources related to fire protection, police protection, schools, parks, and libraries.

[18] http://www.san-marcos.net/work/economic-development/general-plan

Fire Protection

The San Marcos Fire Department (SMFD) would provide fire protection and emergency medical services to the project. The SMFD has existing automatic mutual aid fire agreements in place with the Cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District. The SMFD has an Insurance Service Office Rating 1, on a scale of one to ten with one being superior service.

The SMFD currently operates 4 fire stations, 4 paramedic assessment engine companies, 1 paramedic assessment truck company, 5 paramedic transport ambulances (24-hour units), 1 shift battalion chief, and 1 on-call duty chief. SMFD also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services wildland fire engine (City of San Marcos 2024). The Department also cross-staffs three wildland fire engines and a State of California/Office of Emergency Services (Cal/OES) wildland fire engine.

The SMFD Station 1, located at 180 W. Mission Road in San Marcos, is the closest station to the project site and would likely serve the project site should fire response or emergency services be needed (City of San Marcos 2024). SMFD Station 1 is located approximately 1.4 miles east of the project site. SMFD Station 1 houses an engine, truck, brush engine, ambulance, and battalion chief.

Police Protection

The San Diego County Sheriff's San Marcos Station provides law enforcement services to the city and unincorporated communities of Harmony Grove, Elfin Forest, Lake San Marcos, Hidden Meadows, Ivy Del, Del Dios, Lake Hodges, and the San Pasqual Valley (SDCSD 2024). The San Marcos Station is located at 182 Santar Place, approximately 2.3 miles east of the project site.

Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services (City of San Marcos 2012a). Services are available 24 hours a day, 7 days a week.

The San Marcos Station serves more than 111,000 residents and staffs more than 100 deputies, volunteers, and professional staff members. Additionally, Community Oriented Police and Problem-Solving teams are assigned to investigate community quality-of-life issues. Lastly, the Sheriff's San Marcos Station has the only Aerial Support to Regional Enforcement Agencies helicopter landing pad in the County, which assists ground units and extends the range deputies can patrol (SDCSD 2024).

The County Sheriff's Department does not set response time goals. The Sheriff's Department does, however, prioritize different types of calls to better facilitate deputy dispatches. The Sheriff Department's priority categories are as follows: priority level 1 (lifesaving response calls), priority level 2 (expeditious response calls within confines of vehicle codes), priority level 3 (calls responded to as soon as possible), and priority level 4 (calls responded to when clear, still being alerted to violations that require immediate law enforcement action) (City of San Marcos 2012a).

Schools

The project site is located within the San Marcos Unified School District (SMUSD). SMUSD is 49 square miles in size and encompasses most of the City of San Marcos and portions of the cities of Vista, Escondido, and Carlsbad, as well as unincorporated areas of the County of San Diego between these cities. As of 2023, there were 10 elementary schools, two K–8 schools, three middle schools, three

high schools, and one independent high school program that are a part of the SMUSD. SMUSD serves more than 19,500 students (SMUSD 2024a).

Based upon information from SMUSD, the project site falls within the attendance boundaries of La Mirada Academy (Grades TK-8) and San Marcos High School (Grades 9-12). La Mirada Academy has a maximum capacity of 1,202 students with a 2023/24 school year enrollment of 890 students. San Marcos High School has a maximum capacity of 3,184 students, which is currently being exceeded with a 2023/24 school year enrollment of 3,195 students (SMUSD 2024b).

Other Public Facilities (Libraries)

The San Diego County Library system has 33 branches, two bookmobiles, and five kiosks (San Diego County Library 2024). The City is served by the San Diego County Library, San Marcos Branch located at 2 Civic Center Drive, approximately 1.6 miles southeast of the project site. The San Marcos Branch is 15,394 square feet (s.f.) (City of San Marcos 2012b). The library is open seven days a week.

3.10.2 Regulatory Setting

Local

San Marcos General Plan

The following are applicable goals and policies from the City of San Marcos General, Land Use and Community Design Element related to public services:

<u>Land Use and Community Design Element</u>

- Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.
    - Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.
    - Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
- Goal LU-10: Fire protection, emergency services, and law enforcement: Provide effective, high-quality, and responsive services.
    - Policy LU-10.1: Provide demand-based firefighting and emergency medical services infrastructure, equipment, and personnel to provide a high level of fire, emergency medical, and law enforcement service in San Marcos to meet existing and future demands.
    - Policy LU-10.2: Work closely with the County of San Diego Sherriff's Department to determine and meet the community needs for adequate personnel, equipment, and state-of-the-art technology to effectively combat crime, and meet existing and projected service demands.
    - Policy LU-10.3: Continue to conduct public outreach and education regarding fire safety and crime prevention within San Marcos.
- Goal LU-11: Schools: Ensure all residents have access to high-quality education.
    - Policy LU-11.1: Collaborate with the local public school district (SMUSD), private schools, and institutions of higher learning to ensure a range of traditional and distance-learning

educational opportunities are provided in superior, accessible facilities that complement the surrounding land uses.

  - Policy LU-11.2: Work with San Marcos Unified School District and developers to ensure adequate school facilities are funded as required by State law and through developer mitigation agreements between the school district and the developer. The City shall require a "will serve" letter substantiating that the developer has paid fees to the satisfaction of the school district prior to issuance of building permits.

- Goal LU-12: Libraries: Provide library resources and services that meet the needs of the community.
  - Policy LU-12.1: Provide adequate library facilities and technological access that enhance San Marcos's quality of life and create a civic environment with vast opportunities for self-learning and academic enrichment.
  - Policy LU-12.2: Accommodate technological needs of the community and locate accessible technology in the library.

Safety Element

The following are applicable goals and policies from the City of San Marcos General Plan, Safety Element related to public services, including fire protection, police protection, parks, and libraries:

- Goal S-3: Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.
  - Policy S-3.1: Require development to be located, designed, and constructed to provide adequate defensibility and reduce the risk of structural loss and life resulting from wildland fires. Development will consider hazards relative to terrain, topography, accessibility, and proximity to vegetation. One such provision for development to minimize the risk of structural loss and life shall be the inclusion of overhead fire sprinklers.
  - Policy S-3.2: Provide sufficient level of fire protection service to reduce risk from urban and wildland fire. Advocate and support regional coordination among fire protection and emergency service providers.
  - Policy S-3.3: Require development to provide additional access roads when necessary, to provide for safe access of emergency equipment and civilian evacuation concurrently.
  - Policy S-3.4: Coordinate with fire protection and emergency service providers to assess fire hazards before and after wildfire events to adjust fire prevention and suppression needs, as necessary, commensurate with both short- and long-term fire prevention needs.
- Goal S-6: Provide neighborhood safety through effective law enforcement.
  - Policy S-6.1: Continue to maintain demand-based law enforcement service levels to reduce the risk of criminal activity.
  - Policy S-6.2: Continue public education efforts and community outreach programs to promote community involvement in crime and drug prevention.
  - Policy S-6.3: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings.

Environmental Justice Element

The following are applicable goals and policies from the City of San Marcos General Plan, Environmental Justice Element related to parks:

- Goal EJ-2: Locate public facilities and services equitably throughout the community.
    - Policy EJ-4.12: Use Crime Prevention through Environmental Design (CPTED) principles in the design or redevelopment of projects and buildings (See Policy S-6.3).

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7 in Section 3.7, Land Use and Planning, the project is consistent with all applicable goals and policies related to public services.

San Marcos Municipal Code

Section 17.44 – Development Services and Public Facilities Exactions, Fees, and/or Costs

This code requires that each applicant for a grading, construction, building and/or development permit or entitlement shall, prior to the issuance of such permit or entitlement, pay the fees including Development Services Fees and Public Facilities Fees (PFF).

3.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services would occur if the project would:

- **Threshold #1:** Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools and other public facilities.

3.10.4 Project Impact Analysis

Threshold #1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire Protection

As discussed in Section 3.10.1, above, the SMFD provides fire protection services to the city and would serve the project site. The proposed project would increase the demand for SMFD resources as a result of the development of residential uses and the associated population increase (512 residents), as well as the proposed new commercial uses. These future residents and employees would increase the need for fire protection services through routine fire and emergency medical calls. As a condition of project approval, prior to the issuance of a grading permit, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, with respect to the property,

the special taxes levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic)[19]. This would offset the project's increase in demand for fire protection services. Thus, while new development places increased demand on fire protection services, it is not anticipated that the proposed project would result in the need for construction of new fire facilities or expansion of existing fire facilities. The project would not result in substantial adverse physical impacts associated with the provision of new fire protection facilities and impacts would be **less than significant.**

Police Protection

As discussed in Section 3.10.1, above, the San Diego County Sheriff's Department provides law enforcement services to the city. More specifically, the project would be served by the San Marcos Station, located approximately 2.3 miles from the project site. The project would introduce approximately 512 residents on-site, resulting in an increased demand for existing police protection resources. The increased density of development on the project site would be expected to increase the frequency of emergency and non-emergency calls to the Sherriff's Department. However, as discussed in Section 3.10.1 above, over 100 deputies, volunteers, and professional staff serve the residents of the city. Law enforcement services include general patrol, criminal investigation, crime prevention, juvenile services, narcotics and gang investigations, communications and dispatch, and various management support services. Unlike fire services, which respond solely to emergencies, law enforcement services consist of patrolling large areas 24 hours a day, 365 days a year. Police units are continuously mobile, and service calls are responded to by the nearest available mobile unit. At the San Marcos Station, patrol deputies are assigned to a geographical "beat" area, allowing deputies to become familiar with citizens and problems within their "beats". As such, the location of the proposed project relative to the nearest station would not affect police protection. Further, to minimize the increased demand for police protection services, the project has been designed to improve the safety for future residents and visiting guests. Safety features proposed for the project include walls, fencing and lighting as described in Section 2.2.3 (Chapter 2, Project Description). Additionally, as a condition of project approval, prior to the issuance of a grading permit, the applicant/developer/property owner would submit an executed version of petition to annex into and establish, with respect to the property, the special taxes levied by the following Community Facility District: CFD 98-01 (Police). Thus, while new development places increased demand on police protection services, it is not anticipated that the proposed project would result in the need for construction of new police facilities or expansion of existing police facilities. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities. Impacts resulting from the proposed project would be **less than significant**.

Schools

The project site is located within the service boundary of the SMUSD. Per SMUSD the following schools would serve the project:

- La Mirada Academy (grades K-8), 3697 La Mirada Drive, San Marcos
- San Marcos High School (grades 9-12), 1615 W. San Marcos Boulevard, San Marcos

Table 3.10-2 presents the number of students anticipated to be generated by the 165-unit residential portion of the project. As shown in Table 3.10-2, the project would generate 4 TK students, 13

[19] https://www.san-marcos.net/home/showpublisheddocument/24248/637163295768400000

elementary school students, 9 middle school students, and 13 high school students for a total of 39 students.

Table 3.10-2. Student Generation

Grade	Generation Rate(1)	Number of Units Proposed	Students Generated
TK	0.0206	165	4
K-5	0.077	165	13
6-8	0.051	165	9
9-12	0.074	165	13
		Total Students	**39**

Source: SMUSD 2024b.
Note: (1) SMUSD has rates for single family, multifamily and apartments. The apartment rate was used for the project.

Based upon information from SMUSD, San Marcos High School is currently over capacity (SMUSD 2024b) and SMUSD as a whole is experiencing capacity issues. The addition of students generated by the project would contribute to these District-wide capacity issues. The project applicant shall pay school mitigation fees pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) in effect at the time of building permit issuance. Current Level II school fees are $5.17/s.f. ~~$4.79/s.f~~. for residential development and $0.84/s.f. ~~$0.78/s.f~~. for commercial development (SMUSD 2023). Further, consistent with General Plan Policy LU-11.2, the applicant shall provide a letter from the school district to the City prior to the issuance of building permits confirming these fees have been paid.

Payment of these fees would assist in funding SMUSD's long-range plans. Senate Bill (SB) 50 states that the fees imposed by school districts shall constitute the exclusive method of considering and mitigating impacts on school facilities caused by a development project. Such payment shall provide "full and complete mitigation of the impacts of any legislative or adjudicative act…on the provision of adequate school facilities" (Government Code Section 65995(h)). As such, with contribution of required development fees, impacts to schools would be **less than significant**.

Other Public Facilities (Libraries)

The project would develop 165 residential units, introducing approximately 512 new residents at the project site. Although not all of these residents would be new residents to the city, the generation of residents at the project site would increase the demands on other public facilities, including library services and additional resources. However, additional library services are available in the County through the Serra Cooperative Library System and California State University San Marcos (CSUSM). The Serra Cooperative Library System is a network of public, academic, and special libraries in the southern California counties of Imperial and San Diego. Serra helps member libraries provide expanded resources and services at reduced costs. The City of Oceanside Library and the City of Carlsbad Library are Serra member libraries in North County San Diego. CSUSM also allows community members to obtain a Community Borrow Card by showing a valid photo identification (CSUSM 2023). Community members can also borrow materials at Palomar College with a valid photo identification and proof of current mailing address (Palomar College 2023). Thus, while new development places increased demand on library services and facilities, it is not anticipated that the proposed project would result in the need for construction of new library facilities or expansion of existing library

facilities. Therefore, adequate library services are available to serve the proposed project, and a **less than significant impact** is identified for this issue area.

3.10.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to public services, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to public services (see Table 2-3, Cumulative Projects).

Fire Protection Services

The geographic area for the cumulative analysis of fire protection and emergency services is those areas that are serviced by the SMFD. The cumulative projects that fall within this geographic area would add to the increase in demand for fire protection and emergency services, and the potential need for additional fire protection resources. The SMFD provides service to the City of San Marcos and has existing automatic mutual aid fire agreements in place with the Cities of Carlsbad, Vista, Escondido, Encinitas, and the Rancho Santa Fe Fire Protection District. However, all cumulative projects would be required to participate in existing Community Facilities Districts as determined necessary. Future projects would be required to offset the increase in demand caused by their respective projects. Development fee payments would go towards providing the additional staff and equipment that would be needed by SMFD in the future to provide fire protection services, including potential new fire stations. Similarly, to offset any potential cumulative impacts to fire protection services, the project would pay all required development impact fees. Thus, cumulative impacts to fire protection services would be **less than significant.**

Police Protection Services

The geographic area for the cumulative analysis of police protection is those areas that are serviced by the San Diego County Sheriff's Department. All cumulative projects listed in Table 2-3 would result in an increase in demand for police protection services from the Sheriff's Department, and the potential need for additional police protection resources. Nonetheless, all cumulative projects would be required to offset increased demand for police protection services through the payment of fees. These fees would provide for additional staff and equipment to assist in the provision of law enforcement services. As such, with payment of fees, cumulative impacts to police protection services would be **less than significant.**

Schools

Based upon information from SMUSD, there are district-wide capacity issues including San Marcos High School, which is currently over capacity (SMUSD 2024b). The addition of students generated by the project along with cumulative development projects would contribute to the district-wide capacity issues.

As discussed in Section 3.10.4, the proposed project would be required to contribute development fees to SMUSD, pursuant to California Education Code Section 17620 et seq. and Government Code Sections 65995(h) and 65996(b) as well as the City's Municipal Code Section 17.52.050. All the cumulative projects included in Table 2-3 that include residential development would result in increased demand for school services and would be required to pay school fees to offset the increased demand, similar to the proposed project. Additionally, non-residential projects are also required to pay school fees consistent with SMUSD's developer fee schedule. As such, with contribution of required development fees by the proposed project and cumulative development projects, cumulative impacts to schools would be **less than significant.**

Other Public Facilities (Libraries)

Cumulative projects within the service area of the San Marcos Branch Library would result in an increase in demand for library services. However, additional library services are available in the County through the Serra Cooperative Library System and California State University San Marcos (CSUSM). Community members can also borrow materials at Palomar College with a valid photo identification and proof of current mailing address (Palomar College 2023). Therefore, adequate library resources are available to serve cumulative development in San Marcos, and cumulative impacts to library services would be **less than significant.**

3.10.6 Mitigation Measures

No significant impacts to public services were identified; thus, no mitigation measures are required.

3.10.7 Conclusion

Development of the proposed project would result in an increase in demand for fire protection, emergency medical services, police protection, school services, and library facilities. However, the project applicant would be required to pay all applicable development fees including payment of school mitigation fees, and development fees. These fees are utilized to provide improvements to public services in San Marcos, including fire and police protection, schools, and libraries The payment of all required development fees by the proposed project and cumulative development projects would offset any potential cumulative impacts to public services. The project applicant would also annex into CFD 2001-01 (Fire and Paramedic) and CFD 98-01, Improvement Area No. 1 (Police) which would offset and minimize potential impacts. As such, with payment of fees towards schools, fire, and police, impacts to public services would be **less than significant.**

3.11 Transportation

This section provides a transportation impact analysis for the proposed project related to transit, roadway, bicycle and pedestrian facilities, vehicle miles traveled, design feature hazards and emergency access. The section is based on the following reports, which are included as **Appendices O and R** of the Environmental Impact Report (EIR):

- *Local Transportation Analysis, Armorlite Lofts*. Prepared by Linscott Law & Greenspan, November 4, 2024 (LLG 2024a)
- *Vehicle Miles Traveled (VMT) Study*, Armorlite Lofts. Prepared by Linscott Law & Greenspan, November 4, 2023 (LLG 2024b)

In the Initial Study prepared for the proposed project (**Appendix B.1**), it was determined that there would be no potential for the project to substantially increase hazards due to a design feature or result in inadequate emergency access. Section 5.13, Environmental Effects Found Not to be Significant – Transportation, of the EIR provides additional information on these topics.

Section 3.7 (Land Use and Planning) includes a description of existing traffic conditions, methodology, baseline conditions and trip generation for the local transportation analysis/level of service (LOS) analysis. Table 3.7-7 in Section 3.7 analyzes the project's consistency with the Mobility Element of the General Plan. **Table 3.11-1** summarizes the project- and cumulative-level traffic impact analysis, by threshold.

Table 3.11-1. Transportation Summary of Impacts

Thresholds of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	No Impact	Less than Significant	Less than Significant Without Mitigation
#2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.11.1 Existing Conditions

The City strives to create a robust, city-wide system of roadways, bicycle and pedestrian paths and routes, as well as public transit options, which provide residents with alternative modes of travel as well as recreational opportunities.

Existing Roadways

Access to the project site from the regional transportation network would be provided via California State Route 78 (SR-78) freeway, Las Posas Road, W. Mission Road, and Armorlite Drive. These facilities will either provide a direct connection to the project site via project driveway or will provide a critical link between the project site and the regional transportation network.

Existing Transit Service

Transit service is provided to the area via North County Transit District (NCTD). The nearest bus stop is located about 500 feet south of the project site (2-minute walk), just south of the Armorlite Drive / Las Posas Road intersection. This bus stop serves bus routes 347, 445 and 645. The Palomar College Station, which serves the SPRINTER, is located about 1,000 feet east of the W. Mission Road / Las Posas Road intersection (8-minute walk from the project site). Continuous sidewalk connectivity is provided between the project site and these transit stops. A description of the nearest transit service is as follows:

- **Bus Route 347** provides bus service to the area via Mission Road and Las Posas Road, within the City of San Marcos. During weekdays, headways are 30 minutes for the duration of the day. During Saturdays, headways are one hour for the duration of the day.

- **Bus Route 445** provides bus service to the area via W. Mission Road and Las Posas Road, connecting Carlsbad to San Marcos. During weekdays, headways are one hour for the duration of the day. This bus route does not run on weekends.

- **Bus Route 645** provides bus service to the area via W. Mission Road and Las Posas Road, within the City of San Marcos. During weekdays, there are only two services in the morning starting at 7:50 AM, and only one service in the afternoon sometime between 3:30 PM and 3:50 PM.

- The **SPRINTER** runs between Escondido and Oceanside. There are 15 stops along this route. SPRINTER service provides 34 daily trips on the weekdays with an additional six trips on Friday nights. It also provides 25 daily weekend trips with an additional three trips on Saturday nights.

Existing Bicycle Infrastructure Conditions

Currently, there are bike lanes on both sides of W. Mission Road, and they are a mix of Class I, Class II and Class III depending on the location. Closest to the project site is a Class I bike lane which runs on the north side of W. Mission Road west of Pacific Street, and on the south side of W. Mission Road east of Pacific Street. This Class 1 bike lane is associated with the Inland Rail Trail. Additionally, a Class I Multi-Use Path currently exists along the north side of Armorlite Drive, between Las Poses Road and Bingham Drive along the project frontage.

Planned Bicycle Infrastructure

In the City's Active Transportation Plan, (ATP) recommendations for future bicycle classifications are characterized as interim and ultimate conditions. The interim bicycle network is composed of recommendations that can be accomplished in the near term without requiring redevelopment, right-of-way, or easements, or major environmental documentation/ permitting. The ultimate network contains long-term recommendations that can be completed over time as the City redevelops and right-of-way is acquired. In some cases, and ultimate improvement may be constructed first, rendering the interim improvement unnecessary.

Under interim and ultimate conditions, the existing Class I Multi-Use Path on Armorlite Drive will be extended east to Vallecitos de Oro. From there it would split with one segment connecting to Furniture Row and another segment connecting to Knoll Road (City of San Marcos 2023).

Existing Pedestrian Connections

Existing sidewalk connection is provided between the project site and the Palomar College Station SPRINTER Station and area bus stops via Armorlite Drive to Las Posas Drive. Sidewalks are provided on both sides of Armorlite Drive and other study area roadways except for the south side of W. Mission Road from Pacific Street to 350 feet west, the north side of W. Mission Road from Pacific Street to 170 feet west, and the north side of W. Mission Road from Pacific Street to 670 feet east. There are no plans to add or alter sidewalks within the immediate project vicinity according to the City's ATP (City of San Marcos 2024).

3.11.2 Regulatory Setting

The following provides a general description of the applicable regulatory requirements and guidelines for the project area.

State Regulations

California Department of Transportation

The California Department of Transportation (Caltrans) is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans has established standards for roadway traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects.

AB 1358 – California Complete Streets Act of 2008

The California Complete Streets Act of 2008 (Assembly Bill [AB] 1358) requires circulation elements as of January 1, 2011 to consider the transportation system from a multi-modal perspective, including public transit, walking, and biking, which have traditionally been marginalized in comparison to autos in contemporary American urban planning.

SB 743, CEQA Guidelines Update

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, which included the California Natural Resources Agency Guidelines for the Implementation of CEQA. As a result, the California Governor's Office of Planning and Research (OPR) updated and released the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) in December 2018. According to the updated guidelines, lead agencies had until July 1, 2020 to comply with the updated CEQA revision. The City of San Marcos has adopted Vehicle Miles Traveled (VMT) thresholds as part of their Transportation Impact Analysis Guidelines (City of San Marcos 2020).

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process; cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City

can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside CEQA. Section 3.7, Land Use and Planning, includes results of the LOS analysis prepared for the project.

Local Plans and Policies

SANDAG San Diego Forward: The 2021 Regional Plan

The Regional Plan, adopted in 2021 by the San Diego Association of Governments (SANDAG), provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative transportation demand and management strategies.

The Regional Plan combines the Regional Comprehensive Plan and the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS). By integrating land use and transportation plans, the Regional Plan is intended to achieve greenhouse gas emission reduction targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities Act.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the city and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

The Regional Plan also supports other regional transportation planning and programming efforts, including overseeing which projects are funded under the Regional Transportation Improvement Program and the TransNet program. SANDAG is applying data-driven strategies, innovative technologies, and stakeholder input to create a future system that is faster, fairer, and cleaner. Part of this data-driven approach includes the implementation of five key transportation strategies referred to as the 5 Big Moves. These strategies provide the framework for the Regional Plan and consider policies and programs, changes in land use and infrastructure, the existing transportation highway and transit networks, and trends in technology to optimize use of the transportation system. Together, these initiatives will create a fully integrated, world-class transportation system that offers efficient and equitable transportation choices, meets state climate targets, and supports local jurisdictions' achievements of Climate Action Plan goals.

In September 2022, the SANDAG Board directed staff to prepare an amendment to the 2021 Regional Plan without the regional road usage charge. In developing the amendment, SANDAG will refine the financial strategies used in the 2021 Regional Plan to achieve the region's greenhouse gas emissions target set by CARB, without the road usage charge. SANDAG will also assess the region's continued ability to meet air quality standards. An Amendment to the 2021 Regional Plan removing the regional road user charge was adopted by SANDAG in October 2023. The 2025 Regional Plan is currently in development and will not include a regional road user charge.

SANDAG Smart Growth Opportunity Area

The project site is located within the SM-3 Mixed Use Transit Corridor as identified in the SANDAG Smart Growth Concept Map for North County. The Smart Growth Concept Map identifies locations in the region that can support smart growth, transit, walking, and biking. The map serves as the foundation for prioritizing transportation investments and determining eligibility for local smart growth incentive funds.

Congestion Management Program

The 2008 Congestion Management Program (CMP) for San Diego County was developed to meet the requirements of Section 65089 of the California Government Code. Since that time, the local agencies within San Diego County approved to opt out of the CMP requirements, as allowed within the Government Code. As such, there are no CMP-specific requirements associated with this project. However, to ensure the region's continued compliance with the federal congestion management process, SANDAG has prepared San Diego Forward: The 2021 Regional Plan in compliance with 23 Code of Federal Regulations 450.320. The Regional Plan incorporates performance monitoring and measurement of the regional transportation system, multimodal alternatives to single-occupancy vehicles, land use impact analysis, congestion management tools, and Integration with the Regional Transportation Improvement Program process.

City of San Marcos Transportation Impact Analysis Guidelines

The City of San Marcos approved *Transportation Impact Analysis Guidelines* (TIAG) on November 16, 2020 (City of San Marcos 2020). The TIAG provide screening criteria for determining whether a land development project should conduct a VMT analysis. These thresholds are based on the project's consistency with the General Plan, estimated daily trips, project location, and other project characteristics. A VMT analysis applies to all land development projects except for those that meet at least one of the provided screening criteria.

City of San Marcos Active Transportation Plan

The City's Active Transportation Plan (ATP) supplements the General Plan Update by recommending specific pedestrian and bicycle-related projects, programs, and policies for the City. The ATP Plan focuses on encouraging non-motorized modes of transportation – primarily walking and biking - by recommending projects, programs, and policies that enhance the active transportation experience in the community. The ATP evaluates the current state of walking and biking opportunities; analyzes user demographics, safety data and more; engages community members; and provides recommendations to support mobility in the city. The ATP also incorporates a Safe Routes to School (SRTS) Study to identify challenges associated with the schools located within the San Marcos Unified School District. The ATP will be used to create active transportation-oriented projects for the City's Capital Improvement Program (CIP) and for construction as required by the city for private development projects.

In the City's ATP, recommendations for future bicycle classifications for each roadway were broken down into interim and ultimate conditions. The interim bicycle network is composed of recommendations that can be accomplished in the near term without requiring redevelopment, right-of-way, or easements, or major environmental documentation/ permitting. The ultimate network contains long-term recommendations that can be completed over time as the City redevelops and right-of-way is acquired. In some cases, and ultimate improvement may be constructed first, rendering the interim improvement unnecessary.

Developers will be required to implement the ultimate bicycle network recommendations when considering setbacks, frontage improvements, and design, and may be required to construct the ultimate facilities based upon roadway characteristics, adjacent facilities, and the ability to design and construct safe transitions into the ultimate improvements. For two-way bicycle facilities—such as a Class I multi-use path or a Class IV two-way bikeway—the City may require a developer to construct or provide setbacks for these types of facilities that may be identified on the side of the roadway opposite the project's frontage. Locations of desired facilities may, in some cases, be placed on either side of the roadway, at the discretion of the City. Parallel facilities may be required by the City as opportunities arise to create similar connectivity on other routes. The City may require other connectors between the high-level infrastructure shown in this plan in order to ensure a seamless network.

