

Draft Environmental Impact Report
SCH No. 2022090029

Questhaven
San Diego County, California

Lead Agency
County of San Diego
Planning and Development Services
5510 Overland Avenue, 3rd Floor
San Diego, CA 92123

Draft Environmental Impact Report | May 16, 2024

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Lead Agency

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Planning and Development Services
5510 Overland Avenue, 3rd Floor
San Diego, CA 92123

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Lead Agency Discretionary Permits

Tentative Map (PDS-2020-TM-5643)
Density Bonus Permit (PDS2021-DB-21-001)
Site Plan Review (PDS2022-STP022-018)
Administrative Permit (PDS-2020-AD-20-011)

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EIR Technical Appendices (bound separately)

Appendix A Notice of Preparation (NOP) and Written Comments on the NOP for Questhaven.

Appendix B Alden Environmental, Inc. 2024. *Biological Technical Report*. May 6, 2024.

Appendix C HELIX Environmental, Inc. 2023a. *Air Quality Technical Report*. June 2023.

Appendix D Brian F. Smith and Associates. 2021a. *Cultural Resources Study for Questhaven 64 Project*. February 2021.

Appendix E HELIX Environmental Planning, Inc. 2023b. *Energy Impact Assessment*. June 12, 2023.

Appendix F1 Advanced Geotechnical Solutions, Inc. 2016. *Preliminary Geotechnical Investigation*. March 11, 2016.

Appendix F2 Advanced Geotechnical Solutions, Inc. 2020. *Geotechnical Addendum*. November 19, 2020.

Appendix F3 Advanced Geotechnical Solutions, Inc. 2024. *Soils of Statewide Significance*. April 18, 2024.

Appendix F4 Brian F. Smith and Associates. 2021. *Paleontological Resource Assessment for the Questhaven 64 Project*. February 2021.

Appendix G HELIX Environmental Planning, Inc. 2024. *Questhaven Project Greenhouse Gas Emissions Technical Report*. May 2024.

Appendix H C Young Associates. 202. *Environmental Site Assessment*. June 9, 2020.

Appendix I Excel Engineering. 2021. *Stormwater Quality Management Plan*. August 5, 2021.

Appendix J Excel Engineering. 2021. *Hydrology/Hydraulics Study*. August 4, 2021.

Appendix K Urban Crossroads, Inc. 2024. *Questhaven Residential Neighborhood Noise Impact Analysis*. April 3, 2024.

Appendix L1 CR Associates. 2023. *Traffic Impact Study*. March 2023.

Appendix L2 CR Associates. 2024. *Local Transportation Analysis*. April 2024.

Appendix M1 Dudek. 2024. *Questhaven Fire Protection Plan*. May 2024.

Appendix M2 Dudek. 2021. *Questhaven Conceptual Evacuation Plan*. April 2021

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SUMMARY

S.1 Project Synopsis

S.1.1 Project Location

The Project site is located in the western portion of unincorporated San Diego County within the San Dieguito Community Plan Area. From a regional perspective, the Project site is located immediately south and west of the City of San Marcos and east of the City of Carlsbad. Interstate 5 (I-5) is located approximately 5.3 miles west of the Project site. Specifically, the Project site is located south of San Elijo Road and east of Denning Drive. Figure 1-9, *Regional Map*, depicts the boundaries of the Project site in a regional context and Figure 1-10, *Aerial Map*, provides an aerial view of the Project site and surrounding area.

S.1.2 Project Description

The Project consists of entitlement applications for a Tentative Map (PDS-2020-TM-5643), Density Bonus Permit PDS2021-DB-21-001, Site Plan Review (PDS2022-STP-22-018) and an Administrative Permit (PDS2020-AD-20-011). Descriptions of the Project’s application components, physical design, and anticipated expected operating characteristics are provided in the following subsections. Copies of the entitlement applications for the Project are available for review at the County of San Diego, Planning & Development Services (PDS), 5510 Overland Avenue, 3rd Floor, San Diego, CA, 92123.

Approval of the Tentative Map, Density Bonus Permit, Site Plan Review, and Administrative Permit (herein, the “Project”) would allow for ultimate development of the 89.23-acre Project site with 76 single-family residential homes (69 market rate homes and seven low-income affordable homes), a recreational park, water quality detention basins, and open space. The Project Applicant’s marketing name for the Project is “Questhaven.”

The Project is a Senate Bill 330 (SB 330) housing development project. Under SB 330, submittal of a Preliminary Application for a residential development project provides that the project is only subject to the ordinances, policies, and standards adopted and in effect when the Preliminary Application is submitted. An SB 330 Preliminary Application was filed with the County of San Diego on January 19, 2023, and the County of San Diego confirmed acceptance of the application on May 9, 2023.

S.2 Summary of Significant Impacts and Mitigation Measures

Table S-1, *Summary of Significant Impacts and Mitigation Measures*, provides a brief summary of each potential environmental effect found to be significant with implementation of the Project, the mitigation measures that would reduce or avoid that effect, and the conclusion as to whether the effect is reduced to below a level of significance by applying the mitigation measures. The table also includes the subchapters of this Environmental Impact Report (EIR) where each topic is analyzed in detail.

S.3 Areas of Controversy

The Notice of Preparation (NOP) for the EIR was distributed on September 1, 2022, for a 30-day public review and comment period. Public comments were received on the NOP reflect concern and/or controversy over several environmental issues. The NOP and NOP comment letters are in *Appendix A*

of this EIR. Major environmental issues and potential areas of controversy were raised in 25 letters commenting on the NOP, as listed below:

- Evacuation plans and fire safety;
- Traffic mitigation;
- Overcrowding of public services, including schools;
- Biological resources located on-site; and
- Infrastructure improvements.

In addition, a public scoping meeting was held virtually on September 20, 2022. Issues raised in the NOP comment letters are evaluated in the EIR, in Chapters 2.0 through 4.0.

S.4 Issues to be Resolved by the Decision-Making Body

The Planning Commission is the decision-making body for the Project. The Planning Commission would be required to make decisions concerning the significant impacts to biological resources, cultural resources, noise, and tribal cultural resources that can be avoided and/or reduced to less than significant with mitigation measures, and significant impacts to global climate change, land use and planning, and transportation that cannot be avoided and/or reduced to less than significant with mitigation measures. Findings are required to be adopted for each significant impact that shows the Project has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the impact. The Planning Commission must also determine that adopted mitigation measures are feasible and would be implemented during the design and construction phases of the Project.

S.5 Project Alternatives

In accordance with Section 15126.6(a) of the State CEQA Guidelines, an EIR must describe a range of reasonable alternatives to the project that 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 it must evaluate the comparative merits of the alternatives. Section 15126.6(a) also states that an EIR need not consider every conceivable alternative to a project. Instead, the EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation, but it is not required to consider alternatives that are infeasible. There is no ironclad rule governing the nature or scope of the alternatives to be discussed in an EIR other than the “rule of reason.” State Guidelines Section 15126.6(f) states, “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.” It further states that “[t]he range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.”

The following discussion covers a reasonable range of feasible alternatives that focuses on avoiding or substantially lessening the significant effects of the project, even if these alternatives would not attain all the project objectives or would be more costly. According to the State CEQA Guidelines, many factors may be considered when addressing the feasibility of alternatives, such as environmental

impacts, site suitability as it pertains to various land use designations, economic viability, availability of infrastructure, regulatory limitations, and jurisdictional boundaries. An EIR need not consider an alternative whose effects cannot be reasonably identified, one whose implementation is remote or speculative, or one that would not achieve most of the basic project objectives. However, CEQA requires that a no project alternative be included in the range of alternatives. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. CEQA also requires that the EIR identify the environmentally superior alternative. Based on impact comparison between the project and the evaluated alternatives, the Property Specific Request (PSR) Alternative has been identified as the environmentally superior alternative. Below is a brief description of the alternatives. A full analysis of each alternative and impact comparisons are provided in Chapter 5.0, *Alternatives*.

S.5.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the Project site would remain in its current condition. The native and non-native habitat throughout the site would remain intact. The above-ground transmission line that currently bisects the property, the informal dirt trails would continue to exist. The Project residential uses would not be constructed; nor would supporting infrastructure such as improved road elements, and other utility upgrades. In addition, the Project-proposed public trail parking and connection and HOA-maintained landscaped areas would not be created.

S.5.2 No Project/Development Pursuant to Existing Land Use Alternative

Under the No Project/No Development Pursuant to Existing Land Use Alternative, the Project site would be developed with 63 dwelling units across the entire 89.23-acre Project site pursuant to the existing General Plan and zoning designations. This Alternative would include development across the entire Project site and would not include any clustering of development to avoid sensitive biological resources, as is proposed under the Project and an Administrative Permit that would allow for clustering of the development. The Project includes a Density Bonus Permit, which includes development of seven Affordable dwelling units on-site in exchange for a density bonus on-site. Under this Alternative, a Density Bonus Permit would not be proposed; therefore, the seven Affordable dwelling units proposed as part of the Project would not be included under the analysis of this Alternative.