San Marcos Transportation Demand Management (TDM) Ordinance and Policy

To implement the City's Climate Action Plan measures and to reduce traffic impacts from development projects, the City of San Marcos adopted a TDM Ordinance and Policy in December 2023. The TDM Ordinance and Policy will be applicable to any development project that is not exempt from CEQA requirements and would result in emission of more than 500 metric tons of carbon dioxide (MT of CO_2) per year. Projects that are subject to this Ordinance shall submit a project specific TDM Plan for the City's review and approval with the entitlement application to show compliance with the TDM Policy and Ordinance.

Its intent is to encourage a shift away from single-occupancy vehicles to alternative travel options such as walking, biking, carpooling, or taking transit. Reducing reliance on roadways will likewise result in reduced congestion, vehicle miles traveled, and greenhouse gases. The TDM policy lists six mandatory strategies that are required for all projects to implement and 29 optional strategies, each assigned a specific point value. Applicable projects would have to establish a project specific TDM Plan that should include all mandatory and a selection of optional strategies to achieve a minimum of a ten-point score.

San Marcos General Plan

The Land Use and Community Design Element of the General Plan identifies specific policies related to congestion management. Those that are applicable to the proposed project are identified below.

- Goal LU-1: Achieve a balanced distribution and compatible mix of land uses to meet the present and future needs of all residents and the business community.
    - Policy LU-1:1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices.
- Goal LU-3: Develop land use patterns that are compatible with and support a variety of mobility opportunities and choices.
    - Policy LU-3.4: Provide non-motorized (pedestrian and bicycle) access/circulation within, and to mixed-use centers to reduce reliance on the automobile.
    - Policy LU-3.5: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways.
    - Policy LU-3.7: Require new development to prepare traffic demand management programs.

  - Policy LU-3.8: Require new development and discretionary actions to annex into a Congestion Management Community Facilities District.

The Mobility Element of the General Plan identifies specific goals and policies related to an efficient circulation system, traffic calming and safety, and alternative modes of travel. Those that are applicable to the transportation analysis for the proposed project are identified below. Policy M-1.4, which addresses LOS, is analyzed in Section 3.10, Land Use and Planning.

- Goal M-1: Provide a comprehensive multimodal circulation system that serves the City land uses and provides for the safe and effective movement of people and goods.
  - Policy M-1.1: Safely and efficiently accommodate traffic generated by development and redevelopment associated with implementation of the General Plan Land Use Policy Map.
  - Policy M-1.2: Require new development to finance and construct internal adjacent roadway circulation and City-wide improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
  - Policy M-1.3: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the city.
  - Policy M-1.4: Utilize multi-modal LOS techniques to evaluate transportation facilities. For identified prioritized modes (based on facility typology), provide the following minimum LOS as shown in Table 3-4 of the Mobility Element:
    - LOS D or better for Vehicles as a prioritized mode
      - Generally, provides facilities that have minimum vehicle congestion during peak periods. Most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle).
    - The City shall allow for flexible LOS where warranted (e.g., accepting a lower LOS than identified above).
  - Policy M-1.6: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network.
  - Policy M-1.7: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor.
- Goal M-2: Protect neighborhoods by improving safety for all modes of travel and calming traffic where appropriate.
  - Policy M-2.1: Work with new development to design roadways that minimize traffic volumes and/or speed, as appropriate, within residential neighborhoods, while maintaining the City's desire to provide connectivity on the roadway network.
  - Policy M-2.3: Consider roundabouts, as appropriate, as an intersection control device with demonstrated air quality, traffic efficiency, and safety benefits.
- Goal M-3: Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City.

- Policy M-3.1: Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
- Policy M-3.2: Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians through design, maintenance, and law enforcement. Install wider sidewalks and curb extensions at pedestrian crossings (bulb outs) where appropriate.
- Policy M-3.3: Provide a pedestrian and bicycle network in existing and new neighborhoods that facilitates convenient and continuous pedestrian and bicycle travel free of major impediments and obstacles.
- Policy M-3.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians.
- Policy M-3.9: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities.

The Environmental Justice Element of the General Plan identifies specific goals and policies related to access to and facilitation of walking, bicycling, and transit use. Those that are applicable to the proposed project are identified below.

- Goal EJ-1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.
  - Policy EJ-1:1: Ensure that adjacent land uses complement one another by considering compatibility of activities, development patterns and architectural character elements, and access to various mobility choices (See Policy LU-1.1).
  - Policy EJ-1.3: Promote compact development patterns that reduce air pollution and automobile dependence and facilitate walking, bicycling, and transit use (See Policy LU-2.1).
  - Policy EJ-1.6: Require new developments to prepare and implement Transportation Demand Management (TDM) programs to minimize vehicle trip generation and promote alternative modes of travel within the city (See Policy M-1.3).
  - Policy EJ-1.8: Develop an integrated multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City (See Policy M-3.1).
- Goal EJ-2: Locate public facilities and services equitably throughout the community.
  - Policy: EJ-2.10: Work to improve connectivity within the City by closing gaps in the existing bicycle, pedestrian, trail, transit, and roadway network. Work with new development to provide connectivity and redundancy in the mobility network (See Policy M-1.6).
  - Policy: EJ-2.11: Strive to ensure that streets within San Marcos shall be complete streets where feasible; thereby providing accessibility, safety, connectivity, and comfort for all

modes and users of the system. Appropriate new local streets and Main Streets will prioritize pedestrian and bicycle users through the corridor (See Policy M-1.7).

- Goal EJ-5: Encourage physical activity and improved physical fitness.
  - Policy: EJ-5.1: Provide non-motorized (pedestrian and bicycle) access/ circulation within, and to, mixed-use centers to reduce reliance on the automobile (See Policy LU-3.4).
  - Policy EJ- 5.2: Provide an interconnected open space system that is accessible to the public, including pedestrian and equestrian links, bicycle paths, multi-use trails, recreation areas, and drainage-ways (See Policy LU-3.5).
  - Policy EJ-5.5: Ensure that streets in areas with high levels of pedestrian activity (such as employment centers, residential areas, mixed use areas, and schools) support safe pedestrian travel by providing detached sidewalks, bulb-outs, enhanced pedestrian crossings, pedestrian bridges, and medians (See Policy M-3.5).
  - Policy EJ-5.6: Create a pleasant walking environment for roadway typologies where pedestrian travel is prioritized. This includes providing shade trees, landscaping, benches, pedestrian-scale lighting, way finding signage, transit shelters, and other appropriate amenities (See Policy M-3.9).

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As presented in Table 3.7-7 in Section 3.7, the project is consistent with the applicable transportation-related goals and policies.

3.11.3 Thresholds of Significance

Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* provides thresholds for determining significant environmental impacts. A project may be deemed to have a significant impact on transportation if it would:

- **Threshold #1:** Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; or
- **Threshold #2:** Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b); or

3.11.4 Project Impact Analysis

Threshold #1: Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Access to the proposed project from the regional transportation network would be provided via the SR-78 freeway, Las Posas Road, W. Mission Road, and Armorlite Drive. These facilities would either provide a direct connection to the proposed project, via the project driveway, or would provide a critical link between the proposed project and the regional transportation network.

The project would not result in any conflicts related to plans or policies addressing transit, bicycle, and pedestrian facilities. The project is located within 500 feet of the nearest bus stop and about 1,000 feet (8-minute walk) to the closest SPRINTER station. Continuous sidewalk connectivity is provided between the project site and these transit stops. Existing sidewalks are already provided on both sides of Armorlite Drive, the project site's frontage road, and the project would not interfere with anticipated

improvements to the existing Class I Mult-Use Path on Armorlite Drive or bike lanes on Las Posas Road (City of San Marcos 2023).

Additionally, based upon the analysis presented in Section 3.7.4, the project would not result in an inconsistency with the Mobility Element of the City's General Plan. The Local Transportation Analysis determined that the project would result in 1,214 total average daily trips (ADT). All roadway segments are calculated to operate acceptably at LOS D or better with the addition of project and cumulative project traffic under Near Term 2025 and Horizon Year 2050 conditions. All study intersections are calculated to operate acceptably at LOS D or better with the addition of project and cumulative project traffic under Near Term 2025 conditions with the exception of the Las Posas Road/ Descanso Avenue and Las Posas Road/ Grand Avenue intersections. These intersections are forecast to operate at LOS F with and without the proposed project in the Near Term 2025 condition. The trips associated with the proposed project would not be enough to add two seconds of average vehicle delay, which is the threshold for intersections operating at LOS E or F, as identified in the Mobility Element of the General Plan (LLG 2024a).

All study intersections are calculated to operate acceptably at LOS D or better with the addition of project and cumulative project traffic under Horizon Year 2050 conditions with the exception of the following intersections: Mission Road/Pacific Street, Mission Road/ Las Posas Road, Mission Road/ Knoll Road, Las Posas Road/ Descanso Avenue, Las Posas Road/ SR-78 Westbound Ramps, and Las Posas Road/ Grand Avenue intersections. These intersections are forecast to operate at LOS E or F with and without the proposed project in the Horizon Year 2050 condition. The trips associated with the proposed project would not be enough to add two seconds of average vehicle delay, which is the threshold for intersections operating at LOS E or F (LLG 2024a).

Therefore, impacts related to a conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be **less than significant**.

Threshold #2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).

The TIAG (City of San Marcos 2020) provides several screening approaches to identify when a project should be expected to cause a less-than-significant impact related to VMT. The City of San Marcos TIAG suggest that a detailed transportation VMT analysis applies to all land development projects, except those that meet at least one of the screening criteria. Relevant screening criteria for the proposed project is described below:

- **Map-Based Screening for (Projects Located in VMT Efficient Areas)** – Residential and employment projects that are proposed in areas that generate VMT below adopted City thresholds can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. This determination must be made using SANDAG's online residential and employment VMT maps for existing year or model baseline year VMT (whichever is available at the time analysis is being conducted), which show census tracts in the city where the VMT is below the regional average. The following types of projects could be screened out using this approach:
    - Residential and office projects proposed in census tracts with residential VMT per capita below the City's threshold of 85% of the SANDAG regional average. A significant impact would occur if the project generates VMT per resident or worker greater than 85% of the regional average.

In order to utilize this screening approach, the project must incorporate similar land use characteristics to other projects in the census tract. For mixed-use projects, this screening criteria should be applied to the residential and employment components separately to determine if any portions of the project screen out of a detailed VMT analysis.

- **Local-Serving Retail** - Retail projects that have 50,000 square feet gross floor area or less can be presumed to have a less than-significant transportation impact and would not require a detailed VMT analysis. For a mixed-use project, this screening criteria should be applied to the retail/commercial component separately to determine if that portion of the project screens out of a detailed VMT analysis.

VMT Analysis

Residential Component

Per the City TIAG, a VMT analysis is not required as the project is located in a VMT efficient area (Residential projects proposed in census tracts with residential VMT per capita below the City's threshold of exceeding 85 percent of the SANDAG regional average) based on the applicable location-based screening map produced by SANDAG. The San Diego average regional VMT/capita is 18.9 (and 15% below 18.9 would equate to 16.0) per SANDAG Series 14 (Year 2016) data.

Using the SANDAG screening map for residential projects under per capita measurements (**Figure 3.11-1**) the project is located in census tract 200.29 and would be expected to generate 12.5 VMT/capita. This equates to 66.1% of the regional average VMT/capita. **Table 3.11–2** shows the VMT analysis results.

Table 3.11-2. Project Vehicle Miles Traveled Analysis

Geography	VMT per Resident	Exceeds Threshold?
San Diego Region	18.9	-
Significance Threshold (85% of Regional Average VMT)	16.0	-
Project Site	12.5	No

Source: LLG 2024b.

Therefore, based on the City's TIAG, a VMT analysis is not required as the project is located in a VMT efficient area and VMT impacts are presumed to be **less than significant.**

Commercial Component

The project includes up to 5,600 square feet (s.f.) of retail/flex space. Per the City TIAG, local-serving retail projects that are 50,000 square feet gross floor area or less can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. Retail can include shopping centers as well as standalone uses such as commercial shops, gas stations, and restaurants. Therefore, based on the City's TIAG, a VMT analysis is not required as the proposed 5,600 s.f. of commercial use is far less than the screening criteria threshold for local-serving retail of 50,000 s.f.

3.11.5 Cumulative Impact Analysis

A "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. Pursuant to CEQA Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to transportation, the cumulative analysis is based upon a list approach to determine the proposed project's contributing effect on potential cumulative impacts related to hazards. All of the cumulative projects identified in Table 2-3 are considered in this cumulative analysis.

Cumulative Policy Impact

The related projects and other cumulative development in San Marcos would be subject to the same circulation-related programs, plans, ordinances, and policies as the proposed project. Cumulative projects would be required to demonstrate consistency with the SANDAG 2021 Regional Plan, San Marcos General Plan, the City's ATP , and San Marcos TIAG, which guide development of transportation systems and circulation in the city. The cumulative projects primarily propose medium- to high-density residential and mixed-use development in areas with good transit connectivity and active transportation options, reducing dependence on automobiles and encouraging more active travel modes. As a result, cumulative impacts related to a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be **less than significant**.

Cumulative VMT Analysis

According to the City's TIAG (San Marcos 2020) if a land use project (or a component of a mixed-use project) is screened out of requiring a detailed existing VMT analysis or if it falls below the existing VMT thresholds outlined in Table 2 of the TIAG, it would also result in a less than significant cumulative impact. Therefore, the proposed project's cumulative VMT impact would be **less than significant**.

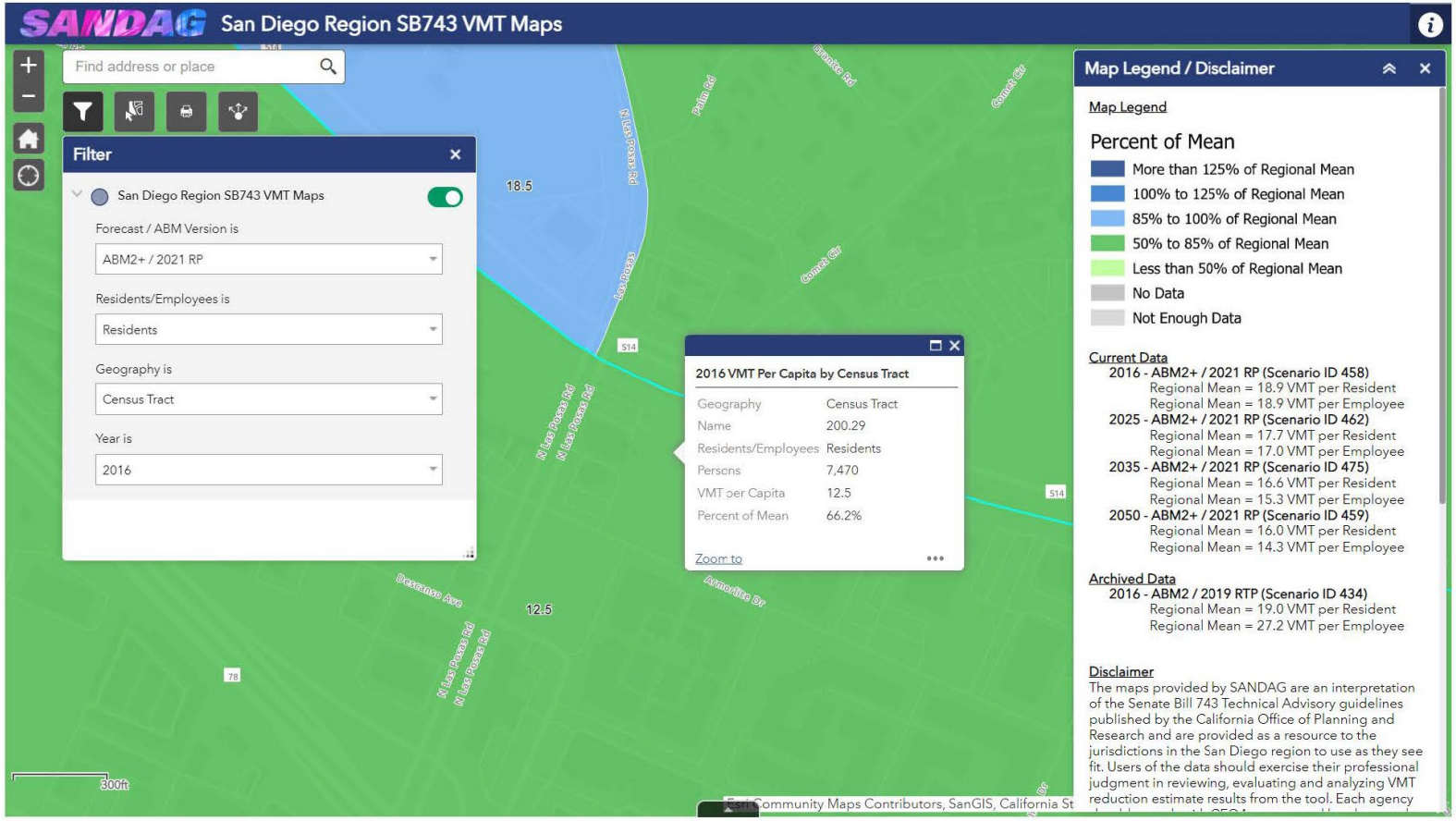
3.11.6 Mitigation Measures

Based upon the analysis presented in Sections 3.11.4 and 3.11.5, impacts were determined to be less than significant. No mitigation measures are required.

3.11.7 Conclusion

Based upon the analysis presented in Section 3.11.4, the project would not have an impact related to a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The project would also have a less than significant impact related to VMT based on the City's screening criteria.

Figure 3.11-1. Project Location within SANDAG SB 743 VMT Map



Source: LLG 2024b.

3.12 Tribal Cultural Resources

Introduction

This section analyzes the potential impacts of the proposed project on tribal cultural resources. As defined by Public Resources Code Section 21074, a tribal cultural resource is a site, feature, place, and or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is either on or eligible for the California Register of Historic Resources (CRHR) or a local historic register, or determined by the City, at its discretion to treat the resource as a tribal cultural resource.

Cultural resources (historical resources, archaeological resources and human remains) are analyzed separately in Section 3.4, Cultural Resources, of the Environmental Impact Report (EIR).

The analysis in this section is based upon the following information:

- Results of a June 2023 search of the Sacred Lands File by the California Native American Heritage Commission, requested by ASM Affiliates (July 2024).
- Government-to-government tribal consultation between the City and California Native American Tribes pursuant to the procedures in Assembly Bill 52 and Senate Bill 18.
- *Archaeological Survey Report for Armorlite Lofts Project, San Marcos, CA prepared by ASM Affiliates (July 2024).*

The analysis also considers the California Environmental Quality Act (CEQA) Guidelines Appendix G and applicable State and Local regulations, including the City of San Marcos General Plan. The General Plan is available on the City's web site.[20] **Table 3.12-1** summarizes the tribal cultural resources project- and cumulative- level impacts, by threshold.

3.12.1 Existing Conditions

A detailed description of the project site's natural setting, archeological context, ethnographic context, records search information, and ASM's informal tribal coordination and information gathering is presented in Section 3.4 (Cultural Resources). The following section provides information about tribal cultural resources and a summary of government-to-government tribal consultation efforts pursuant to AB 52 and SB 18. Although SB 18 is not a CEQA issue, the tribal consultation was simultaneous under both laws.

Table 3.12-1. Tribal Cultural Resources Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 – Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is	Significant Impact	Less Than Significant Impact	Less Than Significant Impact With Mitigation

[20] http://www.san-marcos.net/work/economic-development/general-plan

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
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).			
#2 – Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less than Significant Impact	Less than Significant Impact	Less than Significant Impact

Tribal Consultation

In addition to ASM reaching out to Tribes as part of the archeological report preparation (see Section 3.4), the City provided notice to Tribes pursuant to AB 52 and SB 18 and consulted with Tribes.

Under AB 52, the City sent project notification letters on July 11, 2023 to the following California Native American tribes, which had previously submitted general notification requests in writing pursuant to 21080.3.1(d) of the Public Resources Code. Each recipient was provided a brief description of the project and its location, the lead agency contact information, and a notification that the tribe has 30 days to request consultation, pursuant to PRC Section 21080.3.1(d). The 30-day response period concluded on August 12, 2023.

- Mesa Grande Band of Mission Indians
- Pechanga Band of Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians

Under SB 18, on July 11, 2023, the City sent project notification letters to the following California Native American tribes named on the NAHC list. Each recipient was provided a brief description of the project and its location, the lead agency contact information, and a notification that the tribe has 90 days to request consultation, pursuant to Government Code Section 65352.3(a)(2). The 90-day response period concluded on October 9, 2023.

- Barona Group of the Capitan Grande
- Campo Band of Diegueno Mission Indians
- Ewiiaapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Band of Indians

- Jamul Indian Village
- Kwaaymii Laguna Band of Mission Indians
- La Jolla Band of Luiseño Indians
- La Posta Band of Diegueño Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseño Indians
- Pechanga Band of Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- San Pasqual Band of Diegueño Mission Indians
- Soboba Band of Luiseño Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

As a result of the initial notification letters, the City received the following responses, and engaged in consultation with these tribes as summarized below.

San Luis Rey Band of Mission Indians

The tribe responded on July 19, 2023 to request consultation under AB 52 and separately responded to request consultation under SB 18. The City initiated consultation on July 31, 2023, at which time the City began discussing the project with the tribe during monthly consultation meetings. Tribal representative Cami Mojado recommended that an area be set aside for sage scrub found on the property, and forwarded to the City an email from the Tribal Historic Preservation Officer of the Jamul Indian Village of California that they are deferring consultation on this project to the San Luis Rey Band of Mission Indians. On December 21, 2023, Cami Mojado requested a site visit.

On January 18, 2024, she indicated that she would send a comment letter that recommends a large enough reburial area for unanticipated discoveries and previous collections, preservation of a confidential feature on the property, and planting of a sage shrub garden. On April 10, 2024, Cami Mojado performed a site visit. On June 26, 2024, the City transmitted draft proposed mitigation measures and the grading plan to the tribe for comment.

On October 17, 2024, Cami Mojado provided a letter to the City stating the tribe's agreement with the mitigation measures proposed by the City. Therefore, in accordance with PRC Sections 21080.3.2(b)(1) and 21082.3(d)(1), the City concluded consultation under AB 52. The information provided to the City, including confidential information that cannot be disseminated publicly, was taken into account in the project impact analysis further below.

Rincon Band of Luiseño Indians

The tribe responded on July 31, 2023 to request consultation under SB 18, and responded on August 1, 2023 to request consultation under AB 52. The City initiated consultation on August 1, 2023 when transmitting the technical report to the tribe.

On August 15, 2023, the City discussed the project during a regular monthly consultation meeting. Tribal representative Cheryl Madrigal acknowledged receipt of the information but had not had an opportunity to review the information yet. Additional information was sent to the tribe by the City on September 6 and September 11, 2023.

During a subsequent meeting with the tribe on December 19, 2023, Cheryl Madrigal indicated that she would send the City a letter with comments. On January 11, 2024, the tribe sent a comment letter to the City that included a request for a field meeting and four initial recommendations. On January 25, 2024, the City attended a field visit and hosted an office meeting with the tribe to discuss the tribe's comments. The tribe sent another letter on February 6, 2024 to state its concerns regarding impacts to a tribal cultural resource inside the project area. The letter included two additional recommendations beyond what was stated in the January 11, 2024 letter.

During a subsequent meeting on February 20, 2024, the City requested permission to share the comments with the applicant, which was denied by the tribe. The City and tribe discussed the project in detail, including a robust discussion about whether or not avoidance and preservation in place is feasible. The tribe requested an alternatives analysis in advance of the preparation of the EIR to assist in determining whether or not it is feasible to avoid. The City requested an alternatives analysis from the applicant, and the report of the analysis was provided to the tribe on March 28, 2024 along with a response to the tribe's February 6, 2024 letter. The City explained to the tribe which mitigation measures are feasible and which ones are not, and proposed a suite of eight measures to reduce impacts to less than significant.

In April 2024, the City again met with the tribe, and Cheryl Madrigal indicated that they are still reviewing the City's letter and the alternatives analysis and that a written response from the tribe would be forthcoming in the next couple of weeks. On May 21, 2024, the City met with the tribe again. Cheryl Madrigal reported that the tribal staff and elders were reviewing and discussing the project. She stated that the tribe is not planning to obstruct the project's approval and that mitigation is possible to resolve impacts to the site, and that a letter is still forthcoming. On June 3, 2024, the tribe sent the response letter to the tribe, clarifying the tribe's position on its suggested mitigation.

The City continued to meet with Rincon in July, August, and September 2024 over the language of mitigation measures. In September, the tribe asked for a restriction on the export of soil from the property or an over-excavation and reburial of soil on site. The City discussed the request with the Applicant team and determined that the over-excavation of soil would require blasting due to the presence of dense soils and rock on the property. That location of the rock throughout a significant majority of the parcel is a driving factor for the location of the building and grading plan. The engineering plan accounted for those constraints (inability to penetrate the bedrock) by utilizing the natural contours and grades to the extent possible to lessen the amount of blasting and earthwork required to create a usable pad. The limited amount of ability to grade combined with the amount of rock material onsite would preclude the project from burying the cultural soil in a deep pit as even the standard grading for the project will be very challenging. If the project were to attempt to bury the material it would significantly increase earthwork operations, leading to higher greenhouse gas emissions and potentially triggering the need for new environmental permits. Therefore, excavating

the material, stockpiling the excavated soil on-site, and reburial of the material is not feasible due to the limited space on the site and grading conditions. As a result, the City could not come to agreement on this measure.

The City and Tribe also consulted extensively on the scope and content of ethnographic documentation for the project. The City ultimately concluded that for mitigating impacts to a tribal cultural resource, the City cannot require a regional landscape study and must take into account the nexus and rough proportionality of the project's impacts. The City, however, agreed to require a project-specific ethnography as mitigation.

In July, August, and September 2024, the City continued to seek agreement with Rincon over the impacts and mitigation measures required to reduce the impact to less than significant. Ultimately, although Rincon did not provide written concurrence with the mitigation measures, the City determined that, after a good faith and reasonable effort, further consultation on the project would not be fruitful and that meaningful consultation on the project has been exhausted. As a result, the City considers consultation with the Rincon Band of Luiseño Indians complete without agreement in accordance with Section 21080.3.2(b)(2) of the Public Resources Code. Although consultation concluded without written agreement from the Rincon Band, the mitigation measures presented herein were developed in close coordination with tribal representatives from the Rincon Band over a 16-month period. Ultimately, the City exercised its agency discretion and will require these mitigation measures. The information provided to the City to date, including confidential information that cannot be disseminated publicly, was taken into account in the project impact analysis further below.

Pechanga Band of Indians

The tribe responded on August 9, 2023 to request consultation under AB 52. This followed a discussion on July 24, 2023 between the City and tribe during one of the regular consultation meetings. At that time, Pechanga representative Paul Macarro explained the tribe's perspectives on sensitivity of the property and urged the City to adopt the standard conditions, to which the City agreed. The tribe requested information on the prior studies and grading plans. On May 14, 2024, the City again met with the tribe to discuss the project and the scope of the proposed mitigation measures. The city explained the proposed measures, which were neither supported nor opposed by the tribe during the meeting. The city sent the mitigation measures and the grading plans with a potential reburial location to the tribe immediately following the meeting. After no response, the City followed up with the tribe on June 3 and July 1, 2024 and received no response.

Although multiple attempts during June and July 2024 by the City to obtain a concurrence letter from the tribe prior to release of the EIR were unsuccessful, and there was the appearance that the tribe failed to engage after requesting consultation, enough consultation occurred that the City considers consultation with the Pechanga Band of Indians complete and in substantial agreement in accordance with Sections 21080.3.2(b)(1) and 21082.3(d)(1) of the Public Resources Code. The information provided to the City to date, including confidential information that cannot be disseminated publicly, was taken into account in the project impact analysis further below.

Other Tribes

The balance of the tribes did not request consultation under either AB 52 or SB 18.

Because the City initiated consultation with all tribes that requested it, the threshold for release of the CEQA document for public review in PRC Section 21080.3.1(b) has been met. The City considers consultation with all consulting tribes concluded in good faith, as required by PRC Section 21082.3(d).

3.12.2 Regulatory Setting

The following section provides a general description of the applicable regulatory requirements pertaining to tribal cultural resources. The analysis of tribal cultural resources is a State requirement under CEQA, as required by AB 52, described below. The City also has goals and policies in the General Plan Conservation and Open Space Element related to cultural resources, as described below.

State

Senate Bill 18

SB 18, approved in 2004, amends the California Civil Code and the California Government Code, requiring cities and counties to contact and consult with California Native American tribes prior to adopting or amending any general plan or specific plan, or designating land as open space in order to preserve or mitigate impacts to specified Native American places, features and objects that are located within the city's or county's jurisdiction. SB 18 also requires cities and counties to hold in strict confidence any information about the specific identity, location, character, or use of these resources. In 2005, the Office of Planning and Research published Tribal Consultation Guidelines to guide cities and counties on the process of engaging in consultation in accordance with SB 18. The Native American Heritage Commission maintains a list of California Native American Tribes with whom cities and counties must consult pursuant to SB 18.

Assembly Bill 52

AB 52 was approved in 2014 and adds new requirements regarding consultation with California Native American Tribes and consideration of tribal cultural resources. The law went into effect on July 1, 2015, and after that date, if requested by a California Native American Tribe, lead agencies must consult prior to the release of a Negative Declaration, Mitigated Negative Declaration or Draft EIR.

Health and Safety Code 8010-8011

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

Assembly Bill 2461

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

Local

San Marcos General Plan Conservation and Open Space Element

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

- Policy COS-2.5: Continue to review future development proposals to ensure that cultural resources (including prehistoric, historic, paleontological, and SB 18 Tribal resources) are analyzed and conserved in compliance with CEQA requirements.

- Goal COS-11: Continue to identify and evaluate cultural, historic, archaeological, paleontological, and architectural resources for protection from demolition and inappropriate actions.
- Policy COS-11.1: Identify and protect historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) in compliance with CEQA.

The project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning. As detailed in Table 3.7-7, the project is consistent with the applicable General Plan goals and policies pertaining to cultural resources.

San Marcos Archaeological and Historical Resources Consultant Guidelines

The City of San Marcos published guidelines for archaeological and historical resources consultants in January 2024. The guidelines are generally meant to aid third party consultants who prepare archaeological or architectural history inventories, surveys, evaluations, and other technical documents. These guidelines include information pertaining to the minimum qualifications, records searches, tribal outreach, pedestrian surveys, reporting, research design, findings, discussion and evaluations, management conclusions, references, and appendices of inventories, surveys, evaluations, and other technical documents (City San Marcos 2024). ASM prepared the archaeological resources inventory report in accordance with these guidelines.

3.12.3 Thresholds of Significance

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

- **Threshold #1:** Cause a substantial adverse change in the significance of a tribal cultural resource, 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 of cultural value to a California Native American tribe and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or
- **Threshold #2:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object of cultural value to a California Native American tribe and that is a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1.

3.12.4 Project Impact Analysis

CA-SDI-5633

Tribal consultation under AB 52 and SB 18 identified CA-SDI-5633 as a tribal cultural resource. As described in Section 3.4, Cultural Resources, of this EIR, SDI-5633 was originally recorded by the Museum of Man as W-1573 and rerecorded in 1977 as SDI-5633. Information about the location and character of this resource is restricted from public distribution and is only generally summarized

herein; however, the specific information that led to the impact assessment in this EIR was taken into account by the City.

The entire project site would be graded to prepare the site for future development. Grading depths are anticipated to range from 3 to 7 feet depending on the area of the project site. Ground disturbing activities can result in impacts to buried tribal cultural resources if they are present on the project site. As part of the project design, an area would be set aside on the project site for repatriation of cultural resources. This area would be subject to a conservation easement and would be protected by a deed restriction.

Mitigation measures have been identified in Section 3.4, Cultural Resources, to reduce the potential for impacts to archaeological resources to below a level of significance (MM CR-1a, MM-CR-1b and MM-CR-2). The following analysis discusses the potential for the project to have on tribal cultural resources.

Threshold #1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object of cultural value to a California Native American tribe and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

SDI-5633 is considered eligible for listing in the National Register of Historic Places (Gallegos & Associates 2002) and is eligible for listing in the California Register of Historical Resources (ASM 2023). The City does not maintain a local register of historical resources.

Tribal consultation between the City and consulting tribes identified site SDI-5633 as a tribal cultural resource, as defined in Public Resources Code Section 21074(a)(1)(A). Although site SDI-5633 has been subjected to archaeological data recovery excavation to mitigate impacts to the site by development of the parcel in 2002 (Gallagos & Associates 2002), the site retains importance as a place of value to California Native American tribes.

The alternatives analysis prepared for tribal cultural resources concluded that avoidance and preservation in place would not result in a project that is compliant with state law and consistent with the local, regional, and state housing and environmental goals, given the project area's location within a VMT efficient area and within a SANDAG Smart Growth Area. The analysis also noted a high level of disturbances on the site, including agricultural use, bioturbation, and adjacent construction activity. After reviewing the results of the alternatives analysis, the City has determined that avoidance and preservation in place are not feasible for the project. A No Project/No Development Alternative and No Project/Reduced Development Footprint alternative are analyzed in Section 4.0 of this document.

As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources. This represents a **significant impact (Impact TCR-1)** and mitigation is required.

- **Impact TCR-1** As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources.

Threshold #2: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object of cultural value to a California Native American tribe and that is a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code Section 5024.1?[21]

The City received written comments from one tribe regarding the significance of the site as a tribal cultural resource that transcends site-specific archaeological significance. The nature of the comments and the specific information provided is confidential and cannot be disseminated to the public; however, this information was reviewed in detail by the City. Ultimately, the City determined that the information did not rise to the level of substantial evidence as defined in state law. The project would result in a **less than significant impact** on a tribal cultural resource based on the substantial evidence threshold and no mitigation under Threshold #2 is required. Regardless, site SDI-5633 is eligible for the California Register of Historical Resources and is a tribal cultural resource, as addressed under Threshold #1 and identified in impact TCR-1.

3.12.5 Cumulative Impact Analysis

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

The proposed project will have a significant impact on a tribal cultural resource. Other development projects in the City that are subject to CEQA would require consultation with local tribes. Tribal consultation may provide information on whether tribal cultural resources are present on a given project site. Depending on the information provided, these sites may be determined to be a tribal cultural resource and how a given project may impact them. If projects are determined to have a significant impact on tribal cultural resources, mitigation would be required to reduce potential impact. The date, all projects in the City have reduced potential tribal cultural resources impacts to below a level a significance.

Information provided by one consulting tribe included statements about the cumulative effect on tribal cultural resources in the City as well as the cumulative effect on the tribal cultural resource caused by past mitigation efforts. The City considered this information in light of the substantial evidence and significant nexus thresholds, the development of property in other parts of the City, and the existing laws that require tribal consultation as described above. The City has determined that the project would result in a less than significant cumulative impact on tribal cultural resources. No mitigation is required.

[21] In applying this criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe

3.12.6 Mitigation Measures

Tribal Cultural Resources (Impact TCR-1)

The City has determined, in consultation with Tribes, that the proposed project would result in a significant impact to a tribal cultural resource. The following mitigation measures, which implement Section 21084.3(b)(2)(B, C) and (b)(3) of the Public Resources Code, shall be required.

MM-TCR-1 **Monitoring Agreement**: Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall extend the invitation to enter into a Monitoring Agreement with the Rincon Band of Luiseño Indians and the San Luis Rey Band of Luiseño Indians (Tribes). The purpose of the Monitoring Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the Tribes for the monitoring for Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. In the event that either or both tribes choose not to enter into an agreement or fail to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented.

Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the Tribal 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 Tribes for proper treatment and disposition per the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Monitoring Agreement. Additionally, all non-tribal artifacts collected by the archaeologist shall also be subject to curation.

MM TCR-2 **Controlled Grading.** The area illustrated on the confidential exhibit attached to the grading plans shall be subject to controlled grading. Under the observation of a tribal monitor and qualified archaeologist, the contractor shall use either a small piece of equipment or observe the removal of soil by a backhoe equipped with a flat-edge bucket to excavate soil using shallow cuts made in approximately one-foot lifts. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area and random samples may be screened to ensure adequate detection of any cultural materials that may be present. In the event that cultural materials or human remains are exposed, the procedures for unanticipated discoveries in mitigation measure MM-TCR-4 shall apply. Controlled grading shall continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits, or when restrictive layers or non-cultural formational soils are encountered that predate any human occupation of this location, as determined by the qualified professional

archaeologist, in consultation with the tribal monitor. Once the identified depth has been reached, the controlled grading process will be terminated and mass grading may proceed, subject to review and approval by the City.

MM-TCR-3 **Construction Monitoring**: Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City's Planning Division stating that the Rincon Band and San Luis Rey Band have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Monitoring Agreement. Native American monitoring shall include one monitor from the Rincon Band of Luiseño Indians and one monitor from the San Luis Rey Band of Luiseño Indians simultaneously. In the event that either tribe chooses not to enter into an agreement or fails to respond to the offer, the City shall allow construction to proceed without the Native American monitor(s) as long as the offer was extended and documented.

The monitors shall be provided at least 72 hours' notice of the initiation of construction and be kept reasonably apprised of changes to the construction schedule. In the event that a monitor is not present at the scheduled time, work can continue without the monitor present, as long as the notice was given and documented.

Native American monitors 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 Native American monitors 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 Native American monitors shall be present on-site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb the original pre-project ground surface to identify any evidence of potential tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either: 1) from existing commercial (previously permitted) sources of materials; or 2) are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the Native American monitors.

The Qualified Archaeologist (mitigation measure MM-CR-1a) and Native American monitors 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 Tribes, preferably through e-mail, of the start and end of all ground disturbing activities.

MM-TCR-4 **Unanticipated Discovery Procedures:** Native American monitors may temporarily halt or divert ground disturbing activities if previously unknown tribal cultural

resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. If the resource is determined to be not associated with Native American culture, it will be subject to mitigation measure MM-CR-1b. Native American tribal cultural resources discovered during construction shall follow the procedures below. If a discovery of a previously unknown resource is determined to be both a tribal cultural resource and a potentially significant archaeological resource that is associated with Native American culture (subject to mitigation measure MM-CR-1b), then the Qualified Archaeologist, Tribes, monitors, and City shall coordinate on appropriate treatment.

All unearthed tribal cultural resources will be collected, temporarily stored in a secure location, and repatriated according to the consulting tribes, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

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

All sacred sites and significant tribal cultural resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency (as defined by the California Environmental Quality Act [CEQA]), then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource. The Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation. Any cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site and repatriated according to the terms of the Monitoring Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the Native American monitor. Any testing, taking of photos or 3D prints are prohibited, unless all monitoring tribes give prior written approval.

MM-TCR-5 **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. The procedures in mitigation measure MM-CR-2 shall apply.

MM-TCR-6 **Reburial:** Prior to the approval of grading plans, the Applicant shall designate a reburial location onsite and note the location as excluded from construction-related activity on grading plans. The reburial location shall be used to rebury any cultural materials encountered during monitoring, and to rebury existing collections from the previous data recovery effort. Following the completion of all ground disturbing activity and reburial of all materials and before the issuance of a Certificate of Occupancy, the Applicant shall file a deed restriction on the parcel

that protects the reburial location from future disturbance and provide a copy to the City. The exhibit for the deed restriction and purpose of it shall be kept confidential and out of the public record.

MM-TCR-7 **Access Agreement and Management Plan:** Prior to the issuance of a Certificate of Occupancy, the Applicant shall extend a written offer to each consulting tribe to enter into an access agreement, which is binding on successors and heirs to the property, that allows for legal access to visit the reburial location after construction is completed. If more than one tribe elects to enter into an access agreement, each tribe shall have its own agreement. In the event that one (1) or more consulting tribe does not respond to the offer within 30 days of receipt, then the City will deem this mitigation measure satisfied provided that the offer was extended and documented in accordance with this measure. Management of the reburial area is to include the development of a revegetation plan in consultation with the consulting tribes, including notification process for proposed maintenance of the reburial area.

MM -TCR-8 **Native Vegetation:** Prior to clearing and grubbing of vegetation in the project area, a qualified professional botanist shall flag the presence of white sage for transplanting into the landscaping or offsite. In the event that transplanting is determined infeasible by the botanist, in their professional judgement, the Applicant shall ensure that native white sage is included in the landscaping plan for the project.

MM-TCR-9 **Land Acknowledgement Statement:** The ~~project applicant~~ Applicant/Owner shall develop and post a Land Acknowledgement Statement inside a common area of the development. The statement shall be developed in coordination with Tribes and address the acknowledgement that the project is on the ancestral lands of culturally affiliated tribes that have been the original and ongoing stewards of the land. In the event that consulting tribes do not respond to the offer within 30 days of receipt, then the City will deem this mitigation measure satisfied provided that the offer was extended and documented in accordance with this measure. The location of the Land Acknowledgement Statement shall be noted on elevation and/or plan view drawings for the common area of the development.

MM-TCR-10 **Project-Specific Ethnographic Synthesis:** The Applicant shall fund the preparation of a project-specific ethnographic synthesis, not to exceed what is described in the confidential proposal provided by the Rincon Band of Luiseño Indians dated August 27, 2024. No later than 30 days after the final project approval, the Applicant/Owner shall extend a written offer to the Rincon Band of Luiseño Indians to enter into an agreement with their ethnographer to conduct and prepare the ethnographic synthesis in accordance with the aforementioned proposal. In the event of a dispute between the parties in entering into the agreement for the ethnographic synthesis, and after a good faith and reasonable effort, the City shall serve as the final arbiter. The City will determine the scope and content of an ethnographic synthesis in that event.

The synthesis will draw from oral histories, elder knowledge, and other sources of confidential Indigenous knowledge that relate to the tribal cultural resource affected by the proposed project. The ethnographer shall be afforded up to 90 days

following funding of the ethnography to carry out any field visits with appropriate tribal representatives. After 90 days, or sooner if the ethnographer completed its field studies, the Applicant/Owner shall be permitted to proceed with ground disturbing activities and construction of the project while non-field-based data gathering, such as ethnographic interviews of informants and review of tribal documents, is being carried out. Upon completion, a public (redacted) version of the ethnographic synthesis shall be submitted to the California Historical Resources Information System and the City. The final non-redacted study shall belong to the Rincon Band of Luiseño Indians.

3.12.7 Conclusion

The City has determined, in consultation with Tribes, that the proposed project would result in a significant impact to a tribal cultural resource under Threshold #1. Mitigation measures MM-TCR-1 through MM-TCR-10 shall be required to reduce the level of impact to less than significant.

3.13 Utilities and Service Systems

Introduction

This section identifies the existing service providers for utilities and service systems, including water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications facilities and analyzes the ability of these providers to serve the proposed project based upon current utility infrastructure. A detailed energy consumption analysis is included in Section 3.5, Energy, of the EIR.

The analysis in this section relies on the following document, which is included as **Appendix S** of the EIR:[22]

- *Armorlite Lofts Water and Sewer Study, Final Technical Memorandum*, prepared by Vallecitos Water District, December 12, 2023.

The Water and Sewer Study, prepared by the Vallecitos Water District (VWD) considered water demand and sewage generation increases due to the proposed General Plan Amendment and development of the proposed project. The Water and Sewer Study also analyzed the ability of VWD's infrastructure to serve the proposed project.

Table 3.13-1 summarizes the utilities and service system analysis, by threshold.

Table 3.13-1. Utilities and Service Systems Summary of Impacts

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#1 - Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#2 - Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#3 - Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	Less than Significant	Less than Significant Without Mitigation
#4 – Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

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

Threshold of Significance	Project-Level Impact	Cumulative-Level Impact	Impact After Mitigation
#5 – Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	Less than Significant	Less than Significant	Less than Significant Without Mitigation

3.13.1 Existing Conditions

The following provides background information about the water, wastewater, solid waste, and other utility service providers that would serve the proposed project.

Water Service Area

The proposed project lies within VWD for both water and wastewater services. VWD provides water, wastewater, and reclamation services to a population of more than 108,000 within its 45-square-mile boundary including: San Marcos, the community of Lake San Marcos, parts of Carlsbad, Escondido and Vista and other unincorporated areas in north San Diego County. VWD also wholesales recycled water to the City of Carlsbad and the Olivenhain Municipal Water District.

The project site lies completely within VWD's 855 Pressure Zone. The project site is currently undeveloped. Potable water is delivered to the project area by an existing 8-inch water main in Armorlite Drive at the main entry to the project site.

Water Supply

VWD is a member of the San Diego County Water Authority (SDCWA), thus eligible to purchase water transported into San Diego County via the massive aqueducts of SDCWA and its wholesaler, Metropolitan Water District (MWD) of Southern California. To understand water supply availability for the proposed project, it is important to begin with MWD and follow the water supply through these agencies.

MWD was formed in 1928 to develop, store, and distribute supplemental water to southern California for domestic and municipal purposes. MWD consists of 26-member agencies and has a service area covering six counties, 5,200 square miles, and 19 million people. MWD obtains water from local sources as well as the Colorado River (via the Colorado River Aqueduct) and the Sacramento-San Joaquin Delta (via the State Water Project). MWD's Urban Water Management Plan (UWMP) documents the availability of these supplies to meet future demands. With a projected annual water demand of 5,374,000 acre-feet per year for 2045, the MWD UWMP concludes that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021).

The MWD water demands through normal, single dry year, and multiple dry years are shown in Table 3.13-2.

Table 3.13-2. Metropolitan Water District Total Water Demands in Acre Feet Per Year

Year	2025	2030	2035	2040	2045
Average Year	4,925,000	5,032,000	5,156,000	5,261,000	5,374,000
Single Dry Year	4,929,000	5,037,000	5,156,000	5,265,000	5,374,000
Multiple Dry Years	4,877,000	5,064,000	5,182,000	5,299,000	5,410,000

Source: MWD 2020 Urban Water Management Plan (MWD 2021).

SDCWA is the largest member agency of MWD and supplies 75 to 95 percent of the water needs in San Diego County. The population within the SDCWA's service area was approximately 3.3 million people in 2020 and is projected to increase to roughly 3.8 million people by 2045. The County of San Diego is expected to develop an additional 130,000 acres between 2020 and 2050, with the majority (125,000 acres) of development dedicated to residential land uses. These regional growth projections are based on the San Diego Association of Governments Series 14 Regional Growth Forecast, developed for its 2019 Federal Regional Transportation Plan adopted by San Diego Association of Governments' Board of Directors on October 25, 2019. In fiscal year 2020, total water demand in the SDCWA's service area was 463,128 acre-feet, of which 92% was for municipal and industrial use and 8% was for agricultural water use. By 2045, the SDCWA's annual water demands are projected to reach 630,771 acre-feet. This projection accounts for planned future water conservation savings (SDCWA 2021).

SDCWA is historically the largest purchaser of MWD water; however, as SDCWA and its member agencies have increased their locally controlled water resources and investments in water use efficiency, SDCWA purchases have declined. In fiscal year 2020, SDCWA purchased 62,852 acre-feet, or about 6% of all the water MWD sold. SDCWA's UWMP assessed water reliability from 2025 through 2045 and determined that there are sufficient supplies to meet projected demands under Single Dry-Year and Multiple Dry-Year conditions (SDCWA 2021).

According to the VWD Master Plan Report, VWD imports about 75% of its water supply from SDCWA. The rest of VWD's water supply is provided by the recently completed Carlsbad seawater desalination plant as well as up to 2,200 acre-feet per year of supply from the Olivenhain MWD. Currently, VWD delivers water through 356 miles of pipeline and operates 10 pump stations and 19 potable water storage reservoirs ranging in size from 350,000 gallons to 40 million gallons (MG). VWD's total operational storage capacity is 121.6 MG. During Fiscal Year 2013-2014, VWD provided an average of 14.8 million gallons per day (MGD) to approximately 21,900 meters serving residential, commercial, light industrial, institutional, construction, landscape irrigation and agricultural uses (VWD 2018).

Wastewater Service Area

VWD provides wastewater and reclamation services to a 23-square mile area serving approximately 93,000 people as well as commercial, light industrial, institutional, construction, landscape irrigation, and agricultural customers. Their service area includes the City of San Marcos, parts of the cities of Carlsbad, Escondido, and Vista, and unincorporated areas within the County of San Diego. In addition, VWD wholesales recycled water to the City of Carlsbad and the Olivenhain MWD. Within its service area, there are some rural areas that still use septic systems for sewage disposal, thus VWD's current 23-square mile sewer service area is much smaller in size than its water service area, although VWD's

sphere of influence is equal in size for both. VWD has over 20,000 sewer service connections with 4 lift stations and approximately 250 miles of pipeline (VWD 2018).

VWD would provide the proposed project's wastewater service. The project site is completely within VWD sewer shed 22C (VWD 2023). The project site is currently undeveloped. Sewer service is provided to the project area by an existing 8-inch sewer mainline in Armorlite Drive.

Wastewater Flows

The VWD 2018 Master Plan includes a wastewater system analysis assessing existing and projected wastewater flows, existing and projected capacity and needed capital improvements.

Table 3.13-3 presents the existing and projected future average wastewater flows for VWD's service area at 5-year increments from the base year of 2014 to 2035 and ultimate buildout conditions. These interim flow projections were estimated based upon SANDAG's growth forecasts for the region that were available at the time of the Master Plan's preparation (VWD 2018). As shown in Table 3.13-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The average annual flow projection for the ultimate condition is 14.4 MGD. This total represents the maximum potential flow based on allowable land uses and existing flows. While the ultimate flow is potentially higher, continued conservation and water use efficiency would delay reaching ultimate conditions (VWD 2018).

Table 3.13-3. Projected Wastewater Flows within VWD Service Area

Year	Average Annual Flows (MGD)	Peak Dry Weather Flows (MGD) (1)	Peak Wet Weather Flows (MGD) (1)
Existing 2014	7.5	11.7	17.5
2020	8.7	13.2	20.0
2025	9.5	14.2	21.6
2030	9.6	14.4	21.9
2035	9.6	14.4	22.0
Ultimate	14.4	20.2	31.7
Ultimate w/ NTA (2)	15.2	21.2	33.4

Source: VWD 2018 Master Plan, page 7-19.

Notes: (1) Peak flows were estimated by applying District Peaking Curves as presented in Chapter 6 of the 2018 Master Plan.

(2) NTA is the Northern Tributary Area, a separate drainage basin located in the northern part of VWD's service area that drains away from the wastewater collection system. NTA flows were estimated and would need further evaluation if this area is to be connected into VWD/s sewer system.

Wastewater Infrastructure and Capacity

VWD's sewer service area is divided between two principal drainage basins which are named based on the treatment facility which serves it. The treatment facilities used by VWD are the Meadowlark Water Reclamation Facility (MRF) and the Encina Water Pollution Control Facility (EWPCF). The existing wastewater collection system includes treatment facilities, major conveyance facilities, gravity mains, trunk sewers, lift stations, siphons, and force mains. VWD is able to recycle up to 74% of the wastewater generated in the service area.

Solids Treatment Capacity

The EWPCF is a regional treatment facility located in the City of Carlsbad with a treatment capacity of up to 40.51 MGD. VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. MRF does not have solids treatment capacity and therefore all solids are treated at the EWPCF. As shown in Table 3.13-3, VWD's 2014 average daily wastewater flow was 7.5 MGD. The ultimate average wastewater flow identified in the 2018 VWD Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD (VWD 2023).

Liquids Treatment Facility

VWD currently has a total of 12.67 MGD liquids treatment capacity between EWPCF and MRF. VWD owns 7.67 MGD of liquids treatment capacity at the EWPCF. MRF has a liquid treatment capacity of 5.0 MGD, with a peak wet weather capacity of 8.0 MGD. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD (VWD 2023).

Ocean Disposal Capacity

EWPCF's ocean outfall consists of approximately 1,000 feet on land and extends approximately 7,900 feet into the Pacific Ocean. The EWPCF employs peak flow management procedures and has constructed facilities to manage peak flows, including storage tanks and pump stations. Per the 2018 Master Plan, the plant has provisions to incrementally increase capacity by adding two more 8 MG basins in the future, for a maximum storage capacity of 24 MG. The member agencies' ability to manage inflow and infiltration into the sewer system is a major factor in deferring additional peak flow facilities or future outfall upgrades at the EWPCF (VWD 2018).

VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 3.93 MGD (VWD 2023).

Land Outfall Capacity

A majority of VWD's wastewater is conveyed to the EWPCF using VWD's maintained Land Outfall. The Land Outfall is approximately 8 miles long and conveys flow by gravity as well as pressure through siphon sections. VWD maintains the entire pipeline from Lift Station No. 1 to the EWPCF. From Lift Station No. 1 to El Camino Real, VWD is the sole user of this pipeline. Total capacity of the land outfall is 20.85 MGD and the land outfall capacity controlled by VWD is 12.10 MGD (VWD 2023).

As stated above, the MRF has a capacity of 5.0 MGD with a peak wet weather capacity of 8.0 MGD. Combined with the 12.10 MGD capacity of the land outfall controlled by VWD, VWD has a combined peak wet weather wastewater collection capacity of 20.10 MGD (12.10 MGD + 8.0 MGD). According to the VWD's 2018 Master Plan, average daily wastewater flow through the land outfall was approximately 7.5 MGD in 2014. This corresponds to a peak wet weather flow of 17.5 MGD, which falls within VWD's combined peak wet weather collection capacity. However, the 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development, the 2018 Master Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall (VWD 2023).

VWD Planned System-wide Water Wastewater Facility Improvements

VWD's 2018 Master Plan analyzed the existing water and wastewater system to determine size of pipeline replacements and extensions utilizing a hydraulic model developed by collecting the system's physical data, estimating existing water and wastewater flows, and calibrating the model using actual meter data. The 2018 Master Plan does not include developments that were not approved prior to June 30, 2014. As development projects are proposed, the project proponents will be required to prepare a study that will, at a minimum, define the location and size of the water and sewer facilities required to serve the development, including the necessary regional collection, transfer, and treatment infrastructure (VWD 2018).

Solid Waste

Solid waste disposal in the City is provided by a private franchise hauler, EDCO Waste and Recycling (EDCO), a private waste collection and recycling company which handles all residential, commercial, and industrial collections within the city. Waste collected by EDCO is hauled to the Escondido Transfer Station where it is then transported to the Sycamore Sanitary Landfill in Santee. Recyclable materials are processed at the Escondido Resource Recovery Transfer Station. The project site would be serviced by EDCO. The Escondido Transfer Station has a permitted daily tonnage of 3,223 tons per day (CalRecycle 2019a). Solid waste is consolidated here and then trucked to a landfill for disposal.

The County of San Diego prepared a Five-Year Review Report of its Integrated Waste Management Plan (2022) to plan for the next 15 years of countywide landfill disposal capacity and to determine the adequacy of the region's planning documents based on updated demographic trends and regulations. The report used an average of the past 15 years in-county disposal data (2005-2020) to project disposal for the next 15 years (2022-2037). Though in-county disposal may both increase and decrease over the next 15 years, a conservative projection is that disposal will remain near the average. The 15-year disposal average is 3,206,009 in-county tons annually (County of San Diego 2022).