S.5.3 Property Specific Request (PSR) Alternative

In 2018, the County considered a General Plan Amendment and zoning changes to allow for increased density on certain properties, which were known as “Property Specific Requests (PSRs).” On September 12, 2018, the PSR General Plan Amendment was put on hold due to litigation against the County’s 2018 Climate Action Plan (CAP). The PSR General Plan Amendment and Rezone was formally discontinued by the County on February 25, 2021. Although the PSR was discontinued by the County, the PSR Alternative evaluates development of the Project site if the PSR were implemented by the County. Under the PSR Alternative, the Project site would be developed with 364 multi-family dwelling units by changing the General Plan designation from Semi-Rural to Village and zoning designation from SR-1 to a combination of General Commercial (with mixed use zoning at two dwelling units per acres) VR-10.9, and SR-0.5. This Alternative assumes development would occur in the same development footprint as the Project, and that clustering of development to avoid impacts to biological resources would occur. The Project includes a Density Bonus Permit, which includes development of seven Affordable dwelling units on-site in exchange for a density bonus on-site. Under

this Alternative, a Density Bonus Permit would not be proposed; therefore, the seven Affordable dwelling units proposed as part of the Project would not be included under the analysis of this Alternative.

S.5.4 Reduced Development Area Alternative

Under the Reduced Development Area Alternative, the Project's development footprint and dwelling unit number would be reduced by 20%. Under this alternative, the Project site would be developed with 61 dwelling units (a reduction of 15 dwelling units as compared to the 76 units proposed by the Project), within a development area of 16.78 acres (a reduction of 4.2 acres as compared to the 20.98 development area proposed by the Project). While residential uses would continue to be developed on-site, the reduced development area would reduce physical impacts and would potentially reduce impacts due to the number of dwelling units proposed as part of the Project. Given the reduced density that would occur under this Alternative, a Density Bonus Permit would not be pursued.

Table S-1 Summary of Significant Impacts and Mitigation Measures

Impact No. and Description of Impact	Mitigation	Impact Conclusion
2.1, BIOLOGICAL RESOURCES		
<p>BIO-1: Project-related grading, clearing, construction or other activities would permanently remove sensitive native or naturalized habitat.</p>	<p>M-BIO-1 Prior to vegetation clearance and issuance of grading permits, the Project Applicant shall provide evidence that on- and off-site preservation of 44.2 acres of sensitive vegetation communities, off-site preservation of 0.2 acre of non-sensitive communities, and on- and off-site restoration of 5.9 acres (including creation of 21 water holding basins suitable for western spadefoot toad breeding) as shown in Table 7 and on Figure 6 of the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental has occurred.</p>	<p>Less-than-Significant Impact with mitigation</p>
<p>BIO-2: Human activities that occur near sensitive habitat communities and plant and wildlife species and their habitats have the potential to indirectly impact sensitive vegetation communities, plants, and wildlife.</p>	<p>M-BIO-2 Prior to vegetation clearance and issuance of grading permits, temporary construction limits fencing with sign messaging indicating that the fencing shall not be crossed, shall be installed along the edges of the approved limits of physical disturbance where construction activities adjoin open space preservation areas. The positioning of the fencing shall be verified by a County-approved professional biologist prior to the commencement of ground-disturbing construction activities. The fencing shall be maintained in place over the duration of construction activities unless or until it is replaced with permanent open space fencing or another physical barrier.</p> <p>M-BIO-3 Prior to issuance of the first certificate of occupancy, open space fencing and signage shall be installed at the following locations: 1) at the interface of the Project site and the adjacent open space preserve; 2) at the southeast corner of the Project site where the site abuts non-preserve area; 3) at the trailhead entering the preserve from the southwest; and 4) around the off-site preserve area adjacent to an existing trail (refer to Figure 6 of the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental for specific locations). The remaining preserve area boundaries shall not be fenced as they are adjacent to</p>	<p>Less-than-Significant Impact with mitigation</p>

	<p>Preserve Areas in the Draft NCMSCP (refer to Figure 2 the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental and have steep slopes with impenetrable vegetation, making fence installation unnecessary and infeasible.</p> <p>M-BIO-4 Prior to the issuance building permits, the County shall review the Project’s landscape plans and verify that only non-invasive plant species will be planted on the site (i.e., species not listed on the California Invasive Plant Council Inventory rated as Moderate or High).</p> <p>M-BIO-5 The Project’s homeowners association (HOA) CC&Rs shall require that 1) landscaping is prohibited from including species listed Moderate or High on the California Invasive Plant Council Inventory; and 2) all domestic cats are required to remain indoors. The HOA shall be responsible for providing information to residents to protect the adjacent open space preserve as the need arises. A copy of the CC&Rs shall be provided to the County for verification prior to issuance of the first certificate of occupancy.</p>	
<p>BIO-3: Project-related grading, clearing, construction or other activities would result in direct impacts to a non-wetland waters of the State subject to CDFW and RWQCB jurisdiction.</p>	<p>M-BIO-6 Prior to issuance of grading permits, the Project Applicant shall obtain the appropriate permits/approvals from the regulatory agencies, including the CDFW and RWQCB for impacts to the jurisdictional non-wetland water of the State.</p>	<p>Less-than-Significant Impact with mitigation</p>
<p>BIO-4: Project-related grading, clearing, construction or other activities would result in direct and indirect impacts to special-status plant species and special-status animal species.</p>	<p>M-BIO-1 through M-BIO5 would apply.</p> <p>M-BIO-7 Prior to vegetation clearance and issuance of grading permits, the Project Applicant shall translocate Orcutt’s brodiaea corms from within the Project impact footprint to suitable habitat within the on-site preserve in accordance with a County-, CDFW-, and USFWS-approved translocation plan.</p> <p>M-BIO-8 If clearing of vegetation or grading activities will occur during the breeding season for the California gnatcatcher (CAGN) (February 15 to August 31) or nesting raptors such as the Cooper’s hawk (January 15 to July 15), pre-</p>	<p>Less-than-Significant Impact with mitigation</p>

	<p>construction survey(s) shall be conducted by a qualified biologist to determine whether these species occur within the construction footprint and/or adjacent areas potentially impacted by construction noise (i.e., 60 dB(A) hourly average or ambient, if greater). If it is determined at the completion of pre-construction surveys that active nests belonging to these sensitive species are absent from the construction limits and adjacent potential noise-impacted area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to these sensitive species occur within the construction limits or adjacent noise-impacted area, the biologist shall determine the physical area in which construction activities cannot occur to protect the nesting species, and one of two actions shall occur: (1) construction activities in the area delineated by the biologist shall be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) construction activities shall be postponed until a temporary noise barrier or berm is constructed at the edge of the development footprint or other location determined appropriate and effective by the biologist and an acoustical engineer to ensure that noise levels in the occupied habitat are reduced to below 60 dB(A) hourly average or ambient, if greater. Decibel output shall be confirmed by a County-approved acoustical engineer and intermittent monitoring by a qualified biologist shall occur to ensure that the reduced noise levels are being maintained. Implementation of this measure shall also mitigate for potential noise impacts to nesting southern California rufous-crowned sparrows.</p>	
<p>BIO-5: Project-related grading, clearing, construction or other activities would impact sensitive lands and could potentially result in the taking of migratory birds protected under the MBTA.</p>	<p>M-BIO-1 and M-BIO-8 would apply.</p>	<p>Less-than-Significant Impact with mitigation</p>
<p>2.3, CULTURAL RESOURCES</p>		
<p>CR-1: Project-related grading activities have the potential to encounter and impact previously undiscovered archaeological</p>	<p>M-CR-1 Prior to issuance of grading permits, the Project applicant shall enter into a Treatment Agreement and Preservation Plan with consulting tribe(s)</p>	<p>Less-than-Significant Impact with mitigation</p>

<p>resources that could be determined to be important archaeological resources according to the criteria listed in CEQA Guidelines Section 15064.5.</p>	<p>and implement an Archaeological and Tribal Monitoring Program during earth disturbing activities. The Treatment Agreement and Preservation Plan and Archeological and Tribal Monitoring Program shall be provided to the County Archeologist for review and approval prior to issuance of the grading permit.</p>	
<p>2.3, GLOBAL CLIMATE CHANGE</p>		
<p>GHG-1: The Project would result in GHG emissions of 763 MT CO₂e per year, and 3.58 MT CO₂e per capita per year, based on a population of 213 (2.8 persons per household multiplied by 76 residences). This would exceed the 2029 GHG efficiency metric threshold calculated for the Project to be 3.07 MT CO₂e per service population per year. As such, the Project would have a cumulatively considerable significant impact on global climate change.</p>		<p>Impacts significant and unmitigable</p>
<p>GHG-2: Because the Project would emit 3.58 MT CO₂e per capita per year, which would exceed the 2029 GHG efficiency metric threshold calculated for the Project to be 3.07 MT CO₂e per population per year, and because the Project also would conflict with the goals established by SB 32, AB 1279, the CARB 2022 Scoping Plan, and the Regional Plan. Therefore, the Project would have a cumulatively considerable significant impact on global climate change.</p>		
<p>2.4, LAND USE AND PLANNING</p>		
<p>The Project would have significant impacts due to conflicts with the County of San Diego General Plan Noise Element.</p> <p>The Project would be inconsistent with the City of San Marcos General Plan Mobility Element Policy M-1.4. As such, the Project would result in a significant impact related to City of San Marcos General Plan Mobility Element policy consistency.</p>	<p>M-N-1 Prior to the issuance of each residential building permit, the County shall review the proposed locations of HVAC units. For HVAC units located less than 35 feet from the nearest property line, a three-sided barrier blocking the line of sight to adjacent properties shall be required. The barrier, if required, shall have a minimum height of 5.5 feet or be 1.75 times the height of the HVAC units and shall be constructed of materials with a minimum weight of 2 pounds per square foot. The barrier shall be solid with no holes, perforations, or gaps.</p>	<p>Noise Impacts: Less-than-Significant Impact with mitigation</p> <p>Transportation Impacts: Significant and unmitigable</p>

M-N-2 Residential lots proposed within 400 feet of the San Elijo Road right-of-way (Lots 1 through 6 and 15 through 18 of Tentative Map 5643) shall have “noise protection easements” to mitigate vehicular noise levels from San Elijo Road. Such easements shall be shown on the final map or subsequent implementing tentative map, as applicable. The noise protection easements shall contain a restriction requiring that exterior noise levels not exceed 60 CNEL within the easement area of the lot. The restriction shall apply to the following minimum exterior use areas: 1) for lots less than 4,000 s.f. in area, the exterior area shall include 400 square feet; and 2) for lots larger than 4,000 s.f, the exterior area shall include 10 percent of the lot area. A noise study is required to be prepared and approved by the County Department of Planning and Development Services (PDS) prior to the issuance of building permits for these lots demonstrating that the residential lots within 400 feet of San Elijo Road would achieve these requirements. In the event that the noise study determines that one or more lots would not achieve the 60 CNEL noise limit within the minimum exterior use areas, the noise study shall identify noise attenuation measures that must be incorporated, such as the use of sound walls or berms, in order to achieve the exterior noise requirement

M-N-3 To achieve interior noise levels at or below 45 CNEL in a windows closed condition, homes located on Lots 1 through 13 shall have mechanical ventilation (e.g., air conditioning) and standard windows with a minimum Sound Transmission Class (STC) rating of 27. The County shall verify that these features will be installed as part of the building permit plan check process.

M-N-4 Prior to the issuance of a grading or blasting permit that would permit these activities within 50 feet of the adjacent Loma San Marcos property line, a temporary noise barrier as described below or a functional equivalent as verified by a professional acoustical engineer shall be implemented to ensure that construction-

	<p>related noise is maintained at or below 75 dBA Leq on the Loma San Marcos property, which occurs to the immediate east of the Project site's northeastern boundary. a. A temporary 12-foot-high noise barrier shall be installed along the eastern property line of the Project site where it borders the Loma San Marcos facility south of the roadway during grading and blasting activities. The barrier shall be of sufficient length to block the line of sight between Loma San Marcos and the construction activities. The noise barrier shall be constructed of material with a minimum weight of 2 pounds per square foot with no gaps or perforations. The noise barrier may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. The noise barrier shall be installed prior to grading, rock drilling, or blasting activities within 50 feet of the eastern property line, and shall remain in place throughout the duration of grading, construction, and blasting activities on the site.</p> <p>M-TRANS-1 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to optimize the traffic signal timing at the intersection of Melrose Drive and San Elijo Road. Signal optimization could include reoptimizing cycle lengths and/or signal splits to better accommodate future traffic demand along the corridor. It is important to note that if signal optimization is implemented, adjacent intersections within the coordinated system should be taken into consideration. Additionally, prior to issuance of the first certificate of occupancy, the north leg of the intersection (Melrose Drive) shall be restriped to accommodate southbound dual left-turn lanes and a shared through-right lane. A striping plan shall be prepared to the satisfaction of the City Engineer.</p> <p>M-TRANS-2 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to install a traffic signal at the intersection of Streete "E" and San Elijo Road. Additionally, prior to issuance of the first certificate of occupancy, the south leg of the intersection (Street "E") shall be reconfigured to include</p>	
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	dual left-turn lanes and an exclusive right turn lane.	
2.5, NOISE		
<p>N-1: The operation of unshielded HVAC mechanical systems for the Project’s residential homes could exceed the County property line noise limit (50 dBA Leq) within 35 feet of the source depending on the operation schedule. This represents a potentially significant direct operational noise impact.</p>	<p>M-N-1 Prior to the issuance of each residential building permit, the County shall review the proposed locations of HVAC units. For HVAC units located less than 35 feet from the nearest property line, a three-sided barrier blocking the line of sight to adjacent properties shall be required. The barrier, if required, shall have a minimum height of 5.5 feet or be 1.75 times the height of the HVAC units and shall be constructed of materials with a minimum weight of 2 pounds per square foot. The barrier shall be solid with no holes, perforations, or gaps.</p>	<p>Less-than-Significant Impact with mitigation</p>
<p>N-2: Proposed outdoor living areas (residential yards) facing, or adjacent to, San Elijo Road would experience unmitigated exterior noise levels ranging from 58.9 to 65.6 CNEL. Because outdoor living areas would exceed the County of San Diego 60 CNEL exterior noise standard, the noise impact from vehicular noise is considered a significant direct impact.</p>	<p>M-N-2 Residential lots proposed within 400 feet of the San Elijo Road right-of-way (Lots 1 through 6 and 15 through 18 of Tentative Map 5643) shall have “noise protection easements” to mitigate vehicular noise levels from San Elijo Road. Such easements shall be shown on the final map or subsequent implementing tentative map, as applicable. The noise protection easements shall contain a restriction requiring that exterior noise levels not exceed 60 CNEL within the easement area of the lot. The restriction shall apply to the following minimum exterior use areas: 1) for lots less than 4,000 s.f. in area, the exterior area shall include 400 square feet; and 2) for lots larger than 4,000 s.f, the exterior area shall include 10 percent of the lot area. A noise study is required to be prepared and approved by the County Department of Planning and Development Services (PDS) prior to the issuance of building permits for these lots demonstrating that the residential lots within 400 feet of San Elijo Road would achieve these requirements. In the event that the noise study determines that one or more lots would not achieve the 60 CNEL noise limit within the minimum exterior use areas, the noise study shall identify noise attenuation measures that must be incorporated, such as the use of sound walls or berms, in order to achieve the exterior noise requirement of 60 CNEL within the minimum exterior use areas. The County shall require that the noise attenuation measures be installed and be verified as effective in meeting the 60 CNEL</p>	<p>Less-than-Significant Impact with mitigation</p>

	requirement by an acoustical engineer prior to the issuance of certificates of occupancy.	
N-3: For proposed residential homes facing, or adjacent to, San Elijo Road, unmitigated exterior noise levels at the second-floor building façades are expected to range from 56.5 to 65.1 CNEL requiring an interior noise level reduction ranging from 12 to 20.6 CNEL to meet the County’s 45 CNEL standard. In the absence of a “windows closed” condition, impacts due to traffic related interior noise levels would be significant.	M-N-3 To achieve interior noise levels at or below 45 CNEL in a windows closed condition, homes located on Lots 1 through 13 shall have mechanical ventilation (e.g., air conditioning) and standard windows with a minimum Sound Transmission Class (STC)	Less-than-Significant Impact with mitigation
N-4: During the Project’s construction, maximum construction-related noise levels at the adjacent occupied land use to the east, Loma San Marcos, would exceed the 75 dBA Leq significance threshold. Therefore, the Project’s short-term construction-related noise impact on Loma San Marcos would be significant.	M-N-4 Prior to the issuance of a grading or blasting permit that would permit these activities within 50 feet of the adjacent Loma San Marcos property line, a temporary noise barrier as described below or a functional equivalent as verified by a professional acoustical engineer shall be implemented to ensure that construction-related noise is maintained at or below 75 dBA Leq on the Loma San Marcos property, which occurs to the immediate east of the Project site’s northeastern boundary. a. A temporary 12-foot-high noise barrier shall be installed along the eastern property line of the Project site where it borders the Loma San Marcos facility south of the roadway during grading and blasting activities. The barrier shall be of sufficient length to block the line of sight between Loma San Marcos and the construction activities. The noise barrier shall be constructed of material with a minimum weight of 2 pounds per square foot with no gaps or perforations. The noise barrier may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. The noise barrier shall be installed prior to grading, rock drilling, or blasting activities within 50 feet of the eastern property line, and shall remain in place throughout the duration of grading, construction, and blasting activities on the site.	Less-than-Significant Impact with mitigation
N-5: Blasting and rock drilling activities would produce noise levels of approximately 74 dBA Leq at 50 feet. Blasting could be conducted anywhere within the construction activity footprint and because Project construction	M-N-4 would apply.	Less-than-Significant Impact with mitigation