The report included a second disposal projection scenario, which anticipates organic materials being diverted from the landfills at a greater rate to align with the statewide organics legislation and goals (AB 32, AB 1826, AB 1594, and SB 1383). When the 75% organics diversion rate was applied to the County's baseline disposal, organics waste disposal projections were reduced to 288,541 tons for the year 2025. Considering the additional organics diversion scenario, the projected disposal by 2037 would be 2,282,678 tons annually, nearly a million tons (923,330 tons) less than the average disposal projection of 3,206,009 tons (County of San Diego 2022).

The second component of determining disposal capacity is the permitted daily capacities allowed by the Local Enforcement Agencies including any projected maximum disposal limits. The maximum annual allowable permitted capacity for all San Diego County landfills was 6,967,600 tons in 2021 and will be 4,134,600 tons in 2032. Landfill operators project that Otay Landfill will close in 2030 and Miramar Landfill will close in 2031. Sycamore Landfill is anticipated to receive additional waste flows at that time. The County's report projections assumed that Sycamore Landfill will apply for three expansions to their daily permitted capacity. Sycamore Landfill has completed the California Environmental Quality Act (CEQA) documentation for these landfill expansions; however, there has been no application to the Local Enforcement Agency to revise the Solid Waste Facility Permit. For the purposes of projection, the County assumed that the first expansion at Sycamore Landfill is estimated to occur in 2025 and daily permitted capacity is projected to increase permitted capacity from its current 5,000 tons per day to 7,000 tons per day. The second expansion is estimated to occur in 2027

and permitted capacity is projected to increase to 9,000 tons per day followed by a third expansion estimated to occur in 2030 to increase permitted capacity to 11,000 tons per day. The County's report indicated that there would be adequate landfill capacity to serve the County for the next 15 years. Specifically at Sycamore Landfill, the report estimated that there was 105,064,991 cubic yards (or 86,153,293 tons) remaining based on aerial survey/calculations occurring in February 2021. Estimated closure date is listed as 2042, though the permit is anticipated to be revised and extended to 2054 (County of San Diego 2022).

Electricity and Natural Gas

SDG&E provides energy service to an estimated 3.7 million consumers through 1.49 million electric meters and 905,000 natural gas meters in San Diego County and southern Orange County (SDG&E 2024). Electrical facilities throughout the city include a combination of aboveground and belowground electrical distribution lines and utilities structures. The city's fiber-optic network is facilitated by a 72-strand fiber-optic line that runs in various streets throughout the city. All major arterials in the city have implemented fiber optics. The design for the dry utilities' connection is still under preparation, however the proposed project proposes to connect to existing underground electricity and natural gas infrastructure within Armorlite Drive. This work would take place within existing right-or-way and would not disturb any vegetation.

Telecommunications

Telecommunications services to the project site may be provided by various distributors. Existing telecommunication lines from AT&T, Cox and other independent cable companies telecommunication lines are available in the project vicinity.

3.13.2 Regulatory Setting

Existing federal, state, and local regulations related to water, wastewater, and solid waste that are applicable to the proposed project are summarized below.

Federal

Clean Water Act

The federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The City of San Marcos is required to monitor water quality and conform to regulatory requirements of the CWA.

Resource Recovery and Conservation Act

The Resource Recovery and Conservation Act Subtitle D focuses on state and local governments as the primary planning, regulating, and implementing entities for the management of non-hazardous solid waste, such as household solid waste and nonhazardous industrial solid waste. Subtitle D provides regulations for the generation, transportation, treatment, storage, and disposal of hazardous waste.

State

California Green Building Standards Code (CCR, Title 24, Part 11 – CALGreen)

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations) is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2022 building standards code became effective on January 1, 2023. The mandatory standards require the following measures that relate to utilities and service systems (24 CCR Part 11):

- Mandatory reduction in indoor water usage through compliance with specified flow rates for plumbing fixtures and fittings and faucets and fountains.
- Mandatory reduction in outdoor water usage through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- 65% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

Urban Water Management Plans

Urban water purveyors are required to prepare and update an UWMP every 5 years. The UWMPs address water supply, treatment, reclamation, and water conservation, and contain a water shortage contingency plan. Local UWMPs and those of other water districts are supplemental to the regional plans prepared by MWD. The Water Conservation Bill of 2009 (SBX7-7) requires each urban retail water supplier to develop an urban water use target and an interim urban water use target. Notably, SBX7-7 authorizes urban retail water suppliers to determine and report progress toward achieving these targets on an individual agency basis or pursuant to a regional alliance as provided in California Water Code (CWC) Section 10608.28(a). In accordance with this regulation, the MWD prepared and their Board of Directors adopted its 2020 UWMP in 2021. MWD's UWMP includes estimated future water demands until 2045, using updated population projections and a conservative assumption that, in the absence of mandatory water conservation measures, per-capita consumption could rebound to

its 2020 target value (MWD 2021). Demands provided in MWD's UWMP have been coordinated with SDWCA, VWD's wholesale supplier.

Assembly Bill 939 and 341

In 1989, Assembly Bill (AB) 939, known as the Integrated Waste Management Act (California Public Resources Code, Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020.

Senate Bill 1374

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in Public Resources Code Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills. The model ordinance was adopted by CalRecycle on March 16, 2004.

Assembly Bill 1826

AB 1826 requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction is to identify a multitude of information, including barriers to organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines "organic waste" as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a "business" as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multi-family residential dwelling consisting of five or more units. As of January 1, 2017, businesses that generate 4 cubic yards or more of organic waste per week are subject to this requirement. Commencing January 1, 2019, businesses that generate 4 cubic yards or more of commercial solid waste per week are also required to arrange for organic waste recycling services. In September 2020, CalRecycle reduced this threshold to 2 cubic yards of solid waste (i.e., total of trash, recycling, and organics) per week generated by covered businesses (CalRecycle 2024).

Senate Bill 1383

SB 1383 establishes statewide organic waste diversion rate goal of 75 percent by 2025. Beginning in 2022, SB 1383 required every jurisdiction to provide organic waste collection services to all residents and businesses, including food, green material, landscaping waste, organic textiles, lumber, paper

products, manure, biosolids, digestate, and sludges. Jurisdictions are also required to educate residents and businesses about the collection requirements.

Local

San Diego County Integrated Waste Management Plan

Pursuant to the Integrated Waste Management Plan, the Countywide Integrated Waste Management Plan for San Diego County describes the goals, policies, and objectives of the county for coordinating efforts to divert, market, and dispose of solid waste during the planning period through the year 2017 (County of San Diego 2005). A Five-Year Review Report was prepared in 2022 to plan for 15 years of countywide landfill disposal capacity and to determine the adequacy of the region's planning documents based on updated demographic trends and regulations. The report identified reduced landfill disposal rates compared to the high in 2005. The plan presumes waste disposal tonnages will not reach the 2005 level again due to increased State and local recycling programs. Another reason for reduced landfill disposal rates is increased conservation and recycling activities, expansion of compost and construction and demolition facilities, and implementation of mandatory recycling ordinances by jurisdictions. Average disposal quantities and landfill capacities are discussed above in Section 3.13.1 (County of San Diego 2022).

Countywide policies for reducing waste and implementing the programs identified in the individual jurisdiction Source Reduction and Recycling Elements and Household Hazardous Waste Elements, which are intended to reduce costs, streamline administration of programs, and encourage a coordinated and planned approach to integrated waste management.

To avoid duplication of effort, all jurisdictions in the county participate in the San Diego County Integrated Waste Management Local Task Force. The Local Task Force coordinates mandated planning, oversees implementation of new or countywide integrated waste management programs, and carries out an active legislative program. Regulatory reform, changes to state diversion requirements, and reduction of the costs of compliance are considered by the Local Task Force, as well as other solid waste issues of regional or countywide concern.

City of San Marcos Municipal Code

Title 8, Health and Sanitation

San Marcos Municipal Code Title 8 contains regulations and provisions on sewers and sewage disposal plants, sewer connections, septic tanks, waste matter, garbage and refuse collection, and other matters concerning sanitation. Chapter 14.15 contains regulations concerning storm water management and discharge control. Chapter 14.24 contains regulations concerning underground utility facilities. Title 19 regulates subdivision requirements, including the installation of utility facilities and connections and payment or fees for such installations.

Title 20, Chapter 20.330 Water Efficient Landscaping Ordinance

The provisions of Title 20 of the San Marcos Municipal Code are referred to as the Zoning Ordinance. Title 20, Section 20.330, details the City's Water Efficient Landscape (WELO). In accordance with State law, Chapter 20.330 establishes specific standards for landscape and irrigation design and installation to ensure beneficial, efficient, and responsible use of water resources within the city.

City of San Marcos General Plan

The General Plan Conservation and Open Space Element includes two goals and one policy that are applicable to the proposed project (related to water supply and solid waste):

- Goal COS-5: Reduce water consumption and ensure reliable water supply through water efficiency, conservation, capture, and reuse.
- Goal COS-10: Establish and maintain an innovative, sustainable solid waste collection, recycling, and disposal delivery system for present and future generations.
    - Policy COS-10.1: Promote the curbside recycling program to divert residential refuse from the landfills.

The General Plan Land Use and Community Design Element identifies the following goals and policies regarding utilities and services systems that are applicable to the proposed project:

- Goal LU-8: Ensure that existing and future development is adequately serviced by infrastructure and public services.
    - Policy LU-8.1: New development shall pay its fair share of required improvements to public facilities and services.
    - Policy LU-8.2: Promote development timing that is guided by the adequacy of existing and/or expandable infrastructure, services, and facilities.
- Goal LU-13: Water Service and Supply: Manage and conserve domestic water resources by reducing water usage and waste on a per capita basis, to ensure an adequate water supply for existing and future residents.
    - Policy LU-13.1: Work closely with local and regional water providers to ensure high quality water supplies are available for the community.
    - Policy LU-13.2: Actively promote water conservation programs aimed at reducing demand.
    - Policy LU-13.3: Encourage exploration and use of deep underground wells to reduce reliance on treatable water.
- Goal LU-14: Wastewater: Ensure an adequate wastewater system for existing and future development.
- Policy LU-14.1: Work closely with local service providers to ensure an adequate wastewater system for existing and future development is in place.
    - Policy LU-14.2: Ensure development approval is directly tied to commitments for the construction or improvement of primary water, wastewater, and circulation systems.
- Goal LU-16: Solid waste: reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program.
    - Policy LU-16.1: Work closely with local service providers to ensure adequate solid waste disposal, collection, and recycling services.
    - Policy LU-16.2: Increase recycling, composting, source reduction, and education efforts throughout the city to reduce the amount of solid waste requiring disposal at landfills.
- Goal LU-17: Utilities and Communications: Encourage provision of power and communication systems that provide reliable, effective, and efficient service for San Marcos.

- Policy LU-17.2: Require all new development and redevelopment to provide the technology to support multiple telecommunications facilities and providers such as multi-media products, wireless technologies, and satellite communications.
- Policy LU-17.3: The City shall prohibit above ground utility equipment within any of the pedestrian pathways and street frontage areas. All above ground utilities shall be placed either within; "wet closets" within the buildings, underground vaults, or behind buildings where they are not visible. The developer shall be responsible to contact the applicable utility agencies in advance to coordinate utilities prior to approval of the final street improvement plans for both public and private street frontages and prior to submittal of building permits.
- Policy LU-17.4: Require utility location to be shown on all site development plans at the time of development/project application.

The proposed project's consistency with applicable General Plan goals and policies is discussed in Section 3.7, Land Use and Planning of this EIR. As detailed in Table 3.7-7 in Section 3.7, the project is consistent with the applicable utilities-related goals and policies.

3.13.3 Thresholds of Significance

The determination of significance for utilities and service systems is based on Appendix G of the CEQA Guidelines. Utilities and services system impacts would be significant if the proposed project meets any of the following thresholds:

- **Threshold #1:** Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- **Threshold #2:** Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- **Threshold #3:** Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- **Threshold #4**: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- **Threshold #5**: Comply with federal, state, and local management and reduction statues and regulations related to solid waste?

3.13.4 Project Impact Analysis

The proposed project would connect to the existing 8-inch water main in Armorlite Drive for potable water and fire protection. Three water connections are proposed for the project site. One potable water connection and one connection for the fire service line will occur at the southwestern corner of the project site with Armorlite Drive. A landscaping irrigation connection is also proposed approximately at the center of the project's southern property line along Armorlite Drive. The project proposes to upsize approximately 223 feet of the existing 8-inch water main in Armorlite Drive to 10-inch diameter (Pipe Segment P-7-55).

For sewer service, the proposed project would connect to the existing 8- inch sewer main in Armorlite Drive. The project proposes to upsize approximately 539 feet of the existing 8-inch sewer main in Armorlite Drive to 10-inch diameter main (Pipe Segments AL-1 through AL-3).

Additionally, as a project design feature (Table 2-1), the project applicant would pay the applicable Water and Wastewater Capital Facility Fees in effect at the time service is committed in accordance with VWD rules and regulations. Proof of payment would be provided to the City's Planning Division Director.

The design for the dry utility connection is still under preparation, however the project proposes to connect to existing infrastructure within Armorlite Drive. This work would take place within existing right-or-way and would not disturb any vegetation.

Threshold #1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water

As the project site lies within VWD's water service area, VWD would provide potable water service for commercial uses, residential uses and fire protection. VWD has confirmed their ability to serve the proposed project and has prepared a Technical Memorandum which includes a Water System Analysis. The memorandum analyzes water demand, water distribution, water storage capacity and water pump station capacity (VWD 2023, Appendix S).

Water Demand

The City of San Marcos' approved land use designation for the project site is Public/Institutional (PI). The project is proposing 165 residential apartments with 5,600 square feet (s.f.) of commercial use. **Table 3.13-4** provides the average water demand generated both under the density planned for the VWD 2018 Master Plan and for the proposed project. As shown, the proposed project would increase the projected average water demand from the 2018 Master Plan land use by 36,172 gallons per day (GPD) (VWD 2023).

Water Distribution System Analysis

VWD prepared a water distribution system analysis to identify potential system impacts that may be created by the proposed water demand, and to recommend any improvements required to provide service to the project. Modeling focused on the infrastructure in the direct vicinity of the project site. Per the 2018 Master Plan, maximum day demands for the proposed project are 300% those of average day demands, and peak hour demands are 620% those of average day demands (VWD 2023).

Pipeline design criteria states that to avoid excessive velocity and head loss within the distribution system, the maximum allowable velocity is 7 feet per second. The model found that the proposed project would not create any distribution system deficiencies under an average day demand scenario but would create system deficiencies under maximum day plus fire flow demand conditions in the existing 8-inch water main in Armorlite Drive. As discussed above, the project design includes upsizing approximately 223 feet of the existing 8-inch water main in Armorlite Drive to 10-inch diameter (Pipe Segment P-7-55).

Table 3.13-4. Estimated Water Demands for Proposed Project

Land Use Type	Area (Acres)	Residential Units	Duty Factor (GPD/DU)	Duty Factor (GPD/acre)	Water Demand (GPD)
2018 Master Plan Land Use Demand					
Open Space(1)	2.44	0	-	200	488
Total	**2.44**				**488**
Proposed Project Demand					
Residential/Mixed Use (68 du/ac)(2)	2.44	165	200		33,000
Commercial/Mixed Use	2.44	0	-	1,500	3,660
Total	**2.44**				**36,660**
Water Demand Increase					**36,172**

Source: VWD 2023.
Notes: (1) The 2018 Water Master Plan assumed an Open Space land use designation for the project site instead of the current Public/ Institutional designation.
Notes: (2) VWD's Master Plan down not have a unit water demand for density of 68 du/ac. The demand for this density was determined by converting VWD's highest density residential land use category (Residential 40-50 du/acre) from dwelling units per acre to gallons per day per unit: 9,000 gpd/ac / 45 du/ac = 200 gpd/du
GPD/DU= Gallons per Day per Dwelling Unit

As shown in **Table 3.13-5**, an upsized pipe diameter of ten inches would reduce the velocity to 6.04 feet per second, which is below the maximum allowable velocity of 7 feet per second. Improvements would occur within an existing paved road so no additional environmental impacts would occur.

Table 3.13-5. Potable Water Pipeline Results under Maximum Day Demand plus Fire Flow Conditions

Pipe ID Number	Length (ft)	Existing Pipe Diameter (in)	Velocity under Average Day Demand (ft/s) (1)	Velocity under Maximum Day + Fire Flow (ft/s) (1)	Upsized Pipe Diameter (in)	Velocity under Maximum Day + Fire Flow w/ Upsized Pipe (ft/s) (1)
P-755	223	8	0.19	8.79	10	6.04

Source: VWD 2023.
Notes: (1) Maximum allowable velocity: 7 feet per second.
ft= feet
in= inches
ft/s= feet per second

Water Storage Analysis

The 2018 Master Plan outlines VWD's potable water storage reservoirs for each pressure zone. The proposed project is located entirely within the VWD 855 pressure zone. Water storage for this zone is located within the 920 zone and 1028 Twin Oaks pressure zones. **Table 3.13-6** shows the required storage in the 855, 920, and 1028 Twin Oaks pressure zones for existing and ultimate build-out conditions relative to the existing storage provided within each zone. As shown in Table 3.13-6, there is sufficient existing storage available to meet existing demand. The proposed project would increase the projected average water demand by approximately 36,172 GPD. The amount of additional

reservoir storage required is 500% of the project's average day demand, which is 180,860 gallons GPD (36,172 gallons X 500%). VWD's analysis found that water storage capacity is currently available to serve the project's increased storage requirements. Because the proposed project would increase the ultimate water demand planned in the 2018 Master Plan, it would contribute to the existing deficiency identified for ultimate storage requirements. However, per VWD, future projects identified in the 2018 Master Plan would address and accommodate the ultimate build-out storage deficiency. As a project design feature (Table 2-1), the project applicant would pay Water Capital Facility Fees which would be used for the increase in storage necessitated by the project's demand (VWD 2023).

Table 3.13-6. Existing Reservoir Storage Capacity and Requirements

Pressure Zone	Existing Average Day Demand (MGD)	Existing Storage Requirement (MG)	Ultimate Average Day Demand (MGD)	Ultimate Storage Requirement (MG)	Existing Storage Available (MG)
855	3.74	50.05	6.79	101.25	0
920	5.61		10.40		18
1028 Twin Oaks	0.66		3.06		73
Totals	10.01	50.05	20.25	101.25	91

Source: VWD 2023.
Notes: MGD= Million Gallons per Day
MG= Million Gallons

Water Pump Station Analysis

Since the proposed project is located in a pressure zone that is not served by pumping, there would be **no impacts** to existing or proposed pump stations (VWD 2023).

Summary

The project proposes to upsize approximately 223 feet of the existing 8-inch water main in Armorlite Drive to 10-inch diameter (Pipe Segment P-7-55), which would avoid creating system deficiencies under maximum day plus fire flow demand conditions. An 8-inch fire main would parallel the potable water line for fire service to the site and a 6-inch line for fire sprinkler service would also be provided to meet fire flow requirements. These improvements would occur within the project site or within an existing paved road and would not result in any additional significant environmental impacts.

While the proposed project would increase water demand by 36,172 GPD above what the 2018 Water Master Plan identified, VWD's analysis determined that with the water main improvements and payment of the required Water Capital Facility Fees (included as a design feature in Table 2-1), the proposed project would have less than significant impacts related to water distribution, water storage, or water pumping (VWD 2023). The proposed project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts related to the construction or relocation of new or expanded water collection facilities would be **less than significant.**

Wastewater

The proposed project lies completely within VWD sewer shed 22C. The analysis of wastewater infrastructure is based upon the Water and Sewer Study, prepared by VWD (VWD 2023). The Water and Sewer Study is included in Appendix S of this EIR.

As described above, the proposed project would include development of 165 apartments and 5,600 s.f. of commercial use. The current General Plan designation for the project site is Public/Institutional (PI). VWD's 2018 Master Plan incorrectly based its ultimate wastewater generation planning on a land use of open space and assumed the project site would not generate any wastewater flow. The project is proposing a General Plan Amendment to change the site designation to SPA (Specific Plan Area) with proposed residential development (68 du/acre) and commercial use. VWD's Master Plan does not have a unit wastewater demand for a density of 68 du/ acre; therefore, the demand for this density was determined by converting VWD's highest density residential land use category (Residential 40-50 du/acre) from dwelling units per acre to gallons per day per unit (8,100 GPD/ac divided by 45 du/ac equals 180 GPD/du. Based on this (180 GPD/du x 165 du), the Water and Sewer Study estimated that the proposed project would generate approximately 32,628 GPD of wastewater. This is an increase in the projected average wastewater generation of 32,628 GPD (VWD 2023).

Wastewater Collection System Analysis Model Results

VWD modeled several wastewater scenarios to identify system impacts that may be created by the proposed sewer generation, and to recommend any improvements required to provide service to the proposed project. Modeling focused not only on the sewer collection infrastructure in the direct vicinity of the project site, but also on all downstream infrastructure from the development to Lift Station No. 1 on San Marcos Boulevard that would be receiving project flows. The modeling results showed no deficiencies have been identified under the 2018 Master Plan land use density. The modeling results also showed the proposed project resulted in new deficiencies under peak wet weather flows during ultimate build-out conditions in the existing 8-inch sewer line in Armorlite Drive. As discussed above, the project design includes upsizing approximately 539 feet of 8-inch pipe diameter sewer main in Armorlite Drive to 10-inch diameter main (Pipe Segments AL-1 through AL-3). VWD modeling shows that the replacement diameter of 10 inches would sufficiently address deficiencies under peak wet weather flows. Improvements would occur within an existing paved road so no additional environmental impacts would occur.

Wastewater Lift Station Analysis

Since the proposed project is not located in a sewer shed that is served by a lift station, no lift station upgrades would be required, and no impacts would occur (VWD 2023).

Parallel Land Outfall Analysis.

VWD's existing land outfall is approximately 8 miles in length and consists of four gravity pipeline sections and three siphon sections varying in diameter from 20 inches to 54 inches. Total land outfall capacity is 20.85 MGD, and VWD controls 12.10 MGD. The MRF has a capacity of 5.0 MGD with a peak wet weather capacity of 8.0 MGD. Therefore, VWD has a combined peak wet weather wastewater collection capacity of 20.10 MGD (12.10 MGD + 8.0MGD). VWD's 2014 average daily wastewater flow through the land outfall was 7.5 MGD, which falls within VWD's combined peak wet weather collection capacity (VWD 2023).

The 2018 Master Plan estimated that, under approved land uses, VWD has an ultimate build-out average dry weather flow of 14.4 MGD. This corresponds to a peak wet weather flow of 31.7 MGD, which exceeds VWD's combined peak wet weather collection capacity. To accommodate additional wastewater flows from planned development, the 2018 Water Plan recommended conveyance of peak flows to the EWPCF through a parallel land outfall (VWD 2023).

The proposed project would generate 32,628 GPD of additional average wastewater flow that was not accounted for in the Land Outfall's capacity studied in the 2018 Master Plan. However, per the Water and Sewer Study, prepared for the proposed project, VWD finds that outfall capacity is currently available to serve the proposed project's expected wastewater generation. As a project design feature (Table 2-1), the project applicant would pay Wastewater Capital Facility Fees. These fees would be used toward design and construction of a parallel land outfall to be sized to accommodate ultimate build-out wastewater flows (VWD 2023).

Wastewater Treatment Facility Analysis

Because VWD utilizes both MRF and EWPCF for wastewater treatment, wastewater generated by the proposed project would be treated at either facility. MRF has liquids treatment capacity of up to 5 MGD with a peak wet weather capacity of 8 MGD. MRF does not have solids treatment capacity, and therefore all solids are treated at the EWPCF. The EWPCF is a regional facility with treatment capacity of up to 40.51 MGD (VWD 2023).

Solids Treatment Capacity

VWD currently owns 10.47 MGD of solids treatment capacity at EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concluded that adequate solids treatment capacity exists at this time to serve the project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected solids treatment capacity deficiency of 3.93 MGD. Wastewater flows from the proposed project would contribute to that deficiency. As a project design feature (Table 2-1), the project applicant would pay Wastewater Capital Facility Fees which would be used towards the deficiency to accommodate the solid treatment capacity wastewater flows (VWD 2023).

Liquid Treatment Capacity

VWD currently owns 7.67 MGD of liquids treatment capacity at the EWPCF in addition to the liquids treatment capacity of 5.0 MGD at MRF, for a total of 12.67 MGD of liquids treatment capacity. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concludes that adequate solids treatment capacity exists at this time to serve the proposed project. However, the ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD, resulting in a projected liquids treatment capacity deficiency of 1.73 MGD. Wastewater flows from the proposed project would contribute to that deficiency. As a project design feature (Table 2-1), the project applicant would pay Wastewater Capital Facility Fees, which would be used towards the deficiency to accommodate the ultimate average wastewater flow (VWD 2023).

Ocean Disposal Capacity

VWD currently owns 10.47 MGD of ocean disposal capacity at the EWPCF. VWD's 2014 average daily wastewater flow was 7.5 MGD. Therefore, VWD concludes that adequate ocean disposal capacity exists at this time to serve the project. The ultimate average wastewater flow identified in the 2018 Master Plan is 14.4 MGD resulting in an ocean disposal deficiency of 3.93 MGD. Wastewater flows

from the proposed project would contribute to that deficiency. As a project design feature (Table 2-1), the project applicant would pay Wastewater Capital Facility Fees, which would be used towards the deficiency to accommodate the ocean disposal wastewater flow (VWD 2023).

Wastewater Summary

The project proposes to upsize approximately 539 feet of the existing 8-inch sewer main in Armorlite Drive to 10-inch diameter main (Pipe Segments AL-1 through AL-3), which would avoid creating system deficiencies under peak wet weather flows. These improvements would occur within an existing paved road and would not result in any additional significant environmental impacts.

While, the proposed project would increase wastewater flows by 32,628 GPD above what the 2018 Water Master Plan identified, VWD's analysis determined that with the sewer line improvements and payment of all applicable Wastewater Capital Facility Fees in effect at the time service is committed in accordance with District rules and regulations (included as a project design feature in Table 2-1), the proposed project would have less than significant impacts related to wastewater collection, parallel land outfall capacity, wastewater treatment or ocean disposal capacity (VWD 2023). The proposed project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities the construction or relocation of which would cause significant environmental effects. Therefore, impacts related to the construction or relocation of new or expanded sewer facilities would be **less than significant**.

Stormwater Drainage

As discussed in Section 5.6, Hydrology and Water Quality, the proposed project has been designed to carefully handle runoff and to meet regulatory requirements to ensure that post-development runoff quantities and rates are similar to or less than the pre-development condition. Although the proposed project would include new storm water infrastructure (proprietary treatment facilities and an underground storage vault) to support project facilities within the project site, the proposed infrastructure has been accounted for and analyzed throughout this EIR. The project would also construct storm drain improvements within Armorlite Drive to connect the project to the existing storm drain system in Armorlite Drive. This includes the installation of approximately 175 feet of 12-inch reinforced concrete storm drain. This work would take place within the Armorlite Drive right-of-way and full pavement restoration would be required once the work is completed. All storm water quality and drainage facilities would be required with final engineering submittals in conformance with the 2023 City of San Marcos Best Management Practices Design Manual, and the project's Storm Water Quality Management Plan and Drainage Study. These improvements would occur within an existing paved road and would not result in any additional significant environmental impacts.

The proposed project would not contribute a substantial amount of new stormwater runoff relative to existing conditions and the project would not require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts related to the construction or relation of new or expanded stormwater facilities are determined to be **less than significant.** Please refer to Section 5.6, Hydrology and Water Quality, for additional discussion related to drainage.