<p>activity would occur less than 50 feet from the property line of Loma San Marcos, rock drilling and blasting noise levels conservatively are evaluated as a significant impact at this location.</p>		
<p>2.6, TRANSPORTATION AND TRAFFIC</p>		
<p>TRANS-1: The Project's addition of vehicles to the above roadway segment would trigger the roadway segment operating at acceptable LOS D to operate at unacceptable LOS E and would increase the volume/capacity ratio by more than 0.02. Therefore, based upon Mobility Element Policy M-1.4 and the standards set forth in the City of San Marcos TIA Guidelines, the Project would result in cumulatively considerable impacts along the roadway segment</p>	<p>M-TRANS-1 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to optimize the traffic signal timing at the intersection of Melrose Drive and San Elijo Road. Signal optimization could include reoptimizing cycle lengths and/or signal splits to better accommodate future traffic demand along the corridor. It is important to note that if signal optimization is implemented, adjacent intersections within the coordinated system should be taken into consideration. Additionally, prior to issuance of the first certificate of occupancy, the north leg of the intersection (Melrose Drive) shall be restriped to accommodate southbound dual left-turn lanes and a shared through-right lane. A striping plan shall be prepared to the satisfaction of the City Engineer.</p> <p>M-TRANS-2 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to install a traffic signal at the intersection of Streete "E" and San Elijo Road. Additionally, prior to issuance of the first certificate of occupancy, the south leg of the intersection (Street "E") shall be reconfigured to include dual left-turn lanes and an exclusive right turn lane.</p>	<p>Significant and unmitigable</p>

<p>TRANS-2: The Project would have a significant VMT impact and thus would make a cumulatively considerable contribution to a cumulative VMT impact in the San Diego region</p>	<p>M-TRANS-3 The Project Applicant shall encourage reduction in VMT by: 1) providing end of trip bicycle facilities by providing a short term bicycle rack at neighborhood park; and 2) implementing commute trip reduction marketing by requiring the HOA to provide marketing materials to residents encouraging carpooling among residents of the community. The Project's homeowner's association (HOA) shall be responsible for providing information to residents about the benefits of VMT reduction as the need arises. A copy of the covenants, conditions, and restrictions (CC&Rs) shall be provided to the County prior to issuance of the first certificate of occupancy.</p>	<p>Significant and unmitigable</p>
<p>2.7, TRIBAL CULTURAL RESOURCES</p>		
<p>TCR-1: Project-related grading activities have the potential to encounter and impact previously undiscovered TCRs that could be determined to be important TCRs according to the criteria listed in PRC Section 21074.</p>	<p>M-CR-1 Prior to issuance of grading permits, the Project applicant shall enter into a Treatment Agreement and Preservation Plan with consulting tribe(s) and implement an Archaeological and Tribal Monitoring Program during earth disturbing activities. The Treatment Agreement and Preservation Plan and Archeological and Tribal Monitoring Program shall be provided to the County Archeologist for review and approval prior to issuance of the grading permit.</p>	<p>Less-than-Significant Impact with mitigation</p>

1.0 PROJECT DESCRIPTION, LOCATION, AND ENVIRONMENTAL SETTING

1.1 Project Objectives

Pursuant to Section 15124(b) of the CEQA Guidelines, the Project’s statement of objectives is provided below. The objectives are intended to assist the County in developing a reasonable range of alternatives to evaluate in the EIR and aid the decision makers in preparing findings or a statement of overriding considerations.

The Project seeks to achieve the following objectives:

- To efficiently develop an underutilized property with residential uses consistent with the site’s General Plan land use designation.
- To establish a residential development in the unincorporated community of San Dieguito, San Diego County in a manner that is sensitive to the environment and complementary of surrounding land uses.
- To develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration to minimize alterations to natural landforms where practical.
- To increase and diversify the available housing supply in unincorporated San Diego County by providing residential homes that will be marketable within the evolving economic profiles of nearby communities.
- To provide on-site park space for use by Project residents and trail access for use by Project residents and residents of surrounding communities.
- To ensure compatibility of design between on-site land uses and surrounding properties.
- To establish development phasing that results in a logical, coordinated buildout of a new residential community.

1.2 Project Description

1.2.1 Project Components

The Project consists of entitlement applications for a Tentative Map (PDS-2020-TM-5643), Density Bonus Permit PDS2021-DB-21-001, Site Plan Review (PDS2022-STP-22-018) and an Administrative Permit (PDS2020-AD-20-011). Descriptions of the Project’s application components, physical design, and anticipated expected operating characteristics are provided in the following subsections. Copies of the entitlement applications for the Project are available for review at the County of San Diego, Planning & Development Services (PDS), 5510 Overland Avenue, 3rd Floor, San Diego, CA, 92123.

Approval of the Tentative Map, Density Bonus Permit, Site Plan Review, and Administrative Permit (herein, the “Project”) would allow for ultimate development of the 89.23-acre Project site with 76

single-family residential homes (69 market rate homes and seven low-income affordable homes), a recreational park, water quality detention basins, and open space. The Project Applicant’s marketing name for the Project is “Questhaven.”

The Project is a Senate Bill 330 (SB 330) housing development project. Under SB 330, submittal of a Preliminary Application for a residential development project provides that the project is only subject to the ordinances, policies, and standards adopted and in effect when the Preliminary Application is submitted. An SB 330 Preliminary Application was filed with the County of San Diego on January 19, 2023, and the County of San Diego confirmed acceptance of the application on May 9, 2023.

Administrative Permit

The Project site’s zoning classifications are Rural Residential (RR) in the northern portions of the Project site and Open Space (S80) in the southern portion of the Project site. The RR zoning classification has a minimum lot size requirement of 1.0 acre. An Administrative Permit (PDS2020-AD-20-011) is proposed to allow for residential lot size averaging. This will allow the proposed residential development to be clustered in the northernmost portion of the Project site, while reserving other portions of the RR zoned area that contain sensitive habitats for open space preservation and wildlife movement.

Density Bonus Permit

The Density Bonus Permit PDS2021-DB-21-001 is proposed pursuant to State Assembly Bill 2345 (Government Code Section 65915 et seq.) to allow for a 20% increase in the maximum allowable number of residential dwelling units in exchange for reserving 5% of the dwelling units on-site for “Low” Income Affordable Housing (defined as 50% to 80% of the Area Median Income [AMI]). Approval of the Density Bonus Permit would allow for an increase in the maximum allowable dwelling units from 64 dwelling units to 76 single-family dwelling units in exchange for reserving seven units restricted for “Low” Income Affordable Housing.

Site Plan Review

A Site Plan Review (PDS2022-STP-22-018) is required due to the S80 (Open Space) zoning designation that applies to a portion of the Project site. The Site Plan is shown in Figure 1-1, *Site Plan No. PDS2022-STP-22-018*. The Site Plan provides the potential location, size, and use of the future proposed residential dwelling units and their relationship to the significant physical features located on the Project site. The currently proposed entitlement applications do not include any site-specific building footprints; however, the Site Plan provides the conceptual location of the future homes within the proposed Tentative Map lots. The Site Plan also identifies the location of the on-site Affordable Housing dwelling units.

Tentative Map (TM 5643)

The proposed Tentative Map (TM) (PDS-2020-TM-5643) is shown in Figure 1-2, *Tentative Map No. 5643*. A summary of the development lots proposed as part of TM 5643 is presented at the end of this section in Table 1-1, *Tentative Map No. 5643 Lot Summary*. As shown in Table 1-1, the TM would subdivide the 89.23-acre site to allow for the development of 76 single-family residential homes on 76

lots collectively totaling 18.27 acres, recreation uses on 0.31-acre, water bioretention basins on 2.4 acres, with the remaining area reserved for open space on 63.9 acres that would provide for biological open space and a local wildlife corridor connecting to adjacent open space lands south and west of the Project site. Proposed residential lot sizes on the site would range from $\pm 7,899$ square feet (s.f.) to $\pm 21,440$ s.f. The TM depicts the location of each lot, the location and alignment of on-site roadways, and the location of public water, sewer and drainage infrastructure improvements.

- **Single-Family Residential.** TM 5643 proposes to subdivide the property to provide a total of 76 single-family residential lots on 18.27 acres, which would range in size from 7,899 s.f. to 21,440 s.f. Lots 1-76 are designated to implement the single-family residential uses.
- **Park.** TM 5643 proposes one lot for recreation purposes on 0.31 acre located in the center of the site, south of proposed Street C. Lot A, adjacent to Lot 66, would implement the recreation uses.
- **Bioretention Basins.** TM 5643 proposes four lots for bioretention basins on a total of 2.4 acres. Lots F, J, K, and L would implement the open space water uses.
- **On-Site Roadways.** TM 5643 proposes private streets and internal roadways on approximately 4.34 acres, including proposed Streets A, B, C, and E. Lots B, C, D, and E would implement the on-site roadways.
- **Open Space.** TM 5643 proposes nine lots as open space, totaling 63.9 acres. Lots G, H, and N through T designate the open space. Of these lots, 53.13 acres (Lot S) is designated as biological open space, while the other lots accommodate SDG&E easements, fire management buffers, manufactured slopes, and one lot (Lot G) for passive recreational open space that is designed to accommodate a public parking lot and a 10-foot-wide decomposed granite trail segment that would connect to the existing, off-site Copper Creek Trail.

1.2.2 Technical, Economic, and Environmental Considerations

The following section provides a general description of the Project's technical, economic, and environmental characteristics, as required by §15124(c) of the State CEQA Guidelines.

Technical Characteristics

Landscape Concept Plan

The Project's landscaping plan is depicted in Figure 1-3, *Landscape Concept Plan*. Landscaping is proposed within rights-of-way along street frontages, on manufactured slopes, and in and around the bioretention basins. Landscaping would be ornamental in nature, except on manufactured slopes, vegetated swales, and bioretention basins where plant materials would be selected to serve environmental functions (e.g., water quality). The landscaping plan also shows the design of the on-

site park, which is designed to include a dog park, seating area with shade cover, tot lot with play equipment, and ornamental landscaping.

As part of site plan applications for the development of individual lots, future development proposals will be required to submit planting and irrigation plans to the San Diego County PDS for approval. Implementing landscaping plans are required to be reviewed and approved by Rancho Santa Fe Fire Protection District (RSFFPD), and as condition of approval, a bond would be required during construction that would not be released until RSFFPD has inspected the installed landscaping and provided final approval.

SDG&E Easement

The project site is bisected by a 150' wide SDG&E easement shown on proposed TM 5643 as Lots P, Q, and S. The SDG&E easement corridor is improved with 230 kV overhead electric transmission lines supported by steel towers accessed by dirt roads and work pads maintained by SDG&E. The proposed project includes grading, private street crossings, landscaping, and erosion control measures within the SDG&E easement corridor. Prior to grading or construction of improvements within the SDG&E easement corridor, project grading and improvement plans must pass a conflict check by SDG&E to ensure the improvements are compatible with SDG&E facilities and operations. Moreover, these improvements must first be approved by the California Public Utilities Commission through an advice letter process pursuant to Section 851 of the California Public Utilities Code. The SDG&E easement contains large high voltage power lines that would remain in place with implementation of the Project. The easement area is identified as an SDG&E easement and fire buffer open space on TM 5643. Maintenance of the SDG&E easement would be the responsibility of the homeowners association (HOA). Maintenance of the SDG&E easement would be the responsibility of the HOA. The

Fire Management Features

Fire management zones (FMZs) are shown on proposed TM 5643 and the landscape concept plan. FMZ easements are accommodated along the Project's western boundary and in other areas, within which fuel would be thinned for wildfire management. Also assisting in wildfire protection is a cut slope that is planned to occur along the southern edge of Lot R, and the planned construction of 6-foot-high heat-deflecting fencing along the lot lines of Lots 19-24 and atop the manufactured slope behind Lots 25-45. Requirements to adhere to FMZ requirements will be made a responsibility of the HOA and imposed on homeowners through the HOA's CC&Rs.

Project Access and Roadway Improvements

As shown in Figure 1-4, *Site Access*, access to the Project site would be provided by two new private roadway connections (Street B and Street E) at San Elijo Road. San Elijo Road abuts the northern boundary of the Project site and would provide access to the site via proposed Street "B" and Street "E." Primary access to the western portion of the site would be provided via Street "B" at San Elijo Road. Primary access to the eastern portion of the site would be from Street "E" which is proposed as the southern leg of an existing San Elijo Road intersection that currently serves the Loma San Marcos

recreational facility located east of the Project site. As part of the Project, a traffic signal is proposed at this existing intersection. San Elijo Road is not designated as a County Mobility Element roadway.

The new on-site private streets are designed to be 39.75 feet wide, with one 12-foot vehicular travel lane in each direction. In addition to private roadways, the Project's design also provides for a privately maintained parking lot that would be open for public use at the terminus of Street "E." The parking lot would provide public parking access to existing trail systems located south of the Project site.

Drainage and Runoff

In conformance with County requirements for tentative map applications, a hydrology study was prepared for the Project to ensure that development of the site as proposed does not result in erosion or flood hazards to downstream properties. The Project's drainage plan is depicted on Figure 1-5, *Preliminary Drainage Plan*. The Project-specific hydrology study, titled, "Hydrology/Hydraulics Study" dated August 4, 2021, and included as *Appendix J* to this EIR provides a comparison of pre- and post-development drainage conditions on the site.

Under existing conditions, the Project site is composed of undeveloped natural terrain. The site is tributary to two distinct hydrologic subareas of the Carlsbad Hydrologic Unit. The average slope of the pre-development conditions is determined by following the County Standard S-1 and is calculated as 18% for the Project overall.

Drainage from approximately 34 acres of the site discharges from the southern portion of the site, which starts near the southern limits of the drainage basin and flows mainly in a northeasterly direction. As the northeasterly flows meet the eastern limits of the property, the water discharge from the site enters an unnamed tributary of the Escondido Creek flowing in a southerly direction along the eastern property line. The point where the discharge leaves the site is identified as POC-1 in the Project's hydrology study.

Drainage from the remaining 45 acres of the southern tributary area flows in a northerly direction where it meets a natural channel flowing in a north westerly direction to a point where it leaves the site along the western boundary. This point is identified as POC-2 in the Project's hydrology study. After reaching POC-2, the flows continue along their existing offsite flow path in a natural channel until they meet San Elijo Road and continue to San Marcos Creek.

Drainage from approximately 3.0 acres in the northeastern portion of the site flow into an existing brow ditch that carries the water in an easterly direction along the property line and discharge directly to the public storm drain system along San Elijo Road. This point of discharge is identified as POC-3 in the Project's hydrology study. Drainage from the remaining approximately 1.0 acre of the northwestern frontage of the site along San Elijo Road flows into two brow ditches that flow westerly and enter the public storm drain system along San Elijo Road tributary to San Marcos Creek. This point is identified as POC-4 in the Project's hydrology study.

As part of the Project's design, bioretention basins are proposed be constructed within Lots F and J through L of TM 5643. Project compliance with the Project-specific hydrology study would be assured through a condition of approval requiring future review of proposed grading plans by the County of San Diego PDS; (refer to EIR Section 7.0, *List of Mitigation Measures and Environmental Design Considerations*). The Project's hydrology study is included as *Appendix J* to this EIR.

Construction Activities

Construction of the Project is expected to occur over approximately 27 months (2.25 years), commencing as early as January 2026 and completing in March 2028. All of the residential homes on the Project site are expected to be occupied by 2029. These activities would generally include clearing, grading and blasting, installation of infrastructure, building construction and painting, paving, and landscaping,

A preliminary grading plan is a component of proposed TM 5643 and is depicted on Figure 1-6, *Preliminary Grading Plan*. TM 5643 is designed to comply with the San Diego County Grading, Clearing, and Watercourses Ordinance (San Diego Municipal Code Sections 87.701 et seq.). Grading associated with the Project would occur in one phase and result in physical disturbance to 31.35 acres of the Project site including all disturbances for residential lots and the proposed park, trail, trail parking lot, internal roads, utility improvements, and the proposed bioretention basins. The remainder of the site would not be graded or otherwise physically disturbed by the Project and would remain as open space. An additional 1.2 acres of off-site disturbance would occur, including 1.1 acres off-site and 0.1 acre within a Project easement west of the Project boundary to implement the Project's infrastructure connections outside of the Project site boundary.