Electric Power/ Natural Gas

The proposed project would be served by SDG&E for electricity and natural gas services and would be required to implement, as applicable, the City's Climate Action Plan Consistency Checklist measures that would reduce operational electricity consumption. The project would be required to include

various on-site features and measures to reduce the project's energy consumption, which includes electric vehicle charging stations, electric or solar water heaters, solar panels, a transportation demand management plan, reduced landscaping water use, and the planting of 49 trees. The proposed project would also be built under the most current Title 24 standards which are designed to reduce energy. In accordance with the current Building Code, dwelling units would include energy conservation features such as spray foam insulation, thermal breaks, low-e windows, advanced thermostats, Energy Star qualified appliances, and sealed insulated ducts.

The design for the dry utilities' connection is still under preparation. Final utility equipment design will be coordinated with a utility consultant, the City, and SDG&E. Any proposed above-ground transformers and electrical facilities that solely service the Specific Plan area will be placed on-site and not within the City's right-of-way. Additionally, General Plan Land Use Policy LU-17.3 prohibits above-ground utility equipment within any of the pedestrian pathway and street frontage areas.

SDG&E maintains a gas distribution system within Armorlite Drive. If the project utilizes gas utilities, the gas lines will be extended to the developable area within the Specific Plan Area through the same joint trench alignment as electric, cable, and telephone facilities. It is likely that either a three-inch or four-inch pipeline would be utilized to deliver gas to the project site. These improvements would take place within existing right-of-way, would not disturb any vegetation, and have been accounted for in this EIR. Aside from these improvements, the proposed project would not require the relocation or construction of new or expanded electrical power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be **less than significant.**

Telecommunications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. Existing telecommunications infrastructure in the vicinity of the project site would be available to serve the proposed project. No specific systems upgrades are proposed or would be required to serve the proposed project. Thus, the proposed project would not result in physical impacts associated with the construction or relocation of telecommunications systems. Impacts would be **less than significant.**

Threshold #2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

As discussed in response to Threshold #1, the proposed project would be served by VWD. Per the Water and Sewer Memorandum (Appendix S of the EIR), the proposed project is anticipated to generate an additional 36,172 GPD of water demand over the ultimate demand projected in the 2018 Master Plan. This equates to approximately 40.15 acre-feet per year.

As discussed above, MWD's UWMP shows water supplies would be available to meet current and future demands of the region. With a projected annual water demand of 5,374,000 acre-feet per year in 2045, the MWD UWMP demonstrates that, with implementation of required conservation measures, MWD has supply capabilities sufficient to meet expected demands through 2045 under normal, single dry, and multiple dry water years (MWD 2021). Additionally, SDCWA's UWMP assessed water reliability from 2025 through 2045 and determined that there are sufficient supplies to meet projected demands under Single Dry-Year and Multiple Dry-Year conditions (SDCWA 2021). The additional 40.15 acre-feet per year of water demand generated by the proposed project represents 0.00074% of

projected regional demand (5,374,000 acre-feet per year) in 2045. This represents a less than significant increase in water demand relative to the annual water demand projected by the MWD's UWMP.

Further, the project site would be developed in compliance with CALGreen, which implements water efficiency standards for appliances and fixtures. Compliance with CALGreen would further reduce project water usage in combination with VWD and MWD's ongoing water conservation practices. Compliance with these regulations and conservation measures would ensure sufficient water supplies are available to service the proposed project. Therefore, impacts to water supply would be **less than significant.**

Threshold #3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed under Threshold #1, above, the project site is within VWD's service area and VWD would provide service to the proposed project. The proposed project is expected to increase wastewater flows by 32,628 GPD over what was assumed in the 2018 Master Plan. This would lead to an increase of 32,628 GPD in solids handling, liquids handling and ocean disposal capacity requirements at the EWPCF and in the parallel land outfall's capacity requirement. VWD has determined that with sewer line improvements included in the project design (upsizing the 8-inch sewer main in Armorlite Road to 10 inches), there would be adequate wastewater collection infrastructure to serve the project.

In the Water and Sewer Study prepared for the proposed project, VWD concluded that adequate collection, treatment (solids and liquids) and disposal capacity exists at this time to serve the project (VWD 2023). The 2018 Master Plan identified ultimate average wastewater flows that would result in a projected collection, treatment and ocean disposal capacity deficiency. The project's increased wastewater flows would contribute to those deficiencies. However, . as discussed in the Water and Sewer Study (Appendix S), and as a project design feature (Table 2-1), the project applicant would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with District rules and regulations. These fees would be used toward design and construction of a parallel land outfall and used to accommodate the projected deficiencies in solids and liquids treatment capacity and ocean disposal capacity. Because the proposed project would not exceed current capacities of the wastewater treatment system and would contribute Wastewater Capital Facility fees that would be used towards improvements, impacts to water treatment collection and capacity would be **less than significant.**

Threshold #4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction of the proposed project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, and plastics. The City works with EDCO to promote its construction and demolition material waste removal and recycling program. A minimum of 65% of non-hazardous construction and demolition waste would be recycled pursuant to the requirements of CalGreen Tier 1 Standards, and construction would not impair the attainment of solid waste reduction goals.

Operation of the proposed project would result in increased generation of solid waste. The anticipated solid waste generation from the proposed project was estimated using CalRecycle Estimated Solid Waste Generation Rates (CalRecycle 2019b). It is estimated that the residential portion of the project

(165 units) would generate approximately 2,018 pounds of solid waste per day (12.23 pounds per household). The 5,600 s.f. of commercial portion of the project is estimated to generate 258 pounds per day (0.046 pounds per s.f.), for a total of 2,276 pounds or 1.14 tons per day. This does not consider any waste diversion through recycling.

AB 939 mandated a reduction of waste being disposed of where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000. AB 341 amended AB 939 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. According to CalRecycle, the City has a disposal rate target of 8.9 pounds per person per day and 19 pounds per employee per day. If the City meets this target, the City is considered in compliance with requirements of AB 939. The most recent data (2022) from CalRecycle identifies the annual per capita disposal rate as 5.3 pounds per person per day and 12.5 per employee per day (CalRecycle 2022). Thus, the City is exceeding their targets for diversion and is therefore in compliance with state mandates aimed toward the attainment of solid waste reduction goals. The project would be required to adhere to the City's disposal, recycling and organics composting requirements that contribute toward meeting these solid waste reduction goals.

Solid waste generated by the proposed project would be collected and transported to the Sycamore Sanitary Landfill by EDCO. The facility currently has a daily permitted capacity of 5,000 tons per day for solid waste but is projected to increase to 7,000 tons per day in 2025 and 9,000 tons per day in 2027. Sycamore landfill's estimated closure date is listed as 2042, though the permit is anticipated to be revised and extended to 2054 (County of San Diego 2022). Solid waste generated by the proposed project would contribute a minimal amount of solid waste to Sycamore Sanitary Landfill's daily permitted capacity. As such, the proposed project's solid waste generation can be accommodated at the landfill. The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, impacts would be **less than significant.**

Threshold #5: Comply with federal, state, and local management and reduction statues and regulations related to solid waste?

The proposed project would comply with all federal, state, and local statues and regulations regarding solid waste. The project would include trash enclosures with clearly marked, source-sorted receptacles for disposing of solid waste, recyclables, and organic waste to facilitate compliance with the requirements of AB 341, AB 939, AB 1826, SB 1383, and CALGreen Code. Additionally, all solid waste facilities, including landfills, require solid waste facility permits to operate. In San Diego County, Public Resources Code (Sections 44001- 44018) and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4 (Section 21440 et seq.) authorizes the County Department of Environmental Health, Local Enforcement Agency to issue solid waste facility permits. Sycamore Sanitary Landfill is a permitted facility and EDCO is a licensed hauler. As such, the proposed project would comply with existing regulations related to solid waste disposal and would not violate federal, state, or local management and reduction statutes and regulations related to solid waste. Impacts would be **less than significant**.

3.13.5 Cumulative Impact Analysis

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

Guidelines Section 15130(b)(1)(A)(B), an adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or a related planning document that describes conditions contributing to the cumulative effect. For purposes of assessing the proposed project's cumulative impact with respect to utilities and services systems, the cumulative analysis is based upon a combined list and plan project approach.

Water

All of the cumulative projects included in Table 2-3 are within VWD's service area for potable water service and would contribute to the cumulative demand for water supply and water infrastructure. However, MWD anticipates the demand of future development through their master planning process. According to MWD's UWMP, no water shortages are anticipated within MWD's service area in single or multiple dry years through 2045.

As described in Section 3.13.4, Threshold #2, above, the project would generate an additional 40.15 acre-feet per year of water demand that wasn't included in MWD's projections. However, that increase represents 0.00074% of projected regional demand (5,374,000 acre-feet per year) in 2045, which would result in less than significant impacts to water supply services. As discussed in Section 3.13.1, MWD has determined that with supplies provided by SDCWA and compliance with the Water Conservation Bill of 2009, no water shortages would occur in a normal year through 2045 (MWD 2021). Other cumulative projects that are consistent with the land use assumptions made in MWD's UWMP would have already been accounted for in demand projections. Projects that are inconsistent with the land use assumptions made in MWD's UWMP would also be subject to CEQA and required to include water supply analysis to demonstrate adequate supply for development. Further, related projects would be required to show that adequate infrastructure exists to serve the related projects and mitigate any potential impacts to water infrastructure caused by those projects. All projects would be required to pay applicable Capital Facility Fees to VWD or the applicable water service provider, which are required to go towards infrastructure improvements. Thus, cumulative impacts to water services would be **less than significant.**

Wastewater

Cumulative projects that are within the VWD service area for wastewater services would contribute to the cumulative demand for wastewater services. VWD anticipates the demand of future development through their master planning process. Cumulative projects that are consistent with the land use assumptions made in VWD's Master Plan would have already had their demand accounted for.

As discussed in Section 3.13.4, above, VWD has sufficient capacity at this time to account for the proposed project's estimated increase in wastewater generation. However, VWD identified existing system deficiencies in capacity for solids handling, liquids handling, ocean disposal and parallel land outfall's capacity for ultimate build-out wastewater flows. The cumulative projects that result in an increase in density or development over what was accounted for in VWD's Master Plan would further exacerbate these deficiencies. Per VWD, payment of Wastewater Capital Facility fees would go toward projects identified in their 2018 Master Plan including upsizing applicable pipelines and design and construction of a parallel land outfall (VWD 2023). The project applicant for the proposed project and for cumulative projects would be required to pay all applicable Wastewater Capital Facility fees in effect at the time service is committed in accordance with District rules and regulations, which would be utilized to fund the identified projects in the 2018 Master Plan. Thus, with payment of all applicable

Wastewater Capital Facility fees to VWD, cumulative impacts to wastewater treatment facilities would be **less than significant.**

Electrical Power and Natural Gas

Potential cumulative impacts related to electricity and natural gas infrastructure would result if the project, in combination with past, present, and future projects, would require or result in the relocation or construction of new or expanded electricity or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

As described in Section 3.13.4 above, the proposed project would have a less than significant impact related to electricity and natural gas. Each of the cumulative projects identified in Table 2-3 would be within the service area of SDG&E. Each of the cumulative projects would be required to analyze their potential for impacts related to the provision of electricity and natural gas services, including the need for new or expanded utility infrastructure, and would be required to mitigated potential impacts from expanded infrastructure to below a level of significance. Cumulative projects are also required to comply with the state's energy efficiency standards and local regulations. Additionally, SDG&E regularly undertakes upgrades and expansions, as needed, throughout their service area to continue provide reliable electricity and natural service. SDG&E conducts their own CEQA review on these projects. In conclusion, cumulative impacts related to the provision of electrical power and natural gas would be **less than significant.**

Solid Waste

Future development projects would generate solid waste to be disposed of at the Sycamore Sanitary Landfill. The facility has a daily permitted capacity of 5,000 tons/day for solid waste (expected to increase to 7,000 tons per day in 2025, and 9,000 tons per day in 2027). As of February 2021, remaining capacity was 105,064,991 cubic yards or approximately 86 million tons with an anticipated closure date of 2042, likely to be revised and extended to 2054 (County of San Diego 2022). Further, there are five other landfills in the County. This includes Borrego Landfill, with a remaining capacity of 88,750 cy and a closure date of 2046; Miramar Landfill, with a remaining capacity of 11,080,871 cy and a closure date of 2031); Otay Landfill, with a remaining capacity of 11,122,997 cy and closure date of 2030, and two U.S. Marine Corps landfills – Las Pulgas and San Onofre, with remaining capacities of 5,657,717 and 1,057,605 cy and 2060 and 2031 closure dates respectively (County of San Diego 2022).

Combined, the proposed project and cumulative projects include 4,143 residential units, approximately 852,473 s.f. of commercial/industrial/office and 122 hotel rooms. When the CalRecycle Estimated Solid Waste Generation Rates (CalRecycle 2019b) are applied to the proposed project and the cumulative projects, the total solid waste anticipated to be generated is 65,270 pounds per day or 32.6 tons/day. This is prior to any diversion from mandatory recycling and green waste/organics programs. If a 75% diversion rate set by AB 341 is met by all the cumulative projects, the net solid waste generation could be reduced to approximately 8.16 tons/day. The Sycamore Sanitary Landfill has a daily permitted capacity of 5,000 tons/day, which is expected to increase to 7,000 tons/day in 2025 and 9,000 tons/day in 2027 (County of San Diego 2022). The cumulative projects would result in an incremental contribution (8.16 to 32.6 tons/day) to the landfill capacity (5,000 to 9,000 tons/day); however, even without considering diversion, the impact would be less than significant.

3.13.6 Mitigation Measures

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

3.13.7 Conclusion

Development of the proposed project would result in an incremental increase in the need for water, wastewater, stormwater, energy, and solid waste services. However, as outlined in the project impact analysis above, it was determined that water, wastewater, stormwater, energy, and solid waste services would be adequate and the proposed project would not result in the relocation or construction of new or expanded facilities, the construction or relocation of which could cause significant environmental effects. Therefore, **project- and cumulative-level impacts would be less than significant.**

4.0 Alternatives

4.0 Introduction to Alternatives

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines states that an Environmental Impact Report (EIR) shall "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives."

The range of alternatives evaluated in an EIR is governed by the "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (Section 15126.6(a) of the CEQA Guidelines).

In developing the alternatives to be addressed in the EIR, the potential alternatives were evaluated in terms of their ability to meet the basic objectives of the project, while reducing or avoiding the environmental impacts of the project identified in Section 3.0, Environmental Analysis, of the EIR.

In determining what alternatives should be considered in an EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are important to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, the San Marcos City Council (see Public Resources Code Section 21081[a] [3]).

4.1 Project Objectives

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

- Maximize housing opportunities close to major transit facilities, education facilities, shopping and employment opportunities, and trails to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.
- To the extent possible, given site constraints, maximize the opportunity to provide transit-oriented housing for the City of San Marcos up to 67 dwelling units per acre.
- Develop high-quality market-rate for rent housing which meets the housing needs of the City of San Marcos and the region.
- Provide an affordable dwelling unit component that satisfies the State of California qualifying affordable housing income category of very-low income (30 to 50% of area median income [AMI]), through development onsite.
- Facilitate connections to the Armorlite Drive complete street circulation system and provide pedestrian friendly architecture and landscaping to promote walkability and connectivity for people to surrounding transit and places.

- Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the project area.
- Establish development standards and design guidelines that ensure distinctive architecture, landscaping and recreational amenities that complement and enhance the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan area.
- Provide flexible "flex" Commercial space that is capable of adapting to future market conditions and designed to support potential future retail needs.
- Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.
- Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the Specific Plan to promote economic stability.

4.2 Project Alternatives Considered in This EIR

4.2.1 Description of Alternative

The following alternatives are under consideration for this project:

- No Project/No Development Alternative (Section 4.3.3)
- No Project/ Existing Plan Alternative (Section 4.3.4)
- Reduced Development Footprint Alternative (Section 4.3.5)
- Reduced Intensity Alternative (Section 4.3.6)

Alternatives considered and removed from further consideration are summarized in Section 4.4.

4.2.2 Summary of Impacts

Project- and cumulative-level impacts associated with implementation of the proposed project are evaluated in Sections 3.1, Aesthetics, through 3.13, Utilities and Service Systems, of the EIR. As identified in Table 1-1, in Chapter 1, Executive Summary, construction and/or operation of the proposed project would have the potential to cause the following significant but mitigable environmental impacts:

- Impact BIO-1: There is potential to impact avian species protected under the Migratory Bird Treaty Act and California Fish and Game Code 3503.5 and other wildlife and if tree removal, vegetation removal, or other construction activities occur during the nesting season.
- Impact BIO-2: Potential for indirect impacts to sensitive species due to dust, trash, and accidental transport of non-native plant species into the project site, and invasive plant species, and noise and lighting effects.
- Impact BIO-3: Impact to 2.13 acres of Diegan coastal sage scrub and 0.12 acres of non-native grassland-broadleaf dominated for a total of 2.25 acres of impact
- Impact CR-1: Due to grading and ground disturbing activities, the proposed project may uncover previously unidentified archeological resources associated with SDI-5633 or may

result in previously unknown archaeological resources associated with other time periods or cultures.

- Impact CR-2: There is a potential for project construction activities to disturb previously unidentified human remains on the project site.
- Impact N-1: Noise level during rock drilling and blasting.
- Impact N-2: Noise levels during rock crushing.
- Impact TCR-1: As a result of tribal consultation, the City has determined that construction of the proposed project has the potential to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources.

All project impacts would be mitigated to below a level of significance.

4.2.3 No Project/No Development Alternative

Under the No Project/No Development Alternative, the proposed project would not be implemented, and the project site would remain undeveloped and in its current condition. No grading or construction would occur on the project site under this alternative. The project site is currently undeveloped and supports Diegan coastal sage scrub, non-native grassland, and disturbed habitat.

4.2.3.1 Comparison of the Effects of the No Project/No Development Alternative to the Proposed Project

Aesthetics

Under this alternative, the project site would remain in its current condition and the visual character of the site would not change. This alternative would not add additional sources of lighting to the project site and vicinity. The project site is generally flat with elevations ranging from 575 above mean sea level (amsl) in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive. The project site is currently undeveloped, vacant land and supports Diegan coastal sage scrub, non-native grassland, and disturbed habitat. As discussed in Section 3.1, Aesthetics, the proposed project's aesthetics impacts were determined to be less than significant. Compared to the proposed project, this alternative would reduce aesthetics impacts since no development would occur and no visual change would occur. No aesthetics impacts would occur under the No Project/No Development Alternative.

Air Quality

Under the No Project/No Development Alternative, air emissions associated with project construction including emissions associated with grading, site preparation, potential blasting and rock crushing, site finishing and building finishing would not occur. Implementation of this alternative would not introduce any uses that could generate operational air emissions. Therefore, this alternative would not result in any construction or operational air pollutant emissions. As discussed in Section 3.2, Air Quality, the proposed project's air quality impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, this alternative would reduce air pollutant emissions. No air quality impacts would occur under the No Project/No Development Alternative.

Biological Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, this alternative would avoid potential impacts to nesting birds (Impact BIO-1) since no trees or vegetation would be removed. This alternative would also avoid the direct impacts to 2.13 acres of Diegan coastal sage scrub and 0.12 acres of non-native grassland (Impact BIO-3) since no vegetation would be removed. This alternative would also avoid the potential for indirect impacts to sensitive species due to dust, trash, accidental transport of non-native plant species into the project site, and invasive plant species, and noise and lighting effects (Impact BIO-2). As discussed in Section 3.3, Biological Resources, the proposed project's impacts to biological resources were determined to be mitigated to less than significant. Compared to the proposed project, this alternative would eliminate the potential biological resources impacts and would not require mitigation measures. No biological resources impacts would occur under the No Project/No Development Alternative.

Cultural Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, there would be no potential for the project to uncover previously unidentified archeological resources associated with SDI-5633 or to uncover previously unknown archaeological resources associated with other time periods or cultures (Impact CR-1). Further, there would be no potential to disturb previously unidentified human remains that may be present on the project site (Impact CR-2). As such, mitigation measures MM-CR-1a, MM-CR-1b and MM-CR-2 would not be implemented or required. As discussed in Section 3.4, Cultural Resources, the proposed project's impacts to cultural resources were determined to be mitigated to less than significant. Compared to the proposed project, this alternative would eliminate the potential cultural resources impacts and would not require mitigation. However, under this alternative, there would not be any protection or repatriation afforded to the existing cultural resources on the site, and they could be subject to future disturbance from those who may access the site without authorization. No cultural resources impacts would occur under the No Project/No Development Alternative.

Energy

Under the No Project/No Development Alternative, there would be no energy use associated with construction and operation since no development would occur. As discussed in Section 3.5, Energy, the proposed project's energy-related impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, this alternative would eliminate the energy use identified for the project. No energy impacts would occur under the No Project/No Development Alternative.

Greenhouse Gas Emissions

Under the No Project/No Development Alternative, greenhouse gas (GHG) emissions associated with construction and operational activities would not occur, since no development would occur. As discussed in Section 3.6, Greenhouse Gas Emissions, the proposed project's GHG impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, this alternative would reduce GHG emissions. No GHG impacts would occur under the No Project/No Development Alternative.

Land Use and Planning

Under the No Project/No Development Alternative, the project site would remain undeveloped and none of the discretionary approvals identified for the project would be required. The General Plan Amendment to change the designations of the site from PI (Public Institutional) to Specific Plan Area (SPA) and a rezone to change the existing Public-Institutional (P-I) to Specific Plan Area (SPA) would not be required. As discussed in Section 3.7, Land Use, the proposed project's land use and planning impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, this alternative would further minimize potential impacts related to land use and planning. No land use and planning impact would occur under the No Project/ No Development Alternative.

Noise

The project site is currently vacant and does not generate any noise. Under the No Project/No Development Alternative, the project site would remain undeveloped and would not create any new sources of construction or operational noise. Therefore, this alternative would avoid the potential noise impacts associated with rock drilling and blasting (Impact N-1) and rock crushing (Impact N-2). As discussed in Section 3.8, Noise, the proposed project's noise impacts were determined to be mitigated to less than significant. Compared to the proposed project, this alternative would eliminate the potential noise impacts and would not require mitigation measures. No noise impacts would occur under the No Project/No Development Alternative.

Population and Housing

The project site is currently vacant and located adjacent to commercial and residential uses. The No Project/No Development Alternative would not induce population growth in the area, as no development would occur. As described in Section 3.9, Population and Housing, the proposed project would add an additional 512 people on site through the proposed residential use and up to six employees associated with the commercial use. This was not considered a substantial impact to population growth in the area and a less than significant impact was identified. Unlike the proposed project, no housing would be added to the site under the No Project/No Development Alternative, so this alternative would not contribute to meeting regional housing demands, including the provision of affordable units. However, compared to the proposed project because this alternative does not result in the addition of people on site, impacts would be reduced. No population and housing impacts would occur under the No Project/No Development Alternative.

Public Services

The No Project/No Development Alternative would not result in an increase in demand for public services, since no residential or commercial uses would be developed and there would be no increase in the City's population. Specifically, the No Project/No Development Alternative would not increase the demand for police and fire protection services, nor would this alternative increase demand for park, school, and library services. As discussed in Section 3.10, Public Services, the proposed project's public services impacts were determined to be less than significant. Compared to the proposed project, since this alternative would not result in additional residents on site, impacts on public services would be eliminated. No public services impacts would occur under the No Project/No Development Alternative.

Transportation

The No Project/No Development Alternative would not result in the generation of vehicular average daily trips (ADT) or vehicle miles traveled (VMT). As discussed in Section 3.11, Transportation, the proposed project was determined to have no impact related to conflicts with any applicable plans or polices that address the circulation system, and a less than significant impact related to VMT. Compared to the proposed project, since this alternative would not generate any additional vehicle trips or vehicle miles traveled, impacts related to transportation would be eliminated. No transportation impacts would occur under the No Project/No Development Alternative.

Tribal Cultural Resources

The No Project/No Development Alternative would not require any ground-disturbing activities. Therefore, there would be no potential for construction activities to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources (Impact TCR-1). As such, mitigation measures MM-TCR-1 through MM-TCR-9 would not be implemented or required. As discussed in Section 3.12, Tribal Cultural Resources, the proposed project's impacts to tribal cultural resources were determined to be mitigated to less than significant. Compared to the proposed project, this alternative would eliminate the potential tribal cultural resources impacts and would not require mitigation. However, under this alternative, there would not be any protection or repatriation afforded to the existing tribal cultural resources on the site and they could be subject to future disturbance from those who may access the site without authorization. No tribal cultural resources impacts would occur under the No Project/No Development Alternative.

Utilities and Service Systems

No development would occur under the No Project/No Development Alternative. As such, there would be no increase in demand for water service, wastewater service, stormwater capacity, energy, and solid waste handling services. As discussed in Section 3.13, Utilities and Service Systems, the proposed project's impacts related to utilities and services systems were determined to be less than significant. Compared to the proposed project, because no development would occur under this alternative, impacts on utilities and services would be eliminated. No utilities and service system impacts would occur for the No Project/No Development Alternative.

Conclusion

Since the No Project/No Development Alternative would not develop any residential or commercial uses on the project site, overall impacts would be less than those of the proposed project or eliminated entirely. There are some benefits of the project that would not be realized under this alternative, including providing additional housing units, including affordable units, which helps the City meet its Regional Housing Need Allocation numbers. Under this alternative, off-site water, sewer, and stormwater infrastructure improvements would not be realized. Also, under this alternative there would not be any payment of the City's public facility fees (PFF), which goes toward supporting a variety of services and improvements in the City, including but not limited to Circulation Streets, State Route 78 Interchanges, National Pollutant Discharge Elimination System, Tech Improvements, Parks, and Habitat Conservation. Payment of these fees provides improvements that benefit all residents of the city. Similarly, this alternative would not contribute any school fees. Finally, there would not be any protection or repatriation afforded to the existing cultural resources and tribal cultural resources on the site and they could be subject to future disturbance from those who may access the site without

authorization. The No Project/ No Development Alternative would not meet any of the project objectives (**Table 4-1**).

4.2.4 No Project/Existing Plan Alternative

Under the No Project/Existing Plan Alternative, the project site would be developed consistent with the site's existing land use designation. The project site has an existing General Plan Land Use designation of Public/Institutional (PI) which has a maximum floor area ratio (FAR) of 3.0. According to Table 2-3 of the Land Use Element of the City's General Plan, this designation is for "facilities built and maintained for public use such as academic facilities, institutional uses, community service facilities, water and sewer facilities, detention and drainage facilities, cemeteries, police and fire stations, and other government buildings and properties. This designation may include privately owned facilities built and maintained for public use" (City of San Marcos 2012).

One development scenario that would meet the P-I (Public/Institutional) zoning requirements would be a three story, 160,000 square foot (s.f.) telecommunications building that would be used as a data center. This is similar to the existing use of the adjacent AT&T facility and since AT&T was the previous owner of the project site, a data center would be a logical alternative use. Overall, the development footprint would stay the same as the proposed project.

4.2.4.1 Comparison of the Effects of the No Project/Existing Plan Alternative to the Proposed Project

Aesthetics

The No Project/Existing Plan Alternative would develop a three-story, 160,000 s.f. telecommunications building. This building would be smaller in height and bulk that the proposed residential building since the project proposes five stories. Similar to the proposed project, architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development. Additionally, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. As with the proposed project, a landscape concept plan would also be implemented. As discussed in Section 3.1, Aesthetics, the proposed project's aesthetics impacts were determined to be less than significant. Compared to the proposed project, this alternative would have a similar level of aesthetics impacts. Additionally, unlike the proposed project, PRC 21099(d) would not be applicable. Aesthetics impacts would be less than significant under the No Project/Existing Plan Alternative.

Air Quality

Under the No Project/Existing Plan Alternative, air pollutant emissions associated with project construction including emissions associated with grading, site preparation, site finishing and building finishing would still occur. Construction is assumed to be similar in terms of schedule and equipment to the proposed project so construction emissions for the No project/ Existing Plan Alternative are anticipated to be similar compared to the proposed project.