Natural slopes on the Project site range from a 9% to 23% grade, however, the steeper slopes are located primarily within the areas proposed to be designated as permanent open space and would not be developed. In the areas that would be physically disturbed by the Project's grading, approximately 167,100 cubic yards (c.y.) of cut and fill would occur, with no net import or export of earthwork materials. Several manufactured slopes would be created adjacent to proposed on-site roadways. Proposed grading would create manufactured slopes up to 50 feet in height and constructed at a gradient no steeper than 2:1.

As part of the Project's grading operation, blasting would be required in several areas of the Project site consisting of shallow blasting (<30 feet below existing grade) and moderate depth blasting (30–40 feet below existing grade). The exact locations for blasting are not known at this time although reasonable forecasts and assumptions have been made for analytical purposes in this EIR. Blasting locations would be determined following geotechnical investigations regarding rock locations prior to the issuance of grading permits.

Prior to blasting, small holes would be drilled into the rock in a pattern that allows each hole to remove a small amount of rock. In order to comply with the County Fire Code, the blasting contractor would calculate and use only the amount of explosive in each of the small holes necessary to break the rock around each hole while crushing the rock for removal. The explosive would be detonated at each hole

in a sequence with at least 8 milliseconds delay between charges. For blasting, it is estimated that drilling would occur in grids of 4 feet by 4 feet to 6 feet by 6 feet. The drill holes would be extended to a depth of approximately 18 to 24 inches below the proposed subgrade. Additionally, a five-foot-thick blanket of soil would be applied before drilling to reduce noise. Assuming the use of a single drill rig, it is estimated that the drilling, blasting, and excavation would be coordinated such that the duration of drilling and blasting combined would require approximately two weeks to complete, followed by an additional up to two weeks to excavate and stockpile the fractured rock for use as part of the overall Project's grading operation. (Urban Crossroads, 2021, p. 45)

Water, Sewer, and Dry Utilities Service

Sewer Service

Sanitary sewer service to the Project would be provided by the Vallecitos Water District. The Project would be required to be annexed into the Vallecitos Water District through a future annexation process that would be reviewed and approved by the Local Agency Formation Commission (LAFCO). The Project's sewer collection system would consist of 8-inch gravity sewer lines that would connect to an existing sewer main within San Elijo Drive, as depicted on Figure 1-7, *Sewer Plan*. Gravity sewer mains are proposed on-site within the right of ways of proposed Street "B" and a portion of Street "C". Sewer flows would be conveyed off-site to a Vallecitos Water District sewer pump station.

Water Service

Water service to the Project would be provided by the Olivenhain Municipal Water District (OMWD). The Project's proposed water service system would consist of 8-inch water lines that would be looped to connect to an existing 10-inch water main installed within Street E and a 18-inch water main 300 feet west of the Street B connection to San Elijo Road and maintained by OMWD. As depicted on Figure 1-8, *Water Plan*, 8-inch water mains would be installed within proposed Streets "A", "B", and "C". All proposed water facilities are required to be designed in accordance with the OMWD Standards and would require review and approval by OMWD prior to implementation.

Dry Utility Services

Dry utility connections (i.e., telephone, cable) would be provided from existing facilities within San Elijo Road. As with water and sewer improvements, all dry utility improvements would occur within the rights-of-way of planned on-site roadways.

Long-Term Operational Characteristics

Upon the completion of construction, the Project would operate as a single-family residential community. Using an average population factor of 2.8 persons per home, the Project's proposed 76 homes would house approximately 213 persons. Operational characteristics would include those typical of a residential community, including residents and visitors using vehicular, pedestrian, and bicycle forms of travel to traverse internally and to and from the site via roadway connections with San

Elijo Road. A 10-space parking lot located near the terminus of Street “E” would provide public parking for access to a trail segment that would connect to the Copper Creek Trail off-site. Activities in the parking lot are expected to be limited to parking and walking to and from the trailhead.

The Project would be constructed to meet 2022 Title 24 Part 6 energy efficiency standards and Part 11, CALGreen standards (or subsequent standards in effect at the time construction plans are submitted for future development). Specifically, as construction of the Project would commence on or after January 1, 2026, the Project would be subject to the 2025 Title 24 energy efficiency standards. The 2025 Title 24 Part 6 energy efficiency standards would be presumably more efficient than the 2022 Title 24 Part 6 energy efficiency standards analyzed herein. CALGreen includes a requirement for on-site photovoltaic (PV; solar) energy generation for new residential buildings three or fewer stories high and cool/green roofs. Therefore, operation of the residential homes is assured to be energy efficient. Additionally, the Project is designed to include all electric appliances and end uses. Installing PV energy systems and using electric instead of natural gas-powered appliances and end uses assures the reduction of long-term fossil fuel use and the use of electricity from the grid that is increasingly transitioning to renewable sources.

A HOA would be formed and be responsible for oversight of the community, maintenance of common areas, and needed homeowner education. Among other responsibilities, the HOA would be responsible for providing residents a copy of the Project’s Conceptual Wildfire Evacuation Plan (CWEP), contained as *Appendix M2* to this EIR, and providing ongoing education about responsible wildfire suppression and evacuation practices. The HOA also would be responsible for assuring adherence to FMZ requirements some of which would be imposed on homeowners through the HOA’s CC&Rs.

1.2.3 Environmental Characteristics

Resource Protection Ordinance

The County’s Resource Protection Ordinance (RPO) (as most recently amended on October 25, 2012) protects prehistoric and historic sites and sensitive natural resources including wetlands, floodplains, steep slopes, and biological habitats. A focused biological survey of the Project site determined that the Project site contains RPO resources. Although there are no RPO jurisdictional wetlands on the site, the property contains sensitive habitat communities that are regulated by the RPO. Please refer to EIR Section 2.1, *Biological Resources*, and Section 2.2, *Cultural Resources*, for an analysis of the Project’s consistency with the RPO, as well as a discussion of potential impacts to biological and cultural resources and mitigation measures to reduce impacts to below a level of significance.

Biological Mitigation Ordinance

The County’s Biological Mitigation Ordinance (BMO) was adopted by the Board of Supervisors on October 22, 1997, and was most recently amended on March 24, 2004. The BMO is the mechanism used by the County to implement the Multiple Species Conservation Program (MSCP) at the project level to attain the goals set forth in the County’s MSCP Subarea Plan. The BMO contains design criteria and mitigation standards which are applied to discretionary projects to ensure that a project does not preclude the viability of the MSCP Preserve System. As documented in a Project-specific

biological technical report (attached as *Appendix B* to this EIR), implementation of the Project would directly impact sensitive biological habitat and sensitive plant and animal species that are regulated by the BMO. Mitigation measures have been incorporated into the Project to lessen impacts to sensitive biological resources consistent with the applicable policies of the BMO. The Project is located outside of an adopted MSCP subarea; however, the Project lies within the boundaries of the Draft NCMSCP. The currently adopted BMO applies to the adopted South County MSCP Subarea Plan area and a revised BMO to cover the Draft NCMSCP Subarea Plan area has not been adopted at this time. The Habitat Loss Permit (HLP) Ordinance was adopted in March 1994 and, pursuant to the Special 4(d) Rule under the Federal ESA, the County is authorized to issue “take permits” (in the form of HLPs) in lieu of Section 7 or 10(a) permits typically required from the USFWS. Although issued by the County, the USFWS and CDFW must concur with the issuance of an HLP for it to become valid as take authorization under the Federal ESA. An HLP application must be filed with the County if the draft NCMSCP has not been adopted at the time of its environmental review. At the time this EIR was circulated for public review (June 2024), the NCMSCP was not adopted; thus the HLP application is required for the Project. No aspect of the Project was designed to avoid impacts to areas regulated by the BMO, as it was determined in coordination with the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFW) that on-site preservation of such resources is not necessary to achieve the goals of the Draft NCMSCP. By contrast, it was determined that off-site mitigation for Project-related impacts would result in a contiguous assemblage of habitat that would promote the long-term survival of the species covered by the MSCP and/or regulated by the BMO. Please refer to EIR Section 2.1, *Biological Resources*, for a more detailed discussion of the Project’s consistency with the BMO and the HLP requirement, including analysis of potential impacts and presentation of mitigation measures to reduce impacts to below a level of significance.

Watershed Protection, Stormwater Management and Discharge Control Ordinance

The County’s Watershed Protection, Stormwater Management and Discharge Control Ordinance (WPO) contains discharge prohibitions and other requirements that vary depending on type of land use activity and location in the County to protect water resources and to improve water quality. Appendix A of the WPO contains the Stormwater Standards Manual (SSM) that sets out in detail, by project category, what dischargers must do to comply with the WPO and to receive permits for projects and activities that are subject to the WPO. Best management practices (BMPs) are incorporated into the Project to address runoff associated with near-term construction, while runoff from long-term operation of the proposed Project would be addressed with the incorporation of extended/dry detention basins with grass/vegetated lining, vegetated swales, and hydrodynamic separator systems (cyclone separators). Refer to EIR Section 3.7, *Hydrology and Water Quality*, for a more detailed discussion of the Project’s compliance with the WPO.

1.3 Project Location

The Project site is located in the western portion of unincorporated San Diego County within the San Dieguito Community Plan Area. From a regional perspective, the Project site is located immediately south and west of the City of San Marcos and east of the City of Carlsbad. Interstate 5 (I-5) is located approximately 5.3 miles west of the Project site. Specifically, the Project site is located south of San Elijo Road and east of Denning Drive. Figure 1-9, *Regional Map*, depicts the boundaries of the Project

site in a regional context and Figure 1-10, *Aerial Map*, provides an aerial view of the Project site and surrounding area.

1.4 Environmental Setting

1.4.1 Existing Physical Site Conditions

The Project site is undeveloped and includes several unimproved dirt roads and trails. The northern portion of the site was subject to prior disturbance and was used as a laydown yard for construction equipment associated with a former recycling facilities use on an adjacent property. Additionally, a portion of the western area of the site was formerly used for agricultural uses.

The topography of the Project site ranges from gently to steeply sloping. The site is characterized by a topographic saddle in the northerly/northeasterly portion of the property with relatively broad, low-relief drainages flowing to the northwest and southeast. A gently to moderately sloping hillside flanks the saddle to the south and north. Elevations within the Project site range from a low elevation of 490 above mean sea level (amsl) in the southeastern portion of the site where there is a drainage to a high of 930 amsl near the southwestern property boundary. Natural slopes on the Project site range from a 9% to 23% grade. The existing topography of the Project site is depicted on Figure 1-11, *Topographic Map*.

Based on the results of a geotechnical investigation appended to this EIR as *Appendix F1*, the Project site is underlain by metamorphic Santiago Peak Volcanics and a sedimentary unit likely associated with the Santiago Formation. These units are mantled by relatively thin veneers of surficial soils including undocumented artificial fill, colluvium and residual soil. Refer to EIR Section 3.5, *Geology and Soils*, for a detailed description of each of the geologic units and soils that underlie the surface of the Project site. There is a low potential for discovery of paleontological resources (fossils) in the sedimentary unit and no potential for discovery in the volcanic rock. No significant historic, archaeological, or tribal cultural resources are known to occur on the site, but there is a potential for unknown significant archaeological and tribal cultural resources to be located subsurface.

Based on local topography and typical groundwater flows in this area of San Diego County it is believed that the regional groundwater gradient is southwesterly toward the Tijuana River and ultimately to the Pacific Ocean. No groundwater extraction wells are known to exist on-site or within the Project site's immediate vicinity. Groundwater was not encountered on-site during geotechnical investigations. The former San Marcos Landfill is located off-site to the east and is subject to groundwater monitoring as part of its post closure requirements. Two of the groundwater monitoring wells associated with the former landfill are located on the Project site. The wells are identified as SMGW-36 and SMGW-40.

Regarding biological resources, the Project site is predominately composed of non-native grassland (20.9 acres), Mafic southern mixed chaparral (25.7 acres), and Diegan coastal sage scrub (9.8 acres). The Project site also contains Diegan coastal sage scrub-disturbed, scrub oak chapparal, mafic chamise chaparral, eucalyptus woodland, disturbed habitat, and developed/ornamental vegetation communities. Of these, the sensitive vegetation communities/habitat types on the Project site include Diegan coastal

sage scrub, Diegan coastal sage scrub-disturbed, scrub oak chaparral, mafic chamise chaparral, mafic southern mixed chaparral, and non-native grassland. Four sensitive plant species were identified on the Project site, including: Orcutt's brodiaea, southwestern spiny rush, Nuttall's scrub oak, and ashy spike-moss. Four special-status animal species were observed on the Project site including: western spadefoot toad, Cooper's hawk, southern California rufous-crowed sparrow, and coastal California gnatcatcher. Refer to EIR Section 2.1, *Biological Resources*, for a more detailed description of biological conditions on the site.

The Project lies within an area designated a State Responsibility Area (SRA) "Very High Fire Hazard Severity Zone (VHFHSZ). Additionally, the Project site is located within a Wildland Urban Interface (WUI), as mapped by CALFIRE.

1.4.2 Surrounding Land Use and Development

The Project site is located within unincorporated San Diego County, while the properties to the north, east and west generally are located in the City of San Marcos. The Project site is within the City of San Marcos Sphere of Influence. The undeveloped parcel located adjacent to the northwest of the Project site is also within the unincorporated county.

The Project site is designated by the County of San Diego General Plan for Semi-Rural land uses (SR-1 and SR-10). Additionally, a small portion of the site has a "No Jurisdiction" land use designation. The "No Jurisdiction" designation is the result of a mapping error and would be resolved with implementation of the Project. The Project site is zoned Rural Residential (RR) and Open Space (S80).

To the west of the Project site is open space associated with the Rancho La Costa Habitat Conservation Area, beyond which is residential development. North of the Project site is land designated for open space, beyond which are residential uses. East of the Project site is a former recycling facility that is currently used as an indoor sports complex, Loma San Marcos. Also to the east is the former location of the San Marcos Landfill and the San Elijo Hills residential development in the City of San Marcos. To the south of the Project site is open space associated with the Rancho La Costa Habitat Conservation Area. The Copper Creek Trail system also traverses through this area.

All off-site noise sensitive land uses (NSLUs) assessed herein consist of residential uses located within the City of San Marcos. In addition to the NSLUs, there is a non-residential sports facility, adjacent to and east of the Project site. (Urban Crossroads, 2021, p. 6)

The San Diego County General Plan designates lands to the south and a majority of the west of the Project site for "Open Space - Conservation" land uses, which includes part of the Rancho La Costa Reserve. A portion of the land to the west is designated for "Rural Lands (RL-40)". Lands to the north and east of the Project site are located within the City of San Marcos.

1.4.3 Access and Circulation

Regional access to the Project site is provided by State Route 78 (SR-78), located approximately 3.5 miles north of the Project site. North/south access is provided by Interstate 15 (I-15) located

approximately 6.1 miles east of the Project site. Additionally, north/south access is provided by Interstate 5 (I-5) located approximately 5.3 miles west of the Project site.

Local access to the Project site is provided by San Elijo Road, located immediately north of the Project site. San Elijo Road is not designated as a County Mobility Element roadway.

1.5 Intended Uses of the EIR

This EIR is an informational document that will inform public agency decision-makers and the public generally of significant environmental effects of the Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project, pursuant to CEQA Guidelines §15121(a).

This document was prepared pursuant to the guidelines for the preparation of EIRs issued by the County of San Diego and in compliance with all criteria, standards, and procedures of the California Environmental Quality Act (CEQA) of 1970 as amended (PRC 21000 et seq). Per §21067 of CEQA and §15367 and §15050 through §15053 of the State CEQA Guidelines, the County of San Diego PDS is the Lead Agency under whose authority this document has been prepared.

1.5.1 EIR Scope

The County filed a Notice of Preparation (NOP) with the State Clearinghouse of the California Office of Planning and Research. Pursuant to CEQA Guidelines Section 15082, the Lead Agency must send a copy of a NOP to the SCH and State Responsible and Trustee agencies; the SCH has responsibility for ensuring that the State Responsible and Trustee agencies reply to the Lead Agency within the required time. The NOP was filed with the SCH and distributed to potential Responsible Agencies, Trustee Agencies, and other interested parties on September 1, 2022, for a 30-day public review period. The NOP was distributed for public review to solicit responses that would help the County identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR.

In addition, a publicly noticed EIR Scoping Meeting was held on virtually on September 20, 2022. The EIR Scoping Meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of potential environmental concerns be addressed in this SEIR.

The NOP and written comments received by the County during the NOP public review period are provided in *Appendix A* to this EIR. A summary of environmental issues raised in response to the NOP are summarized the Summary Section of this EIR and in the introductory paragraph in the subsections in EIR Chapters 2.0 and 3.0. Regardless of whether or not an environmental or CEQA-related comment is listed in EIR Chapters 2.0 and 3.0, all relevant comments received in response to the NOP are addressed in this EIR.

EIR Chapters 2.0 and 3.0, provide an analysis of the Project’s potential to cause adverse effects under the following topic areas:

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

1.5.2 EIR Format and Content

This EIR contains the information required to be included in an EIR as specified CEQA (California Public Resources Code, Section 21000 et. seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 5). CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference guide for locating the CEQA-required sections within this document.