Emissions from vehicles going to and from the project site typically account for the largest portion of operational air quality emissions. It is anticipated that this alternative could generate approximately 161 ADT per day, which is 1,053 fewer ADT than the proposed project (1,214 ADT). However, data centers are recognized as very high consumers of electrical energy. This alternative would require at

least 257,600 megawatt hours (MWH) of electricity annually, which is about 285 times more electricity than the proposed project (907 MWH). The significantly increased electricity use would contribute to higher operational emissions when compared to the proposed project.

Additionally, data centers are not typically considered to be sources of odors. Similar to the proposed project, impacts related to odors would be less than significant under this alternative.

In summary, as discussed in Section 3.2, Air Quality, construction, and operation emissions were determined to be less than significant. The potential for odor impacts was also found to be less than significant. Compared to the proposed project, impacts related to odor and construction emissions for the No project/ Existing Plan Alternative are anticipated to be reduced compared to the proposed project due to a smaller building size, and would be less than significant. Compared to the proposed project, the No Project/ Existing Plan Alternative would generate higher levels of operational emissions due to increased energy use, but emissions would likely still be less than significant. Air Quality impacts would be less than significant under the No Project/Existing Plan Alternative.

Biological Resources

The No Project/Existing Plan Alternative would have a similar footprint of disturbance as the proposed project. Therefore, this alternative would also result in the potential for impacts to nesting birds (Impact BIO-1), Diegan coastal sage scrub and non-native grassland (Impact BIO-3), and indirect impacts to sensitive species (Impact BIO-2). As discussed in Section 3.3, Biological Resources, the proposed project's impacts on biological resources were determined to be mitigated to less than significant. Biological resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-BIO-1a through MM-BIO-3) and would reduce impacts to below a level of significance. Compared to the proposed project, this alternative would have a similar level of impact. Biological resources impacts would be mitigated to less than significant under the No Project/No Development Alternative.

Cultural Resources

The No Project/Existing Plan Alternative would have a similar footprint of disturbance as the proposed project. Therefore, the potential to uncover previously unidentified archeological resources associated with SDI-5633 or may result in previously unknown archaeological resources associated with other time periods or cultures could still occur under this alternative (Impact CR-1). Similarly, there is a potential to impact unidentified human remains (Impact CR-2) under this alternative. As discussed in Section 3.4, Cultural Resources, the proposed project's impacts to cultural resources were determined to be mitigated to less than significant. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1a, MM-CR-1b and MM-CR-2) and would reduce the impacts to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of cultural resources impacts as the proposed project.

Energy

Construction of the No Project/Existing Plan Alternative is assumed to be less in terms of schedule and equipment since the building would be smaller in heights and size. This translate to a reduction in construction-related energy compared to the proposed project. Operationally, data centers are recognized as very high consumers of electrical energy. This alternative would require at least 257,600 MWH of electricity annually, which is 285 times more electricity than would be required for the proposed project (907 MWH). Data centers typically do not require natural gas so this alternative would

require 1,192,176 kBTU less natural gas than the proposed project. Additionally, this alternative is anticipated to generate fewer ADT than the proposed project (161 compared to 1,214) which would reduce petroleum use.

As discussed in Section 3.5, Energy, the proposed project's energy-related impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, less natural gas and petroleum would be used under this alternative but substantially more electricity would be required. Nonetheless, similar to the proposed project, this alternative would incorporate energy conservation features consistent with the requirements of Title 24 and the City's Climate Action Plan and would not result in the wasteful or inefficient use of energy or a conflict with a state or local plan for energy efficiency. While this alternative would use more electricity than the proposed project, energy impacts would be less than significant under the No Project/Existing Plan Alternative

Greenhouse Gas Emissions

Construction of the No Project/Existing Plan Alternative is assumed to shorter in duration due to a smaller buildings being constructed compared to the proposed project. Therefore, construction-related GHG emissions would be lower under this alternative compared to the proposed project. Operationally, data centers are recognized as very high consumers of electrical energy. The No Project/ Existing Plan Alternative would require at least 257,600 MWH of electricity annually, which is 285 times more electricity than would be required for the proposed project (907 MWH). Based on the City's Climate Action Plan, a building of 160,000 s.f. would be required to install 0.322 Megawatt direct current (MWdc) (2 watts dc per s.f. * 160,000 s.f. / (1 million watts per megawatt)) of solar which would generate 553 MWH of electricity per year. The data center would consume 257,600 MWH annually so the solar photovoltaic (PV) system would provide less than one percent of the total energy required. Based on CalEEMod, the data center would generate 5,505 MT CO_2e just from electrical consumption alone (see Attachment B of the GHG report, which is Appendix E of this EIR). Therefore, the required solar PV system would not reduce emissions sufficiently to reduce emissions to less than what would be expected by the proposed project. In addition to emissions from energy use, this alternative would also generate emissions from vehicular trips, area sources such as landscaping, and waste management, which were not included in the 5,505 MT CO_2e estimate. The proposed project was estimated to generate 1,300.61 MT CO_2e. The No Project/ Existing Plan Alternative would therefore have a 77% more intense carbon footprint than the proposed project.

In summary, as discussed in Section 3.6, Greenhouse Gas Emissions, the proposed project's GHG related impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, the No Project/ Existing Plan Alternative would generate substantially more GHG emissions due to increased electricity use. Nonetheless, since this alternative is consistent with the City's General Plan, its GHG emissions would have been accounted for the in the City's Climate Action Plan. Therefore, with compliance with the City's Climate Action Plan and Title 24 requirements, the No Project/ Existing Plan Alternative would not generate GHG emissions that would have a significant impact on the environment and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHGs. GHG generation under this alternative would be greater compared to the proposed project. However, GHG impacts would still be less than significant under the No Project/Existing Plan Alternative.

Land Use and Planning

Under the No Project/Existing Plan Alternative, a General Plan Amendment and Rezone would not be required as the development would be consistent with the General Plan and zoning designation

assigned to the project site. Development under this alternative would generate fewer ADT than the proposed project (161 compared to 1,214). Similar to the proposed project, it is anticipated that adequate level of service performance would still occur on area roadways and intersections. Development under this alternative would still be required to participate in Community Facility District: CFD2011-01 (Congestion Management).

As discussed in Section 3.7, Land Use, the proposed project's land use and planning impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, this alternative would further minimize potential impacts related to land use and planning. No land use and planning impact would occur under the No Project/ No Development Alternative.

Noise

Construction-related noise under the No Project/Existing Plan Alternative would be similar to the proposed project, since grading activities would still be required, and similar types of equipment would be used, however the duration of construction would be shorter under this alternative. Due to temporary rock drilling and blasting activities during construction, this alternative has the potential to create noise levels in excess of the City's 75 dBA standard if rock drilling equipment is staged closer than 160 feet to an occupied noise sensitive land use (Impact N-1). Similarly, the No Project/Existing Plan Alternative would likely include a Conditional Use Permit to allow for the use of a temporary rock crusher, the use of which has the potential to create noise levels in excess of City standards, depending on the rock crusher's location in relation to sensitive uses (Impact N-2). Additionally, since construction equipment would be the same as the proposed project, vibration resulting from that equipment would be similar.

The No Project/Existing Plan Alternative would generate operational noise from data center activities as well as vehicle trips generated by the project. Development under this alternative would generate fewer ADT than the proposed project (161 compared to 1,214). Therefore, offsite noise generation would be lower under this alternative than the proposed project. A large data center building would typically require larger heating, ventilation, and air conditioning (HVAC) equipment, which can result in more noise compared to predominantly residential buildings. However, HVAC equipment is typically shielded with rooftop parapets or other barriers which help to minimize noise. Since the No Project/ Existing Plan Alternative would not include residential uses, there would be no need for design features in the form of noise barriers to shield outdoor areas (balconies) from cumulative roadway and train noise like would be needed under the proposed project.

In summary, as discussed in Section 3.8, Noise, the proposed project's construction noise impacts were determined to be mitigated to less than significant. This alternative would have a similar level of construction-related noise as the proposed project. Noise mitigation measures identified for the proposed project (mitigation measures MM-N-1 through MM-N-2) would be applicable to this alternative and would reduce the impacts to below a level of significance. The proposed project' s operational noise impacts from ADT and operational noise such as HVAC equipment were found to be less than significant. While noise generated from project traffic under No Project/Existing Plan Alternative would be less than the proposed project, noise from operational uses, such as HVAC equipment would be higher. Similar to the proposed project, the No Project/Existing Plan Alternative would result in less than significant operational noise impacts. In summary, noise impacts would be mitigated to less than significant under the No Project/Existing Plan Alternative.

Population and Housing

The No Project/Existing Plan Alternative would develop the site in a manner that is consistent with the City's General Plan and would, therefore, have been considered in the City's growth assumptions. The No Project/Existing Plan Alternative would not directly increase the City's population because no residential uses are included. As described in Section 3.9, Population and Housing, the proposed project would add an additional 512 people on site, but this was not considered a substantial impact to population growth in the area and a less than significant impact was identified. Unlike the proposed project, the No Project/Existing Plan Alternative would not create transit-oriented housing or market rate for rent housing, nor would it create affordable housing units on the project site, which is needed by the City to meet its Regional Housing Needs Allocation goals. However, because this alternative does not result in the addition of people on site, compared to the proposed project, population and housing impacts would be reduced. No population and housing impacts would occur under the No Project/No Development Alternative.

Public Services

Similar to the proposed project, the No Project/Existing Plan Alternative would result in an increase in demand for public services, due to the construction of a large data center. Specifically, this alternative would increase the demand for police and fire protection services over existing conditions. Residential uses are the primary driver for demand for park, library, and school services. Since no residences would be constructed under this alternative, there would be no increase in demand for school, park, and library services. Development under this alternative would still be required to pay applicable PFF and school fees, though the school fees would be at a reduced rate compared to the proposed project, since no residential uses are proposed. As discussed in Section 3.10, Public Services, the proposed project's public services impacts were determined to be less than significant. Compared to the proposed project, this alternative would result in similar demand for fire and police services and decreased demand for park, library, and school services. Overall, impacts to public services would be less than significant.

Transportation

The No Project/Existing Plan Alternative would generate fewer ADT than the proposed project (161 compared to 1,214). With regard to VMT, based upon San Diego Association of Governments (SANDAG) screening maps, the regional mean VMT for employees is 27.2 VMT per employee. For the census tract where the project site is located, the VMT per employee would be 24.8, which is approximately 89.4% of the regional mean (SANDAG 2024). This means that mitigation would be required to reduce the VMT to 23.12, which would be 85% of the regional mean and below the VMT significance threshold. It is expected that a 4% reduction could be achieved through a mix of mitigation measures such as employer carpool/vanpool programs, employer transit subsidies, and telecommute/alternative work schedules. Even with these reductions, development under the No Project/Existing Plan Alternative would result in more VMT compared to the project. This alternative would have increased VMT impacts compared to the proposed project, and impacts would be less than significant with mitigation.

As discussed in Section 3.11, Transportation, the proposed project was determined to have no impact related to conflicts with any applicable plans or polices that address the circulation system, and a less than significant impact related to VMT because the project would not meet the threshold requiring a full VMT analysis. Similar to the proposed project, it is anticipated that this alternative would not have any impacts related to conflict with applicable plans and policies related to transportation. Further,

compared to the proposed project, this alternative would generate fewer ADT but greater VMT. It is possible that additional reductions could be applied to reduce the No Project/Existing Plan Alternative's VMT impacts to below a level of significance. Compared to the proposed project, this alternative would have a similar level of transportation impacts and fewer ADT. It is anticipated that transportation impacts would be mitigated to less than significant under the No Project/ Existing Plan Alternative.

Tribal Cultural Resources

The No Project/Existing Plan Alternative would have a similar footprint of disturbance as the proposed project. Therefore, construction of this alternative has the potential to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources. As discussed in Section 3.12, Tribal Cultural Resources, the proposed project's impacts to tribal cultural resources were determined to be mitigated to less than significant. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-TCR-1 through MM-TCR-9) and would reduce the impacts to below a level of significance. The No Project/Existing Plan Alternative would have a similar level of tribal cultural resources impacts as the proposed project.

Utilities and Service Systems

The No Project/Existing Plan Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service over existing conditions through the development of a 160,000 s.f. data center. Storm water infrastructure demands are anticipated to be similar to the proposed project as a similar amount of impervious surface would be created. VWD's water/sewer technical memorandum (Appendix S) noted that even though the City's approved land use designation for the proposed project is Public/Institutional, the 2018 Master Plan based its ultimate water demand planning for the project site as Open Space. VWD's memo indicates that water demand based on land uses assumed in the 2018 Master Plan would be 36,172 gallons per day (GPD) less than the proposed project (488 GPD compared to 36,660 GPD). VWD's memo also identified that the sewer demand based on land uses assumed in the 2018 Master Plan would be 32,628 GPD (0 GPD compared to 32,628 GPD) less than the proposed project. However, a large data center would have greater water and sewer demand than open space. Nonetheless, it is expected that the demand for water and sewer services would be decreased under No Project/ Existing Plan Alternative compared to the proposed project. Additionally, the water and sewer line upgrades identified for the proposed project in the VWD memo may also be required for this alternative.

Using CalRecycle Estimated Solid Waste Generation Rates, the No Project/ Existing Plan Alternative would generate approximately 800 pounds or 0.4 tons per day (5 pounds/1,000 s.f./day), which is 1,476 pounds fewer than the 2,276 pounds (1.14 tons) anticipated for the proposed project.

As discussed under Greenhouse Gas Emissions and Energy sections above, natural gas demand would be reduced to zero under this alternative, but electricity demand would be significantly higher than the proposed project. This alternative would require at least 257,600 MWH of electricity annually, which is 285 times more electricity than would be required for the proposed project (907 MWH). Even with the provision of required (per City's Climate Action Plan) solar-generated electricity, the solar would provide less than one percent of the total needed electricity requirement. Therefore, this alternative would have substantially higher demand for electricity from SDG&E than the proposed project would.

As discussed in Section 3.13, Utilities and Service Systems, the proposed project's impacts related to utilities and services systems were determined to be less than significant. Compared to the proposed project, impacts on utilities and services would be reduced, with the exception of electricity. Utilities and service system impacts would be less than significant under the No Project/No Development Alternative.

Conclusion

The No Project/Existing Plan Alternative would result in fewer ADT but would require 285 times more electricity than the proposed project which results in a corresponding proportional increase in air pollutant and GHG emissions.

Footprint-specific impacts, such as those related to biological resources, cultural, and tribal cultural resources, would be similar as the proposed project, as the same amount of site area would be disturbed.

This alternative would not generate any students for SMUSD and would reduce demand for parks, libraries, natural gas, solid waste, water, and sewer services compared to the proposed project. This alternative would result in a VMT impact and would require mitigation to reduce VMT to 85% of the regional mean for employees. It should be noted that the project site was sold by AT&T after they determined it was not necessary for their infrastructure operations, and no other utility companies purchased the property for development of their own infrastructure under the existing designation Finally, this alternative does not meet any of the project objectives, as shown in Table 4-1.

4.2.5 Reduced Development Footprint Alternative

Under the Reduced Development Footprint Alternative, the project site would be developed with 14 live/work rowhomes and associated infrastructure. The units would be three stories high and would be a for-sale product. No affordable housing would be proposed under this alternative. Two-car garages would be included on the ground level of each unit and five additional open parking spaces would be provided for a total of 33 spaces. This alternative would have a density of 5.83 du/acre and would include seven 3 bed/2.5 bath units (1,600 s.f.) and seven 4 bed/2.5 bath units (1,800 s.f.). Access would be via Armorlite Drive and a drive aisle adjacent to the western project boundary would provide access to some of the townhomes. Private and common open space would be provided consistent with the City's Outdoor Space Standards (Section 20.255.120 of the San Marcos Municipal Code). Architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development.

Overall, the development footprint and area of disturbance would be reduced compared to the proposed project, as only 41% of the project site would be disturbed. This results in a corresponding decrease in the amount of grading that would be required for the project.

4.3.5.1 Comparison of the Effects of the Reduced Development Footprint Alternative to the Proposed Project

Aesthetics

Development under the Reduced Development Footprint Alternative would include 14 three-story live/work rowhomes occupying 41% of the project site. Compared to the proposed project, there would be less overall development intensity on the project site and rather than one five-story building, there would be 14 three-story live/work rowhomes. Additionally, 1.4 acres of the site would remain

undeveloped. Similar to the proposed project, architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development. Additionally, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. As with the proposed project, a landscape concept plan would also be implemented. As discussed in Section 3.1, Aesthetics, the proposed project's aesthetics impacts were determined to be less than significant. Compared to the proposed project, this alternative would have a reduced level of aesthetics impacts. Aesthetics impacts would be less than significant under the Reduced Development Footprint Alternative.

Air Quality

Under the Reduced Development Footprint Alternative, air pollutant emissions associated with construction, including emissions associated with grading, site preparation, site finishing and building finishing would still occur. However, due to the reduced footprint of disturbance, construction emissions would be reduced compared to the proposed project.

Operational emissions under this alternative would also be reduced compared to the proposed project as fewer residential units would be constructed (14 units compared to 165 units). Emissions from vehicles going to and from the project site typically account for the largest portion of operational air quality emissions. It is anticipated that this alternative could generate approximately 112 ADT, which is 1,102 fewer ADT than the proposed project's 1,214 trips, representing an approximate 90% reduction in ADT. As such, because this alternative would result in a decrease of development intensity and associated ADT, operational air pollutant emissions would be reduced when compared to the proposed project. Because residential uses would still be proposed, the low potential for sources of odor would be the same as the proposed project.

In summary, as discussed in Section 3.2, Air Quality, construction, and operation emissions were determined to be less than significant for the proposed project. The potential for odor impacts was also found to be less than significant. Compared to the proposed project, impacts related to odor for the Reduced Development Footprint Alternative are anticipated to be similar and would be less than significant. The Reduced Development Footprint Alternative would generate reduced levels of construction emissions, due to the smaller footprint, and operation emissions due to the lesser development intensity. Air Quality impacts would be less than significant under the Reduced Development Footprint Alternative.

Biological Resources

The Reduced Development Footprint Alternative would occupy only 41% of the project site leaving 1.4 acres of the site undisturbed, including a large portion of the Diegan coastal sage scrub vegetation community and all of the non-native grassland vegetation community. Similar to the proposed project, this alternative would also result in the potential for impacts to nesting birds (Impact BIO-1), to Diegan coastal sage scrub (Impact BIO-3), and indirect impacts to sensitive species (Impact BIO-2). However, this alternative would avoid impacts to 0.12 acres of non-native grassland. As discussed in Section 3.3, Biological Resources, the proposed project's impacts on biological resources were determined to be mitigated to less than significant. Biological resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measure MM-BIO-1, the portion of MM-BIO-3 related to Diegan coastal sage scrub, and MM-BIO2a – MM-BIO-2c) and would reduce impacts to below a level of significance. Compared to the proposed project, this alternative would have

a reduced level of impact. Biological resources impacts would be mitigated to less than significant under the Reduced Development Footprint Alternative.

Cultural Resources

The Reduced Development Footprint Alternative would occupy only 41% of the project site leaving 1.4 acres of the site undisturbed. Similar to the proposed project, the potential to impact unknown archaeological resources potentially located within the project site (Impact CR-1) as well as unidentified human remains (Impact CR-2) would still occur under this alternative. However, due to the smaller footprint of disturbance, the potential for discovery is reduced. As discussed in Section 3.4, Cultural Resources, the proposed project's impacts to cultural resources were determined to be mitigated to less than significant. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1 through MM-CR-4) and would reduce the impacts to below a level of significance. Compared to the proposed project, this alternative would have a reduced level of impact. Cultural resources impacts would be mitigated to less than significant under the Reduced Development Footprint Alternative.

Energy

Construction of the Reduced Development Footprint Alternative would require energy; however, due to the reduced footprint of disturbance, energy use during construction would be reduced compared to the proposed project. Electricity and natural gas required during operation of this alternative would also be reduced compared to the proposed project as fewer residential units would be constructed (14 units compared to 165 units). Petroleum use would be decreased as this alternative would generate approximately 112 ADT, which is 1,102 fewer ADT than the proposed project's 1,214 trips, representing an approximate 90% reduction in ADT.

As discussed in Section 3.5, Energy, the proposed project's energy-related impacts were determined to be less than significant, and no mitigation was identified. Compared to the proposed project, less electricity, natural gas, and petroleum would be used under this alternative, so energy impacts would be reduced. Energy impacts would be less than significant under the Reduced Development Footprint Alternative.

Greenhouse Gas Emissions

Under the Reduced Development Footprint Alternative, GHG emissions associated with project construction would still occur but would be reduced compared to the proposed project due to the reduced footprint of disturbance. Operational GHG emissions under this alternative would also be reduced compared to the proposed project as fewer residential units (14 units compared to 165 units). In particular, GHG emissions associated with vehicular trips under the Reduced Development Footprint Alternative would be lower than the proposed project. It is anticipated that this alternative could generate approximately 112 ADT, which is 1,102 fewer ADT than the proposed project's 1,214 trips, representing an approximate 90% reduction in ADT. As such, because this alternative would result in a decrease of development intensity and associated ADT, operations-related GHG emissions would be reduced when compared to the proposed project.

As discussed in Section 3.6, Greenhouse Gas Emissions, construction and operational GHG emissions were determined to be less than significant for the proposed project. Compared to the proposed project, the Reduced Development Footprint Alternative would generate reduced levels of construction emissions, due to the smaller footprint, and reduced levels of operational emissions due to the smaller

development intensity. GHG impacts would be less than significant under the Reduced Development Footprint Alternative.

Land Use and Planning

Under the Reduced Development Footprint Alternative, a Specific Plan, General Plan Amendment and Rezone would still be required. Development under this alternative would generate fewer ADT than the proposed project (112 compared to 1,214). Similar to the proposed project, it is anticipated that adequate level of service performance would still occur on area roadways and intersections. Development under this alternative would still be required to participate in Community Facility District: CFD2011-01 (Congestion Management). As discussed in Section 3.7, Land Use, the proposed project's land use and planning impacts were determined to be less than significant, and no mitigation was identified. Land use and planning impacts would be similar to the proposed project under Reduced Development Footprint Alternative and would be less than significant.

Noise

Construction-related noise under the Reduced Development Footprint Alternative is expected to result in a similar maximum level of noise and vibration levels as the proposed project, since grading activities would still be required, and similar types of equipment would be used. However, construction may be of a shorter duration since less development and a smaller footprint is proposed. Construction would also occur further from the sensitive land uses to the east of the site but still close to the sensitive receptors to the south. As with the proposed project, due to temporary rock drilling and blasting activities during construction, this alternative has the potential to create noise levels in excess of the City's 75 dBA standard if rock drilling equipment is staged closer than 160 feet to an occupied noise sensitive land use (Impact N-1). Similarly, the Reduced Development Footprint Alternative may include a conditional use permit to allow for the use of a temporary rock crusher, the use of which has the potential to create noise levels in excess of City standards, depending on the rock crusher's location in relation to sensitive uses (Impact N-2).

The Reduced Development Footprint Alternative would generate operational noise from 14 live/work row homes as well as vehicle trips generated by the project. Development under this alternative would generate fewer ADT than the proposed project (112 compared to 1,214). Therefore, offsite noise generation would be lower under this alternative than the proposed project. Operational noise from the rowhomes would be similar in type to the proposed project, but there would be substantially fewer units (14 compared to 165). Since this alternative proposes two row homes in the northwest corner of the site with direct line of site to Mission Road and Las Posas Road, a similar design feature in the form of noise barriers to shield outdoor areas (balconies) from cumulative roadway and train noise would be needed, similar to the proposed project.

As discussed in Section 3.8, Noise, the proposed project's construction noise impacts were determined to be mitigated to less than significant. Construction-related noise under the Reduced Development Footprint Alternative is expected to result in a similar maximum level of noise and vibration levels as the proposed project Noise mitigation measures identified for the proposed project (mitigation measures MM-N-1 through MM-N-2) would be applicable to this alternative and would reduce the impacts to below a level of significance. The proposed project' s operational noise impacts from ADT and operational noise such as HVAC equipment were found to be less than significant. This Since this alternative would result in a decrease of development intensity and associated ADT compared to the proposed project, operations-related noise would be reduced when compared to the

proposed project. Noise impacts would be mitigated to less than significant under the No Project/Existing Plan Alternative.

Population and Housing

The Reduced Development Footprint Alternative would result in an increase in the population of the City by approximately 44 residents, whereas the proposed project would increase the population by approximately 512 residents (3.1 persons per dwelling unit). As described in Section 3.9, Population and Housing, the proposed project's population increase would not be considered a substantial impact to population growth in the area and a less than significant impact was identified. Unlike the proposed project, the Reduced Development Footprint Alternative would not create as much transit-oriented housing or market rate for rent housing, nor would it create affordable housing units on the project site, which is needed by the City to meet its Regional Housing Needs Allocation goals. However, because this alternative results in the addition of fewer people on site, compared to the proposed project, population and housing impacts would be reduced. A less than significant impact related to population and housing would occur under the Reduced Development Footprint Alternative.

Public Services

Similar to the proposed project, the Reduced Development Footprint Alternative would result in an increase in demand for public services due to the construction of residential uses on the project site. Specifically, this alternative would increase the demand for police and fire protection, school, park, and library services over existing conditions. Development under this alternative would still be required to pay applicable PFF and school fees, which would help offset demand for public services. Compared to the proposed project, fewer residents (44 compared to 512) and fewer students (5 compared to 39) would be generated since fewer residential units (14 compared to 165) would be constructed, and demand for public services would be reduced. As discussed in Section 3.10, Public Services, the proposed project's public services impacts were determined to be less than significant. Compared to the proposed project, this alternative would result in decreased demand for public services. Impacts to public services would be less than significant under the Reduced Development Footprint Alternative.

Transportation

The Reduced Development Footprint Alternative would generate fewer ADT than the proposed project (112 compared to 1,214). Similar to the proposed project, development under this scenario would screen out of a VMT assessment through the use of SANDAG maps. As discussed in Section 3.11, Transportation, the project site is located within a census tract with a resident VMT of 12.5 VMT/Capita, which is 66% of the regional average and below the VMT significance threshold. Compared to the proposed project, this alternative would generate fewer VMT overall, since fewer units would be constructed.

As discussed in Section 3.11, Transportation, the proposed project was determined to have no impact related to conflicts with any applicable plans or polices that address the circulation system, and a less than significant impact related to VMT because the project would not meet the threshold requiring a full VMT analysis. Because this alternative would generate fewer ADT and less VMT, transportation impacts would be reduced. There would be no impact associated with consistency with policies in the Mobility Element of the General Plan that addresses LOS and a less than significant impact related to VMT under the Reduced Development Footprint Alternative.

Tribal Cultural Resources

The Reduced Development Footprint Alternative would occupy only 41% of the project site leaving 1.4 acres of the site undisturbed. Similar to the proposed project, there would still be a potential for construction activities to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources (Impact TCR-1). However, due to the smaller footprint of disturbance, the potential for discovery is reduced. Mitigation measures MM-TCR-1 through MM-TCR-9 would still be required to be implemented. Compared to the proposed project, this alternative would reduce the potential for tribal cultural resources impacts.

Utilities and Service Systems

The Reduced Development Footprint Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service through the development of 14 live/work row homes. However, compared to the project, this alternative would decrease the overall demand since fewer residences (14 compared to 165) would be constructed. Development under this alternative would still be required to pay all applicable water and sewer fees. and he sewer and water line upgrades identified for the project may also be applicable to this alternative. Storm water infrastructure demand may also be reduced as less impervious surface area would be created due to the reduced footprint of disturbance. Using CalRecycle Estimated Solid Waste Generation Rates (12.23 pounds per household), the Reduced Development Footprint Alternative would generate approximately 171 pounds (0.09 tons) per day, which is 2,105 pounds fewer than the 2,276 pounds anticipated for the proposed project.

As discussed in Section 3.13, Utilities and Service Systems, the proposed project's impacts related to utilities and services systems were determined to be less than significant. Compared to the proposed project, impacts on utilities and services would be reduced. Utilities and service system impacts would be less than significant under the Reduced Development Footprint Alternative.

Conclusion

The Reduced Development Footprint Alternative would reduce the number of residential units constructed on the project site (14 compared to 165). This results in a corresponding decrease in vehicular trips by approximately 90% and a corresponding decrease in air pollutant emissions, GHG emissions and noise from offsite traffic compared to the proposed project. Public services, utilities and service systems, and energy demands would also be proportionally decreased. Footprint specific impacts, such as those related to biological resources, cultural resources, and tribal cultural resources, would also be reduced as this alternative would only impact 41% of the project site. This alternative would contribute less PFF and school fees since fewer residential units would be constructed. As detailed in Table 4-1, this alternative would meet one of the project objectives, and partially meet one objective, though could be designed in a manner that would meet or partially meet six more objectives.

4.2.6 Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the project site would be developed under a Specific Plan with 80 residential apartments and 5,600 s.f. of commercial use for a density of approximately 32 du/acre. The project proposes a density of 67 du/acre. A General Plan Amendment and Rezone would be required for this alternative to change the site from PI (Public Institutional) to Specific Plan. Overall, the development footprint and area of disturbance would be similar to that of the proposed project, but with less density of residential units. The building would range from two to three stories high,

depending on how large the units would be. Private and common open space would be provided consistent with the City's Outdoor Space Standards (Section 20.255.120 of the San Marcos Municipal Code). Architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development.

4.3.5.1 Comparison of the Effects of the Reduced Intensity Alternative to the Proposed Project

Aesthetics

Development under the Reduced Intensity Alternative would include 80 residential units and 5,600 s.f. of commercial use. Compared to the proposed project, there would be less overall development intensity on the project site, and the overall building height would be reduced. Similar to the proposed project, architectural treatments would be incorporated into the design of this alternative to provide for visual interest and to break up the bulk and scale of the development. Similar to the proposed project, this alternative would incorporate lighting for safety, security and way finding. Lighting would be required to comply with the City's Street Lighting Standards and Specifications and San Marcos Municipal Code Title 20, Section 20.300.080 to minimize light pollution. The Reduced Intensity Alternative would have a similar level of aesthetics impacts as the proposed project and impacts would be less than significant. Similar to the proposed project, PRC 21099(d) would be applicable and aesthetics impacts would not be considered a significant environmental impact.

Air Quality

Under the Reduced Intensity Alternative, air pollutant emissions associated with construction including emissions associated with grading, site preparation, site finishing and building finishing would still occur and would be reduced compared to the proposed project due to the reduced development.

Operational emissions under this alternative would also be reduced compared to the proposed project as fewer residential units would be constructed. Vehicular trips under the Reduced Intensity Alternative would be lower than the proposed project. This alternative would generate 704 ADT. Compared to the proposed project, which would generate 1,214 ADT, this alternative would reduce ADT by 42%. As such, because this alternative would result in a decrease of development intensity and associated ADT, operational air pollutant emissions would be reduced when compared to the proposed project and impacts would be less than significant.

Biological Resources

The Reduced Intensity Alternative would have a similar level of biological resources impacts as the proposed project, since it would have a similar footprint of disturbance. This includes the potential for impact bird species protected by the Migratory Bird Treaty Act, impact to Diegan coastal sage scrub, non-native grassland, and the potential for indirect impact to sensitive species. Biological resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-BIO-1 through MM-BIO-3) and would reduce the potential impact to below a level of significance. The Reduced Intensity Alternative would have a similar level of biological resources impacts as the proposed project, and impacts would be less than significant with mitigation.

Cultural Resources

The Reduced Intensity Alternative would have a similar footprint of disturbance as the proposed project. Therefore, the potential to uncover previously unidentified archeological resources associated with SDI-5633 or may result in previously unknown archaeological resources associated with other

time periods or cultures could still occur under this alternative (Impact CR-1). Similarly, there is a potential to impact unidentified human remains (Impact CR-2) under this alternative. As discussed in Section 3.4, Cultural Resources, the proposed project's impacts to cultural resources were determined to be mitigated to less than significant. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative (mitigation measures MM-CR-1a, MM-CR-1b and MM-CR-2) and would reduce the impacts to below a level of significance. The Reduced Intensity Alternative would have a similar level of cultural resources impact as the proposed project.

Greenhouse Gas Emissions

Under the Reduced Intensity Alternative, GHG emissions associated with project construction would be reduced compared to the proposed project due to the reduced density and construction activities required. Operational GHG emissions under this alternative would also be reduced due to the reduction in residential units. In particular, GHG emissions associated with vehicular trips under the Reduced Intensity Alternative would be lower than the proposed project. This alternative would generate 704 ADT. Compared to the proposed project, which generates 1,214 ADT, this alternative would reduce ADT by 42%. As such, because this alternative would result in a decrease of ADT, vehicular-related GHG would be reduced when compared to the proposed project. GHG emissions would be reduced compared to the proposed project, and impacts would be less than significant.

Land Use and Planning

Under the Reduced Intensity Alternative, a Specific Plan, General Plan Amendment and Rezone would still be required. This alternative would generate 704 ADT. Compared to the proposed project, which generates 1,214 ADT, this alternative would reduce ADT by 42%. The proposed project did not require any improvements to maintain adequate LOS on area roadways and intersections. Since the Reduced Intensity Alternative would generate less ADT, a similar conclusion would be made for this alternative and there would be no inconsistencies with the Mobility Element of the General Plan. The proposed project would also be consistent with the other applicable policies and goals of the General Plan, as it would include similar uses and features as the proposed project. This alternative would have a similar level of land use and planning impact as the proposed project and impacts would be less than significant.

Noise

Construction-related noise under the Reduced Intensity Alternative would be similar to the proposed project, since grading activities would still be required, and similar types of equipment would be used, however the duration of construction would be reduced since the building would be smaller. Therefore, due to temporary rock drilling and blasting activities during construction, this alternative has the potential to create noise levels in excess of the City's 75 dBA standard if rock drilling equipment is staged closer than 160 feet to an occupied noise sensitive land use (Impact N-1). Similarly, the Reduced Intensity would likely include a Conditional Use Permit to allow for the use of a temporary rock crusher, the use of which has the potential to create noise levels in excess of City standards, depending on the rock crusher's location in relation to sensitive uses (Impact N-2). Additionally, since construction equipment would be the same as the proposed project, vibration resulting from that equipment would be similar.

The No Project/Existing Plan Alternative would generate operational noise from data center activities as well as vehicle trips generated by the project. Development under this alternative would generate

fewer ADT than the proposed project (704 compared to 1,214). Therefore, offsite noise generation would be lower under this alternative than the proposed project.

In summary, as discussed in Section 3.8, Noise, the proposed project's construction noise impacts were determined to be mitigated to less than significant. Noise mitigation measures identified for the proposed project (mitigation measures MM-N-1 through MM-N-2) would be applicable to this alternative and would reduce the impacts to below a level of significance. The proposed project' s operational noise impacts from ADT and operational noise such as HVAC equipment were found to be less than significant. Operational noise under this alternative would be reduced compared to the proposed project. Similar to the proposed project, the Reduced Intensity Alternative would result in less than significant operational noise impacts. In summary, noise impacts would be mitigated to less than significant under the Reduced Intensity Alternative.

Population and Housing

The Reduced Intensity Alternative would result in an increase in the population of the City by approximately 248 residents, whereas the proposed project would increase the population by approximately 512 residents. However, increased population associated with the proposed project was determined to be less than significant. Compared to the proposed project, this alternative would have a reduced level of impact related to unplanned population growth and impacts would be less than significant.

Public Services

Similar to the proposed project, the Reduced Intensity Alternative would result in an increase in demand for public services due to the construction of residential uses on the project site. Specifically, this alternative would increase the demand for police and fire protection, school, park, and library services over existing conditions. Compared to the proposed project, fewer residents and students would be generated since fewer residential units would be constructed, and demand for public services would be reduced. Development under this alternative would still be required to pay applicable PFF and school fees, which would help offset demand for public services. Similar to the proposed project, impacts would be less than significant.

Transportation

Under the Reduced Intensity Alternative, no impact associated with consistency with policies in the Mobility Element of the General Plan that address LOS is expected. Development under this scenario would screen out of a VMT assessment through the use of SANDAG maps. As discussed in Section 3.11, Transportation, the project site is located within a census tract with a resident VMT of 12.5 VMT/Capita, which is 66.1% of the regional average and below the VMT significance threshold. Compared to the proposed project, this alternative would generate less VMT overall, since fewer units would be constructed, and impacts would be less than significant.

Tribal Cultural Resources

The Reduced Intensity Alternative would have a similar footprint of disturbance as the proposed project. Therefore, construction of this alternative has the potential to cause a substantial adverse change to a tribal cultural resource that is eligible for inclusion in the California Register of Historical Resources. As discussed in Section 3.12, Tribal Cultural Resources, the proposed project's impacts to tribal cultural resources were determined to be mitigated to less than significant. Cultural resources mitigation measures identified for the proposed project would be applicable to this alternative

(mitigation measures MM-TCR-1 through MM-TCR-9) and would reduce the impacts to below a level of significance. The Reduced Intensity Alternative would have a similar level of tribal cultural resources impacts as the proposed project.

Utilities and Service Systems

The Reduced Intensity Alternative would result in an increase in demand for utilities and service systems, including water, wastewater, stormwater infrastructure, and solid waste service through the development of 80 residential units and 5,600 s.f. of commercial. However, compared to the project, this alternative would decrease the overall demand since fewer residences would be constructed. Development under this alternative would still be required to pay all applicable water and sewer fees and the sewer and water line upgrades identified for the project may also be applicable to this alternative. Storm water infrastructure demand is anticipated to be similar to the proposed project as a similar amount of impervious surface would be created. Solid waste generated would be reduced under this alternative. Utilities and service system impacts would be less than significant under the Reduced Intensity Alternative, and would be reduced compared to the proposed project.

Conclusion

The Reduced Intensity Alternative would reduce the number of residential units constructed on the project site. This results in a corresponding decrease in vehicular trips by approximately 42% and a corresponding decrease in air pollutant and GHG emissions and noise from offsite traffic compared to the proposed project. Public services, utilities and service systems, and energy demands would also be proportionally decreased. Footprint-specific impacts, such as those related to biological resources, cultural and tribal cultural resources, would be similar as the proposed project since a similar area of disturbance would occur under this alternative. This alternative would contribute less PFF and school fees since fewer residential units would be constructed. This alternative would meet the majority of the project objectives as detailed in Table 4-1.

4.3 Alternatives Considered But Rejected

CEQA Guidelines Section 15126.6(c) provides guidance in selecting a range of reasonable alternatives for the project. An EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. CEQA Guidelines Section 15126.6(c) provides the following guidance in selecting a range of reasonable alternatives for the project. There are many factors that may be taken into account when addressing the feasibility of range of potential alternatives for the project, such as site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). The alternatives discussion shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. An EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination.

The EIR need not discuss every alternative to the project. A range of alternatives that are "reasonable" for analysis have been evaluated and are discussed above in Section 4.3, Project Alternatives

Considered in this EIR. The following describes other alternatives considered by the City but dismissed from further evaluation in this EIR, and a brief description of the reasons for their rejection.

4.3.1 Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the project. There are sites within the city of an approximately equivalent size to the project site that could be redeveloped with a residential project; however, the project applicant does not control another site within the city of comparable land area that is available for development of the proposed project. One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site."

Because the city is highly urbanized and is largely built out, obtaining another site of a similar size in a similar location is not considered feasible. It should also be noted that the project site is surrounded by development and located adjacent to an established transportation network, existing transit (SPRINTER and Palomar College Transit Center) and utility infrastructure. As such, an alternative location was ultimately rejected from further analysis in the EIR.

4.4 Environmentally Superior Alternative

Table 4-2 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As shown in Tables 4-1 and 4-2, the No Project/No Development Alternative would eliminate all of the potentially significant impacts identified for the project. However, the No Project/No Development Alternative would not meet any of the project objectives. Additionally, there is no certainty that the project site would remain undeveloped in perpetuity. CEQA Guidelines Section 15126.6(e)(2) states that if the No Project alternative is identified as the environmentally superior alternative, then an environmentally superior alternative should be identified among the other alternatives.

Among the other alternatives, not including the proposed project, the Reduced Development Footprint Alternative is the environmentally superior alternative because it would provide a reduced level of impact in some environmental analysis areas including air quality, cultural resources, GHG, noise, public services, recreation, tribal cultural resources, and utilities/service systems. Mitigation measures would still be required to mitigate impacts to biological resources, cultural resources, noise, tribal cultural resources.

Table 4-1. Summary of Alternatives and Project Objectives

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Development Footprint Alternative	Reduced Intensity Alternative
Maximize housing opportunities close to major transit facilities, education facilities, shopping and employment opportunities, and trails to optimize land use with transit use and active modes of transportation, reduce reliance on automobiles, and potentially reduce greenhouse gas emissions.	Meets objective	Does not meet this objective	Does not meet this objective	Partially meets objective	Partially meets this objective
To the extent possible, given site constraints, maximize the opportunity to provide transit-oriented housing for the City of San Marcos up to 67.6 dwelling units per acre.	Meets objective	Does not meet this objective	Does not meet this objective	Partially meets this objective	Partially meets this objective
Develop high-quality market-rate for rent housing which meets the housing needs of the City of San Marcos and the region.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective	Meets objective
Provide an affordable dwelling unit component that satisfies the State of California qualifying affordable housing income category of very-low income (30 to 50% of area median income) through development onsite.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective
Facilitate connections to the Armorlite Drive complete street circulation system and provide pedestrian friendly architecture and landscaping to promote walkability and connectivity for people to surrounding transit and places.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Design a vehicular circulation system that adequately accommodates traffic and minimizes traffic impacts in and around the project area.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Establish development standards and design guidelines that ensure distinctive architecture,	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that	Could be designed in a manner that

Objective	Proposed Project	No Project/No Development	No Project/Existing Plan Alternative	Reduced Development Footprint Alternative	Reduced Intensity Alternative
landscaping and recreational amenities that complements and enhances the existing surrounding neighborhood while providing a desirable living environment for residents within the Specific Plan area.				meets this objective	meets this objective
Provide flexible "flex" Commercial space to support residents of the Specific Plan Area that is also capable of adapting to future market conditions and designed to support potential future retail needs.	Meets objective	Does not meet this objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective
Institute a program for the long-term maintenance of the community to ensure all facilities are adequately maintained to City standards.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective
Finance or contribute a fair share of funding to all community services and infrastructure needed to support development proposed by the Specific Plan to promote economic stability.	Meets objective	Does not meet this objective	Does not meet this objective	Could be designed in a manner that meets this objective	Could be designed in a manner that meets this objective

Table 4-2. Comparison of Impacts of Proposed Project and Alternatives

Environmental Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing Plan Alternative	Reduced Development Footprint Alternative	Reduced Intensity Alternative
Aesthetics	LTS	No Impact (Reduced)	LTS (Same)	LTS (Reduced)	LTS (Same)
Air Quality	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)	LTS (Reduced)
Biological Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Reduced)	LTSM (Same)
Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Reduced)	LTSM (Same)
Energy	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)	LTS (Reduced)
Greenhouse Gas Emissions	LTS	No Impact (Reduced)	LTS (Increased)	LTS (Reduced)	LTS (Reduced)
Land Use and Planning	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)
Noise	LTSM	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)
Population and Housing	LTS	No Impact (Reduced)	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)
Public Services	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)
Transportation	LTS	No Impact (Reduced)	LTSM (Increased)	LTS (Reduced)	LTS (Reduced)
Tribal Cultural Resources	LTSM	No Impact (Reduced)	LTSM (Same)	LTSM (Reduced)	LTSM (Same)
Utilities and Service Systems	LTS	No Impact (Reduced)	LTS (Reduced)	LTS (Reduced)	LTS (Reduced)

Notes: Impact Status: LTS = Less than significant impact; LTSM = Less than significant with mitigation

5.0 Environmental Effects Found not to be Significant

The City of San Marcos completed an Initial Study (IS) for the proposed project in accordance with Sections 21000-21189 of the Public Resources Code and Section 15063 of the California Environmental Quality Act (CEQA) Guidelines. A Notice of Preparation (NOP) was prepared by the City and mailed to applicable agencies, organizations, and neighboring property owners. The NOP is included in Appendix B.2 of this Environmental Impact Report (EIR).[23]

As required by Section 15128 of the CEQA Guidelines, the following is a discussion of the environmental effects that were considered as a part of the IS but were determined to have "No Impact" or a "Less Than Significant Impact," and, therefore, are not discussed in detail in this EIR.

In some instances, complete environmental issue areas were eliminated during the IS process, including agriculture/forestry resources, geology and soils, hazards/hazardous materials, hydrology and water quality, mineral resources, recreation, and wildfire. In other instances, some of the specific CEQA thresholds were eliminated during the IS process including aesthetics (scenic vistas, scenic resources within a state scenic highway), biological resources (federally protected wetlands, wildlife movement), land use and planning (physically divide an established community), noise (project vicinity to private airports or within and airport land use plan), population and housing (Displacement of existing housing or people), public services (parks), and transportation (hazardous design features).

5.0 Aesthetics

Threshold of Significance: Have a substantial adverse impact on a scenic vista.

The project site is located within the Business/Industrial District in the city. The City has a Ridgeline Protection and Management Overlay Zone to protect natural viewsheds and unique natural resources, minimize physical impacts to ridgelines, and to establish innovative sensitive architecture standards. The project site is not located in the Ridgeline Protection and Management Overlay Zone. Further, the project site does not include any primary or secondary ridgelines, as identified in Figure 4-5 of the Conservation and Open Space Element of the General Plan (City of San Marcos 2012). Therefore, development of the project site would not have a substantial adverse effect on a scenic vista and no impact would occur.

Threshold of Significance: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.

The project site is located approximately 0.25 miles north of SR-78. A portion of SR-78 is recognized as a Scenic Highway by the California Department of Transportation (Caltrans); however, that portion is not in the project vicinity. The portion identified as a Scenic Highway is approximately 50 miles east of the project site near Anza Borrego (Caltrans 2019). At a local level, SR-78 is designated by the City of San Marcos as a view corridor. The highway corridor provides views of the Merriam Mountains, Mount Whitney in San Diego County, and Double Peak. There are no scenic resources on the project site. The project site is undeveloped and does not support any historic buildings (ASM 2024). In

[23] The Initial Study, NOP, and comment letters received on the NOP are included in Appendices B.1, B.2 and B.3 of this EIR.

summary, the project would not damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. No impact would occur.

A discussion of additional aesthetics significance thresholds is provided in Section 3.1, Aesthetics.

5.1 Agriculture and Forestry Resources

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

The project site is not mapped as prime farmland, unique farmland, or farmland of statewide importance, as determined by the Farmland Mapping and Monitoring Program and as shown on Figure 4-4 (Agricultural Areas) in the San Marcos General Plan (San Marcos 2012). Therefore, the project would not result in the conversion of prime farmland, unique farmland, or farmland of statewide importance. No impact is identified for this issue area.

Threshold of Significance: Conflict with existing zoning for agricultural use, or a Williamson Act contract.

The project site has a General Plan designation of Public/Institutional (PI) and a zoning designation of Public-Institutional (P-I). The project site does not support zoning for agricultural use. The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The project site is not located within a Williamson Act contract area. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact is identified.

Threshold of Significance: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).

The project site has a General Plan designation of Public/Institutional (PI) and a zoning designation of Public-Institutional (P-I). The proposed project is not located in an area that is zoned for forest land, timber land or for timber production nor is it adjacent to lands that are zoned forest land, timber land or for timber production. Implementation of the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned timberland production. No impact is identified.

Threshold of Significance: Result in the loss of forest land or conversation of forest land to non-forest use.

The project site is undeveloped and does not support forests, nor is there any forest land adjacent to the project site. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact is identified.

Threshold of Significance: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

The project would not result in any other changes to the existing environment that would, due to their location or nature, result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. There is no agricultural activity or forest land on the project site. No impact is identified.

5.2 Biological Resources

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

A project-specific biological resources report was prepared for the project (Dudek 2025 ~~2024~~) and is included as Appendix D. No aquatic resources are present within the project site. San Diego fairy shrimp critical habitat, designated in 2007, encompasses nearly the entire project site. However, as discussed in the biology report (Dudek 2025 ~~2024~~), field study observations in 2023 show that the site does not support suitable ponding or vernal pool habitat for fairy shrimp. No impacts would occur.

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

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals. They may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal. To function effectively, a wildlife corridor must link two or more patches of habitat for which connectivity is desired, and it must be suitable for the focal target species to achieve the desired demographic and genetic exchange between populations.

The project site is a predominantly undeveloped parcel surrounded by existing, high-density residential and mixed commercial development that likely does not provide large-scale regional wildlife movement or habitat connectivity value, but may provide small-scale, local value for small mammals, reptiles, and mesocarnivores. In addition, birds (especially those protected by the Migratory Bird Treaty Act that are using the Pacific Flyway) and bats may use the site as foraging habitat.

The project site is also fenced on all sides (with chain-linked fencing on three sides and open cable railing on a single side) which would preclude its use in facilitating large wildlife movement through the urban landscape. In addition, the site is not located within a Biological Core Linkage Area or Focused Planning Area under the Draft San Marcos Subarea Plan. As such, the isolated project site is

not expected to provide for wildlife movement or serve as an important habitat linkage for wildlife traversing the region. Impacts would be less than significant.

A discussion of additional biological resources significance thresholds is provided in Section 3.3, Biological Resources.

5.3 Geology and Soils

A preliminary Geotechnical Evaluation was conducted, and report prepared by GeoTek in August 2023 (GeoTek 2023b). This report assessed the potential for the project to cause geotechnical related hazards and is included as Appendix H.

Threshold of Significance*:* Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The project site is located in the tectonically active Southern California area and would likely experience shaking effects from earthquakes. The type and severity of seismic hazards affecting the site are to a large degree dependent upon the distance to the causative fault, the intensity of the seismic event, and the underlying soil characteristics. Based upon the preliminary geotechnical report prepared for the project, no known active faults have been mapped at or near the project site (GeoTek 2023b). Therefore, the potential for surface rupture on the project site is low and a less than significant impact is identified.

Threshold of Significance*:* Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Because the proposed project would be located in tectonically active Southern California, the project would be required to comply with the California Building Code, including recommendations for seismic safety. Impacts would be less than significant.

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

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

Based upon the geotechnical investigation for the project (GeoTek 2023b), the liquefaction and seismic settlement potential on the project site is considered to be negligible due to the anticipated medium dense consistency and thickness of less than 10 feet of anticipated fills, shallow bedrock, and the absence of a shallow groundwater table. Therefore, impacts would be less than significant.

Threshold of Significance*:* Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: landslides?

The project site is generally flat. Elevations range from 575 above mean sea level (amsl) in the central knoll on the site to approximately 562 feet amsl along Armorlite Drive. The project site is identified as having zero susceptibility for soil slip, surficial landslides, or liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (San Marcos 2012). Additionally, the geotechnical investigation for the project did not find evidence of ancient landslides or slope instability on the site. Thus, the potential for landslides is considered negligible (GeoTek 2023b). Therefore, impacts would be less than significant.

Threshold of Significance: Result in substantial erosion or the loss of topsoil?

The project would be under the State Water Resources Control Board (SWRCB) General Construction Permit, which prohibits sediment or pollutant release from the project site and requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of best management practices (BMPs) that would incorporate erosion and sediment control measures during and after grading operations to stabilize these areas. The project would not result in substantial soil erosion or the loss of topsoil. Therefore, impacts would be less than significant.

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

Based upon the geotechnical report prepared for the project (GeoTek 2023b), evidence of ancient landslides or slope instabilities at the project site was not observed during the geotechnical investigation. Thus, the potential for landslides is considered negligible (GeoTek 2023b). Also, the project site is identified as having zero susceptibility for soil slip, surficial landslides, or liquefaction per Figure 6-1 of the Safety Element of the City's General Plan (San Marcos 2012). Finally, the proposed project would incorporate techniques and recommendations from the geotechnical report (GeoTek 2023b) that would minimize the potential for unstable conditions that could result in on- or off-site, landslide, lateral spread, subsidence, liquefaction, or collapse. Therefore, impacts would be less than significant.

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

Based upon the geotechnical report prepared for the project site, the surficial soils consist of colluvium and alluvium (undifferentiated) and tonalite (granitic) bedrock. Based upon GeoTek's visual classification encountered onsite and the laboratory testing, soils near subgrade would be classified as "very low" expansive. The geotechnical report (GeoTek 2023b) includes design considerations in Section 5.3 which would be implemented as part of the project's conditions of approval. Therefore, impacts would be less than significant.

Threshold of Significance: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater.

Septic tanks and alternative wastewater disposal systems are not proposed as part of the project. The project would receive wastewater service from Vallecitos Water District (VWD) and would connect to

existing sewer infrastructure in Armorlite Drive. Therefore, no impact is identified for this issue area, and this topic will not be further discussed in the EIR.

Threshold of Significance: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

According to the geotechnical study prepared for the project, the project site is in the Peninsular Ranges geomorphic province. Based on subsurface exploration conducted as part of the geotechnical evaluation, the project site is locally underlain by a layer of colluvium over Cretaceous age tonalite (granitic) bedrock (GeoTek 2023b). Known fossil occurrences in the Peninsular Range region are extremely rare though some areas may have a high to moderate potential to contain paleontological resources (County of San Diego 2009). Given that the project site supports granitic bedrock and colluvium, it would not be characterized as having a high or moderate potential for paleontological resources. Therefore, impacts would be less than significant.

5.4 Hazards and Hazardous Materials

The following technical analyses were prepared to assess the potential for the project site to contain hazardous materials and are included as Appendix I, J.1, J.2, and J.3):

- Phase I Environmental Site Assessment, 225 North Las Posas Road, San Marcos, California. February 1, 2021. Prepared by Stantec (Stantec 2021a, Appendix I)
- Phase II Environmental Site Assessment. 225 North Las Posas Road, San Marcos, California, 92069. March 23, 2021. Prepared by Stantec (Stantec 2021b, Appendix J).
- Due Diligence Environmental Review. A Portion of APN 219-162-57-00, 225 North Las Posas Road, San Marcos, California. January 26, 2023. Prepared by GeoTek (GeoTek 2023a, Appendix K).
- Statement of Clarification Regarding Suspected UST, A Portion of APN 219-162-57-00, 225 North Las Posas Road, San Marcos, California. October 5, 2023. Prepared by GeoTek. (GeoTek 2023c, Appendix L)

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

Hazardous materials include solids, liquids, or gaseous materials that, because of their quantity, concentration, or physical, chemical, or infectious characteristics could pose a threat to human health or the environment. Hazards include the risks associated with potential explosions, fires, or release of hazardous substances in the event of an accident or natural disaster, which may cause or contribute to an increase in mortality or serious illness or pose substantial harm to human health or the environment. The proposed project would involve the transport of fuels, lubricants, and various other liquids needed for operation of construction equipment at the site on an as-needed basis by equipment service trucks. Materials hazardous to humans, wildlife, and sensitive environments, including diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets, would be present during project construction. The potential exists for direct impacts to human health from accidental spills of small amounts of hazardous materials from construction equipment; however, the proposed project would be required to comply with Federal, State, and City Municipal Code restrictions which regulate and control those materials handled onsite.

Compliance with these restrictions and laws would ensure that potentially significant impacts would not occur during project construction.

In addition, as a mixed use residential project, the only hazardous materials anticipated for transport or disposal associated with the proposed project during operation are routinely used household products such as cleaners, paint, solvents, motor oil/ automotive products, batteries, and garden maintenance products. It is anticipated that the use, handling, and disposal of these products would be addressed by household hazardous waste programs that are part of the Integrated Waste Management Plan of the County of San Diego and other Federal, State, and City Municipal Code regulations.

In summary, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Threshold of Significance: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The project site is vacant and undeveloped. A Phase I Environmental Site Assessment (Phase 1 ESA) was prepared for the project site and is included as **Appendix I** (Stantec 2021a). The Phase 1 ESA noted that the project site is listed in several databases and has historically generated and disposed of hazardous waste since at least 1981. In 2012, the project site received violations from San Diego County including missing evidence of financial responsibility, and failure to test secondary containment and alarms. In 2018, the project site received permit-related violations, which were returned to compliance. The Phase 1 ESA concluded that is no indication of a release and the project site was returned to compliance, these listings are not considered a Recognized Environmental Condition (REC) for the site[24]. The Phase 1 ESA also noted that the project site is located in the vicinity of historical Leaking Underground Storage Tank (LUST) cleanup sites within 500 feet. However, due to case closure dates, remediation, and elevations from the project site, these do not constitute RECs for the project site (Stantec 2021a).

The only REC identified for the project site in the Phase 1 ESA was a 550-gallon diesel underground storage tank (UST) that was reportedly installed at the on the project site in 1972. The project site also reportedly had a 1,000-gallon UST containing diesel that was installed in 1980 and removed in 1994. A third UST, which was a 5,000-gallon diesel UST, was reportedly installed in 1994. No leaks or spills associated with any of the USTs have been reported for the project site; however, the presence (or historical presence, as the case may be) of USTs were determined to be a REC for the project site (Stantec 2021a). The Phase 1 ESA recommended performing a ground penetrating radar (GPR) survey to verify if the USTs still remained on the project and a soil and soil vapor assessment to evaluate the subsurface conditions beneath the project site (Stantec 2021a).

Based upon the results of the Phase 1 ESA, a Phase 2 ESA was prepared for the project site by Stantec in 2021. The Phase 2 ESA is included as **Appendix J.** Soil sampling and installation of soil vapor probes

[24] A recognized environmental condition (REC) as defined in American Society for Testing and Materials (ASTM) 1527-13 means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products under conditions in compliance with laws (e.g., permitted discharges).

was performed between February 22 and March 4, 2021. Additionally, a ground penetrating radar survey was conducted to try to locate the 550-gallon UST.

Soil Sampling Results

Railroad spurs are located adjacent to the project site to the north. Herbicides are commonly applied to railroad alignments and heavy metals associated with herbicidal application can be found in such areas. Due to the presence of the spurs, subsurface investigation via soil sampling was conducted in 2021 at two locations (S-1 and S-2) near the project site's northern boundary. Two soil vapor samples were also conducted (SV-1 and SV-2) near the location of the former 550-gallon UST in the northern portion of the project site. Soil sampling locations are detailed in Figure 2 of the Phase 2 ESA (Appendix J of this document)

The results of soil samples collected along the northern property line near the rail line were "non-detect" for arsenic and organochlorine pesticides (OCPs) except for a minor detection of Heptachlor at 0.0014 milligrams per kilogram (mg/kg), which is well below its screening levels for residential uses. Lead was detected at 4.8 and 7.2 mg/kg in location S-1 and S-2, respectively. Because all detected metals concentrations are within typical California naturally occurring background concentration ranges, and do not exceed Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3 or Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for residential use, the adjacent railroad tracks do not represent a recognized environmental condition (REC) to the property and no further assessment appears warranted (Stantec 2021b).

Total Petroleum Hydrocarbons as vapor (TPHv) and various volatile organic compounds (VOCs) were detected at low concentrations at location SV-1 and SV-2. These concentrations were all below the most conservative screening level between the U.S. Environmental Protection Agency (USEPA) Region 9 RSL and DTSC HERO Note 3 with an attenuation factor of 0.03, with the exception of benzene. Benzene was detected at 5.7 micrograms per cubic meter ($\mu g/m^3$) in SV-2 which is above the regulatory screening level with an attenuation factor of 0.03 (3.2 $\mu g/m^3$), but below the regulatory screening level with an attenuation factor or 0.001 (97 $\mu g/m^3$). Given the concentration was only slightly above the regulatory screening level with an attenuation factor of 0.03 (which is not the official screening level and which has not been adopted by any state agency), and well below the risk-based screening level of 97 $\mu g/m^3$, this single detection is considered a de minimis condition and no further assessment appears warranted for soil vapor (Stantec 2021b).

Ground Penetrating Radar Results and Further Investigation

The ground penetrating radar survey identified an anomaly which may be the 550-gallon UST in the northwest portion of the property at approximately 2 to 4-feet in depth. Phase 2 ESA recommended removing and disposing of the UST in accordance with all applicable laws. Based upon this recommendation, additional site work was conducted to attempt to locate the potential 550-gallon UST.

On December 14, 2022, Hal Hays Construction, Inc. was contracted by the property owner to evaluate the anomaly identified by Stantec's Phase 2 ESA. A Professional Geologist and an Environmental Professional from GeoTek were on site during the field exploration. The excavation was performed with a conventional rubber-tired backhoe with a 24-inch wide, smooth edge, bucket. The excavation was approximately six feet long and three feet wide. Shallow refusal by granitic rock (tonalite) was encountered at an approximate depth of two to three feet below grade. A weathered core stone was encountered at the approximate location of the anomaly identified in Stantec's Phase 2 ESA. A second core stone was encountered approximately six feet north of the recorded anomaly. To further evaluate

a potential UST, the excavation was lengthened to the north and south for a total linear excavation length of approximately twelve feet. North and south of the excavation, core-stones extruded from the subsurface. The excavation encountered a thin layer of topsoil over weathered tonalite and encountered non-rippable rock at a depth three feet but became as shallow as one foot above the core-stones. Based on this, GeoTek concluded that evidence is not present to conclude the 550-gallon UST is present on the site and no further environmental investigation is necessary (GeoTek 2023a and 2023c). The documentation from GeoTek regarding the field exploration is included as **Appendix K and L.**

In conclusion, based upon the Phase 1 ESA, Phase 2 ESA, and subsequent exploratory investigations, there are not any RECs or significant hazards on the project site which has the potential to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant.

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

The project site is not located within 0.25 miles of an existing or proposed school. The closest school is San Marcos Middle School which is located approximately 0.6 miles west of the project site. No impact is identified.

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

The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires California Environmental Protection Agency (CalEPA) to develop an updated Cortese List annually, at minimum. California DTSC is responsible for a portion of the information contained in the Cortese List. Other California state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

The Phase 1 ESA prepared for the project included a search of federal and state databases. The site was not identified as being on the Cortese List (Stantec 2021a). A subsequent review of the Cortese List in 2023 reconfirmed that the project site is not identified on a Cortese List (DTSC 2023). Therefore, the project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and no impact is identified for this issue area.

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

The nearest airport is the McClellan-Palomar Airport in Carlsbad, which is located approximately 6.5 miles to the southwest of the project site. According to Figure 6-5 of the Safety Element of the City's General Plan, the project site is located within Review Area 2 of the airport influence area. Review Area 2 limits the heights of structures in areas of high terrain. The project site is situated in a lower elevation area of the City. According to the Airport Land Use Compatibility Plan (ALUCP) for the McClellan-

Palomar Airport, the project site is not located within the existing or future 60 dB CNEL noise contour of the airport (San Diego County Regional Airport Authority 2011). Therefore, the project would not result in a safety hazard of excessive noise for people residing or working in the project area. No impact is identified.

Threshold of Significance: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

According to the General Plan Safety Element, the San Marcos Emergency Operations Plan (EOP) governs the operations of the City during a disaster. This plan addresses response to moderate evacuation scenarios, including the identification of evacuation points and general routes (San Marcos 2012). The project would not result in any changes to the transportation network which could impair implementation of or physically interfere with an adopted emergency response plan. No impact would occur.

Threshold of Significance: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The project site is located in a developed part of the City and is not located where wildlands are adjacent to urbanized areas, nor does the project propose residences mixed in with wildlands. The project site is located in a Local Responsibility Area, not a State Responsibility area (CAL FIRE 2022). The project site is in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per California Department of Forestry and Fire Protection (CAL FIRE) San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding area are not identified as a San Marcos Fire Protection District (SMFPD) Community Hazard Zone. Impacts would be less than significant.

5.5 Hydrology and Water Quality

Threshold of Significance: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The applicant would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit. Regionally, this is achieved by preparing and implementing a Stormwater Quality Management Plan (SWQMP) based on the standards set forth in the 2023 City of San Marcos BMP Design Manual (City of San Marcos 2023). The project would be required to comply with the City of San Marcos BMP Design Manual. The SWQMP would require implementation of water quality BMPs to ensure that water quality standards are met and that stormwater runoff from construction areas does not result in a degradation of water quality in receiving water bodies. Impacts would be less than significant.

Threshold of Significance: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Implementation of the project would not use any groundwater. The project would be served by VWD for its water supply and would not require development of any new groundwater wells. The project site is not located within a sustainable groundwater management area and is not part of a significant

groundwater recharge area. The geotechnical analysis (see Section 5.4) determined the project site is underlain by colluvium, alluvium and tonalite (granitic) bedrock (Geotek 2023b). The granitic bedrock creates a barrier to groundwater infiltration. Groundwater is not anticipated to be within 50 feet of the ground surface and would not be a factor in site development. An infiltration evaluation including percolation testing was performed and determined that the site's average infiltration rates were 0.1 and 0.4 inches per hour (Geotek 2023b). The threshold for relying on infiltration is 0.5 inches per hour (or greater) according to Attachment I of the SWQMP (Latitude 33 2024b).

According to the SWQMP prepared for the project, the project would utilize two proprietary treatment facilities (e.g., Modular Wetland System or approved equal) and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. The BMPs would collect water from all impervious areas before it is discharged off site. Flow-thru treatment is required to treat runoff from the proposed development (Latitude 33 2024b). Without feasible infiltration, the project site would not provide groundwater recharge and therefore implementation of the proposed project would not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, nor would it impede sustainable groundwater management of the basin. Impacts would be less than significant.

Threshold of Significance: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site?

Threshold of Significance: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Threshold of Significance: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, through the addition of impervious surfaces, in a manner which would: create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Threshold of Significance: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, through the addition of impervious surfaces, in a manner which would: Impede or redirect flood flows?

The proposed project would increase the amount of impervious surface on the project site through the construction of rooftops, driveways, parking lots, and concrete walkways within the project site. The project would be required to implement design features to ensure that changes to drainage patterns do not result in adverse impacts related to hydrology and water quality. The project design incorporates two proprietary treatment facilities (e.g., Modular Wetland System or approved equal) and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. These treatment facilities would be constructed in conformance with the City's BMP Design Manual, which includes requirements for vector control. Per the BMP Design Manual (Pages 4-1 and 4-2), onsite BMPs must be designed and implemented with measures to avoid the creation of nuisances or pollution associated with vectors (e.g., mosquitos, rodents, or flies). Projects will comply with this requirement by incorporating design, construction, and maintenance principles to drain retained water within 96 hours and minimize standing water. Design

calculations will be provided to demonstrate the potential for standing water ponding at surface level and accessible to mosquitos has been addressed. For water retained in biofiltration facilities that are not accessible to mosquitoes this criteria is not applicable (i.e., water ponding in the gravel layer, water retained in the amended soil, etc.). (City of San Marcos 2023). The BMP Design Manual further states (Page 6-11), "This standard applies to, but is not limited to, detention basins, underground storage vaults, and the above-ground storage portion of LID facilities. When this standard cannot be met due to large, stored runoff volumes with limited maximum release rates, a vector management plan may be an acceptable solution if approved by the City of San Marcos (City of San Marcos 2023).

Currently, there is a high point in the central to the site and drainage flows all directions and does not become concentrated on the project site. In the proposed condition, runoff would discharge to the existing storm drain system at one discharge point (POC1) on Armorlite Drive. Based upon the Drainage Study prepared for the project (Latitude 33 2024a), the current runoff rate is 3.45 cubic feet per second (cfs). With installation of the two treatment facilities and underground storage vault, which are proposed as part of the project design, the runoff rate would be 1.58 cfs. This represents a decrease of 1.87 cfs in the proposed condition. Therefore, the project would not result in substantially altering the drainage pattern of the site or area that would result in substantial erosion on- or off-site, increase surface runoff resulting in flooding on- or off-site, provide substantial sources of polluted runoff, or impede or redirect flood flows. Impacts would be less than significant.

Threshold of Significance: In flood hazards, tsunami or seiche zones, risk release of pollutants due to project inundation.

Per the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map Number 06073C0789H, the project site is not located within a 100-year flood hazard area (FEMA 2012). The project site is approximately 8 miles inland from the Pacific Ocean and would not be subject to inundation by tsunami. Given that the project site is not located near a large standing body of water, inundation by seiche (or standing wave) is considered negligible. No impact would occur.

Threshold of Significance: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is not located in a sustainable groundwater management plan area. The project site is located within the Carlsbad Management Area Water Quality Improvement Plan (WQIP). The project would be required to implement design features to ensure that changes to drainage patterns do not result in adverse impacts related to hydrology and water quality. The project design incorporates two proprietary treatment facilities (e.g., Modular Wetland System or approved equal) and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. Impacts would be less than significant.

Threshold of Significance: Result in significant alteration of receiving water quality during or following construction?

Potential construction-related impacts associated with receiving water quality would include siltation and erosion, the use of fuels for construction equipment, and the generation of trash and debris from the construction site. During project operation, potential impacts associated with receiving water quality could include runoff associated with landscaping/outside pesticide use, pest control (indoor/structural), fire sprinkler test water, and runoff from parking areas and sidewalks. The project design incorporates two proprietary treatment facilities and an underground storage vault beneath the

parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. Impacts would be less than significant.

Threshold of Significance: Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

The project site is in the Carlsbad hydrologic unit (904). Impaired water bodies in this watershed, as listed in the State Water Resources Control Board (SWRCB) 303(d) impaired waters list. San Marcos Creek is listed on the 2020-2022 Integrated Report (CWA Section 303(d)/305(b)) List of Impaired Water Segments as being impaired for Nutrients (nitrogen and phosphorus), Metals (Selenium), Total Toxics (toxicity), Other Causes (Benthic Community Effects), Pesticides (bifenthrin, dichlorodiphenyldichloroethylene [DDE] and pyrethroids), Pathogens (indicator bacteria), and Total Dissolved Solids. Further downstream, Batiquitos Lagoon is also listed as being impaired for toxicity. Furthermore, San Marcos Lake was identified under Section 303(d) of the Clean Water Act as impaired due to nutrients (ammonia as nitrogen and phosphorous, and metals [copper]) (SWRCB 2022). The project would be required to implement design features to ensure that changes to drainage patterns do not result in adverse impacts related to hydrology and water quality. The project design incorporates two proprietary treatment facilities and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. Impacts would be less than significant.

Threshold of Significance: Be tributary to an already impaired water body as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?

Impaired water bodies in the Carlsbad watershed include San Marcos Creek, Batiquitos Lagoon and Lake San Marcos. The project design includes a comprehensive water quality approach including a storm drain system. The project design incorporates two proprietary treatment facilities and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. Impacts would be less than significant.

Threshold of Significance: Be tributary to environmentally sensitive areas (e.g., MSCP, RARE, Areas of Special Biological Significance, etc.)? If so, can it exacerbate already existing sensitive conditions?

The project site is located outside of the Biological Resource Conservation area for the Multiple Habitat Conservation Plan (MHCP). Runoff from the project site eventually flows to San Marcos Creek, Lake San Marcos and ultimately to Batiquitos Lagoon. The project design includes a comprehensive water quality approach including a storm drain system. The project design incorporates two proprietary treatment facilities and an underground storage vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. Impacts would be less than significant.

Threshold of Significance: Have a potentially significant environmental impact on surface water quality, to either marine, fresh or wetland waters?

The project would generate pollutants both during construction and operation that could impact water quality. The project design includes a comprehensive water quality approach including a storm drain system. The project design incorporates proprietary treatment facilities and an underground storage

vault beneath the parking lot to regulate stormwater discharge rates and provide a water quality treatment benefit. Impacts would be less than significant.

5.6 Land Use and Planning

Threshold of Significance: Physically divide an established community.

The project site is currently undeveloped. The project proposes residential and commercial uses in an area that is already developed with similar uses. The project would not physically divide an established community. No impact is identified for this issue area.

A discussion of additional land use and planning significance thresholds is provided in Section 3.7 Land Use and Planning.

5.7 Mineral Resources

Threshold of Significance: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

According to the City of San Marcos General Plan Conservation & Open Space Element, the City has land classified in all four Mineral Resource Zones (MRZ) (San Marcos 2012). California does not require that local governments protect land designated as MRZ-1, MRZ-3, or MRZ-4. However, the City is responsible for recognizing lands designated as MRZ-2 and protecting these areas from premature development incompatible with mining. The lands designated as MRZ-2 include small portions between Double Peak, Mt. Whitney, and Franks Peak; and small portions in the northern Sphere of Influence within Twin Oaks Valley Neighborhood. These locations do not overlap with the proposed project site; therefore, no loss of known mineral resources would occur. No impact would occur.

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

The project site is not designated as a locally important mineral resource recovery site on any local general plan, specific plan, or other land use plan (City of San Marcos 2012). Due to the location and the nature of the proposed project, there would be no impact on mineral resources.

5.8 Noise

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

The proposed project is not located within the vicinity of a private airstrip. The public airport closest to the project site is the McClellan-Palomar Airport, located approximately 5 miles to the southwest. According to the ALUCP for the McClellan-Palomar Airport, the project site is not located within the existing or future 60 dB CNEL noise contour of the airport (San Diego County Regional Airport Authority 2011). Therefore, people residing or working in the project area would not be exposed to substantial airport noise.

A discussion of additional noise significance thresholds is provided in Section 3.8, Noise.

5.9 Population and Housing

Threshold of Significance: Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.

There is no existing housing on the project site. Therefore, the project would not remove existing housing. The project proposes 165 residential apartments for a proposed density of 67 dwelling units/acre. As proposed, 15% of units calculated from the base density would be affordable units at the very-low income level (30% to 50% of the average median income). The project would add to the housing stock in the City. No impact is identified for this issue area.

A discussion of additional population and housing significance thresholds is provided in Section 3.9, Population and Housing.

5.10 Public Services

Threshold of Significance: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or 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 parks?

The project proposes residential uses which can result in an increase in demand for neighborhood and regional parks. The project design proposes 36,944 s.f. of common outdoor open space. This includes passive areas, a dog park with dog washing station. a pool/spa area, outdoor lounge, game area, yoga area, courtyard, an indoor-outdoor lounge open to the pool area, and a roof deck. All common open space would be for the use of future residents and would be maintained by the property management company. The project also proposes 2,050 s.f. of common indoor space which includes a 1,200 s.f. fitness area and an 850 s.f. lounge.

Additionally, the project will pay Public Facility Fees (PFF), a portion of which goes toward funding a city-wide park and recreation facilities. Since the project provides on-site recreational amenities and will pay PFF, impacts would be less than significant.

5.11 Recreation

Threshold of Significance: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

Threshold of Significance: Does the project include any recreational facilities or require the construction or expansion of recreation facilities which might have an adverse physical effect on the environment?

The project proposes residential uses which can result in an increase in demand for neighborhood and regional parks. However, the project has incorporated recreational amenities into their design. The project design proposes 36,944 s.f. of common outdoor open space. This includes passive areas, a dog park with dog washing station. a pool/spa area, outdoor lounge, game area, yoga area, courtyard, an indoor-outdoor lounge open to the pool area, and a roof deck. All common open space would be for the use of future residents and would be maintained by the property management company. The

project also proposes 2,050 s.f. of common indoor space which includes a 1,200 s.f. fitness area and an 850 s.f. lounge. The proposed project will pay PFF, a portion of which goes toward funding a city-wide park and recreation facilities and would offset the future residents demand for such facilities. Since the project provides on-site recreational amenities and will pay PFF, impacts would be less than significant.

5.12 Transportation

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

The project does not propose any feature that would result in a substantial increase in hazards due to geometric design or incompatible use. Project access would be via a driveway on Armorlite Drive. The project's entrance and circulation has been designed to meet City standards. No impact is identified.

Threshold of Significance: Result in inadequate emergency access?

The California Fire Code, along with the San Marcos Fire Department, administers the rules and regulations on fire access design. The proposed project must present a design which affords fire and emergency responders suitable fire access roads in terms of dimensions and surfaces (Chapter 5, § 503.1 through 503.4 of the California Fire Code). The project proposes one primary entrance from Armorlite Drive. A secondary emergency-only access from Las Posas Road would be provided at the northwest corner of the project site through the adjacent AT&T parcel. Drive aisles within the project would be designed to accommodate San Marcos Fire Department standard tiller trucks and engines. Impacts would be less than significant.

5.13 Wildfire

Threshold of Significance: A significant wildfire would be identified if the project was located in or near a state responsibility area or lands classified as very high fire hazard severity zone and would:

- **Substantially impair an adopted emergency response plan or emergency evacuation plan;**
- **Due to slope, prevailing wind, and other factors exacerbate wildlife risk, and thereby, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire;**
- **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or**
- **Expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes.**

The project site is located in a Local Responsibility Area, not a State Responsibility area (CAL FIRE 2022). The project site is in a Local Responsibility Area with a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) designation per California Department of Forestry and Fire Protection (CAL FIRE) San Marcos Fire Hazards Severity Zones Map (2009) and is surrounded by areas identified as Non-VHFHSZ. Further, per Figure 6-4 of the City's General Plan, the project site and surrounding area are not identified as a SMFPD Community Hazard Zone. No impact is identified for this issue area.

6.0 Other CEQA Considerations

6.0 Significant and Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines, Section 15126.2(b), requires that an Environmental Impact Report (EIR) describe any significant impacts that cannot be avoided, including those impacts that can be mitigated but not reduced to a less-than-significant level. Chapter 3, Environmental Analysis, of this EIR describes the potential environmental impacts of the proposed project and recommends mitigation measures to reduce impacts, where feasible. Based upon the analysis in Sections 3.1 through 3.13 of this EIR, the proposed project would not have any significant and unavoidable impacts. All impacts would be mitigated to below a level of significance through the incorporation of mitigation measures. These mitigation measures would be identified in a Mitigation Monitoring and Reporting Program that will be adopted as part of the project and would also be made a condition of approval of the project.

6.1 Growth Inducement

Section 15126.2(e) of the CEQA Guidelines mandates that the growth inducing nature of a proposed project be discussed. This CEQA Guideline states the growth-inducing analysis is intended to address the potential for the proposed project to "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Further, the CEQA Appendix G Checklist (Population and Housing) also mandates that a CEQA document speak to the proposed project's likelihood to induce substantial population growth in an area, either directly (e.g., by proposing new homes or businesses) or indirectly (e.g., through extension of roads or other infrastructure).

A project may be distinguished as either facilitating planned growth or inducing unplanned growth. Facilitating growth is related to the establishment of direct employment, population, or housing growth that would occur within a project site. Inducing growth is related to lowering or removing barriers to growth or by creating an amenity or facility that attracts new population/economic activity.

For purposes of this EIR analysis, a significant growth inducement impact would occur if the proposed project, and associated infrastructure improvements, directly or indirectly removes obstacles to growth such that the induced growth would significantly burden existing community services, the environment or cause a demand for General Plan Amendments. This section contains a discussion of the growth inducing factors related to the proposed project and as defined under CEQA Guidelines, Section 15126.2(e). A project is defined as growth inducing when it directly or indirectly:

- Fosters population growth;
- Includes the construction of additional housing in the surrounding environment;
- Removes obstacles to population growth;
- Taxes existing community service facilities, requiring construction of new facilities that could cause significant environmental effects; and/or
- Encourages or facilitates other activities that could significantly affect the environments, either individually or cumulatively.

It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

As discussed in Section 3.9.4, Population and Housing, the proposed project would directly induce growth through the development of 165 apartments on 2.44 acres. Based on the city's population rate of 3.1 persons per dwelling unit, the proposed project would directly induce population growth to the area and would potentially add an estimated 512 people to the area. In addition, the proposed project would add 5,600 square feet (s.f.) of ground floor retail to the project site, which would provide employment opportunities. The proposed project would not, however, indirectly induce a growth in population as no extension of infrastructure is proposed beyond what is required to adequately serve the proposed project. The San Diego Association of Governments (SANDAG) population growth forecasts rely, in part, on individual jurisdiction's planning documents, such as the City's General Plan. Because the project proposes a General Plan Amendment and Rezone, the estimated population of 512 people would not have been accounted for in SANDAG's projections. Therefore, the project's induced population would exceed these projections. However, determination of impacts related to population growth are based upon whether the induced growth would be considered substantial.

As discussed in Section 3.9, Population and Housing, the City's population is projected to grow from 94,258 people in 2016 to 104,365 people by 2035 (an increase of 10,107 people). The population increase of 512 people would account for approximately 5% of SANDAG's projected population growth (SANDAG 2022).

The future commercial uses are anticipated to have approximately 6 employees. It is expected that these employees would come from the local job market and would not require workers to relocate from outside the area. The proposed commercial use would not induce population growth.

There is no hardline number or percentage available to determine whether or not this estimated introduction of 512 people (5% of projected growth) could be considered a substantial increase in population. However, SANDAG's 2050 Regional Growth Forecast is intended to be used as a starting point for regional planning as opposed to a prescribed growth pattern. Although the City determined that there are adequate sites available with appropriate designations/zoning to accommodate the remaining Regional Housing Needs Allocation for the current Housing Element planning period, the City has the discretion to adjust allocated housing units/sites as necessary to balance proposed plans for residential development with approved/constructed residential development (City of San Marcos 2021). Therefore, while the proposed project would directly induce growth beyond current estimates and forecasts, it would not be considered substantially growth inducing, and impacts would be **less than significant**.

6.2 Significant Irreversible Environmental Changes

CEQA Guidelines, Section 15126.2(d), requires that an EIR identify any significant irreversible environmental changes associated with the proposed project. Such changes include, for example, the intensification of land use or irreversible damage from environmental accidents associated with the proposed project.

The project proposes development of 165 apartments on 2.44 acres for proposed density of 67 dwelling units per acre. The project proposes a General Plan Amendment and Rezone. The General Plan Amendment would change the existing PI (Public/Institutional) designation to Mixed Use 2 (MU2) and the rezone would be required to change the existing Public-Institutional (P-I) zoning to Specific Plan Area (SPA).

The proposed project's change in land use would not be an intensification of land use over the existing Public-Institutional designation. As analyzed in Chapter 4, Alternatives, of this EIR, development under the existing land use and zoning designation would result in additional and more severe environmental impacts for many environmental topical areas in comparison to the development under the proposed project designations. Nevertheless, as analyzed throughout Chapter 3 of this EIR, the proposed project may result in potentially significant impacts to biological resources, cultural resources, noise, and tribal cultural resources (see Tables 1-1 in Chapter 1, Executive Summary, of this EIR). All potential impacts identified for the proposed project would be mitigated to below a level of significance.

Construction and/or operation of the proposed project would require the use of resources that include, but are not limited to, soils, gravel, concrete, and asphalt, lumber and other related forest products, petrochemical construction materials, steel, copper, and other metals, water, fuels, and energy. As such, the proposed project would result in the short-term and long-term use of fossil fuels and other nonrenewable resources however this use would not result in any significant irreversible changes as a result of using nonrenewable resources.

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7.0 References

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