In summary, the content and format of this EIR are as follows:

- **Summary** provides an overview of the EIR and CEQA process and provides a brief Project Description, the location and regional setting of the Project site, and potential alternatives to the Project as required by CEQA. The Summary also provides a summary of the Project’s significant impacts, mitigation measures, and conclusions, in a table that forms the basis of the Project’s MMRP.
- **Chapter 1.0, Project Description, Location, and Environmental Setting**, pursuant to CEQA Guidelines Section 15124, includes a detailed Project Description that identifies the precise location and boundaries of the Project, a map showing the Project’s location in a regional perspective, a statement of the Project’s objectives, a general description of the Project’s technical, economic, and environmental characteristics, and a statement describing the intended uses of the EIR, including a list of agencies expected to use the EIR, and a list of approvals for which the EIR will be used. The purpose of the detailed Project Description is to identify the Project’s main features and other information needed for an assessment of the Project’s environmental impacts. Additionally, this section describes the environmental setting, including descriptions of the Project site’s physical conditions and surrounding context used as the baseline for analysis in the EIR and provides introductory information about the CEQA process and the responsibilities of the County in its role as Lead Agency, the type and purpose of the EIR, information regarding the scope of the EIR, and an overview of the EIR’s format.

- **Chapter 2.0, Environmental Effects Found to be Significant and Chapter 3.0, Environmental Effects Found Not to be Significant** includes an analysis of potential impacts that may occur with implementation of the Project. A determination concerning the significance of each impact is addressed and mitigation measures are presented when warranted. The environmental changes identified in Chapter 2.0 and Chapter 3.0 and throughout this EIR are referred to as “effects” or “impacts” interchangeably. CEQA Guidelines Section 15358 describe the terms “effects” and “impacts” as being synonymous.

In each subsection of Chapter 2.0 and Chapter 3.0, the existing conditions pertaining to the subject area being analyzed are discussed accompanied by a specific analysis of physical impacts that may be caused by implementing the Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in CEQA Guidelines Section 15355 as “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.”

The analyses in Chapter 2.0 and Chapter 3.0 are based in part upon technical reports that are included in this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the Project and are cited in the references section of each subsection in Chapter 2.0 and Chapter 3.0.

Where the analysis identifies a potentially significant environmental effect feasible mitigation measures are recommended. Pursuant to CEQA and the CEQA Guidelines, an EIR must propose and describe mitigation measures to minimize the significant environmental effects identified in the EIR. The identified mitigation measures are analyzed to determine whether they would effectively reduce or avoid any significant environmental effects. In most cases, implementation of the mitigation measures would reduce an identified significant environmental effect to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations would need to be adopted by the Lead Agency pursuant to CEQA Guidelines Section 15093.

- **Chapter 4.0, Other CEQA Considerations** includes specific topics that are required by CEQA. These include a summary of the Project’s significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the Project. Chapter 4.0 also includes a discussion of the potential environmental effects that were found not to be significant during preparation of this EIR.
- **Chapter 5.0, Alternatives** describes and evaluates alternatives to the Project that could reduce or avoid the Project’s adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives, including a “No Project” alternative, that will foster informed decision making and public participation.

- **Chapter 6.0, List of EIR Preparers** lists the persons who authored or participated in preparing this EIR.
- **Chapter 7.0, List of Mitigation Measures** lists the Project's mitigation measures.

1.5.3 Matrix of Project Approvals and Permits

Proposed discretionary actions that are analyzed by this EIR are addressed below in Table 1-3, *Matrix of Project Approvals*. This EIR covers federal, State, and local government and quasi-governmental approvals which may be needed to construct and implement the Project, whether or not they are explicitly listed in Table 1-3 (CEQA Guidelines § 15124(d)).

1.5.4 Related Environmental Review and Consultation Requirements

State law requires that all EIRs be reviewed by trustee and responsible agencies. A Trustee Agency is defined in §15386 of the State CEQA Guidelines as “a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.” Per §15381 of the State CEQA Guidelines, “the term ‘Responsible Agency’ includes all public agencies other than the Lead Agency which have discretionary approval power over the project.”

For the proposed Project, the California Department of Fish and Wildlife (CDFW) and the San Diego Regional Water Quality Control Board (RWQCB) are Trustee Agencies.

California Department of Fish and Wildlife (CDFW) is identified as a Trustee Agency that is responsible for the protection of fish and wildlife resources, and has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. The CDFW would be responsible for issuing a Section 1602 Streambed Alteration Agreement (SAA) pursuant to Section 1600 of the California Fish and Game Code.

San Diego Regional Water Quality Control Board (RWQCB) is identified as a Trustee Agency that is responsible for the protection of California's water resources and water quality. The San Diego RWQCB is responsible for issuance of a Construction Activity General Construction Permit and National Pollutant Discharge Elimination System (NPDES) Permit to ensure that on-site water flows do not result in siltation, other erosional effects, or degradation of surface or subsurface water quality. The San Diego RWQCB also would be responsible for issuing a Waste Discharge Permit for Project impacts to RWQCB jurisdictional areas pursuant to the Porter-Cologne Water Quality Act.

Responsible agencies may include but are not limited to SDG&E, OMWD, and the Vallecitos Water District pertaining to approvals and permits for utility infrastructure installation and connections.

Subsequent discretionary actions associated with Project implementation include but are not limited to issuance of Grading Permits by the County of San Diego, to permit implementation of the Project's proposed subdivision map, TM 5643.

1.6 Project Inconsistencies with Applicable Regional and General Plans

State CEQA Guidelines §15125(d) requires that several types of regional plans be assessed for potential Project inconsistency. Pursuant to the *Environmental Impact Report Format and General Content Requirements* (County of San Diego, 2006), this subchapter should focus on:

“...the project’s inconsistencies with regional and/or general plans. The inclusion of a discussion on the project’s consistency with regional and general plans is not necessary. If no inconsistencies are found, the plans that were reviewed must simply be listed accompanied by a statement that no inconsistencies were found.”

In EIR Section 2.4, *Land Use and Planning*, Table 3.8-1, *Consistency with Applicable Regional and General Plans*, lists the regional plans that were reviewed, provides summary findings and, where necessary due to inconsistencies or public controversy, references the EIR Section in which a comprehensive discussion occurs. See Section 2.4 for more information regarding Project consistency with applicable plans, policies, and regulations that apply to the Project site.

1.7 Lisa of Past, Present, and Reasonably Anticipated Future Projects in the Project Area

The State CEQA Guidelines define cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15335). The guidelines further state that the individual effects may be the various changes resulting from a single project or the changes resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts may result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355). CEQA Guidelines Section 15130 requires that the EIR include either (a) a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or (b) 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 a cumulative impact.

For purposes of this EIR, the geographic scope of the cumulative analysis for each environmental topic in Chapters 2.0 and 3.0 includes a combination of growth projections and a project list. Population and employment data used for this analysis was developed for the San Diego County region by SANDAG for year 2050 (SANDAG 2021). As stated in Section 2.6.4 of this EIR, the traffic impact analysis used the SANDAG Series 13 Year 2035 Transportation Model for analysis of near-term impacts. The cumulative impact analysis for other environmental issues used the SANDAG 2050 Regional Growth Projections because it describes the impacts of growth from a long-term perspective based on adopted land use plans and is less subject to short-term fluctuations in economic conditions and land development cycles (SANDAG 2021). For long-term traffic impacts, the SANDAG Year 2035 Transportation Model was used. In addition to being used for assessing traffic impacts, the SANDAG model incorporates other projects including growth projections that are analyzed as part of EIR Section 2.4, *Land Use and Planning*, and Section 3.9, *Population and Housing*. Table 1-4, *Cumulative*

Developments, identifies the list of approved/pending projects that were used for the near-term cumulative traffic impact analysis.

A detailed discussion of potential cumulative impacts also is included for each environmental issue in Chapters 2.0 and 3.0 of this EIR.

1.8 Growth Inducing Impacts

CEQA requires that a discussion be prepared in environmental documents regarding the ways in which a Project could be growth inducing. The State CEQA Guidelines identify a project as growth-inducing if it would foster economic growth or population growth, or results in the construction of new housing, either directly or indirectly, in the surrounding environment (State CEQA Guidelines, Section 15126.2(d)). New employees from commercial or industrial development, schools, golf courses, and new population from residential development represent direct forms of growth. Indirect forms of growth include the demand for additional goods and services associated with the increase in project population that would reduce or remove barriers to growth in other nearby locations.

Under CEQA, growth inducement is not necessarily considered detrimental, beneficial, or of little significance to the environment. The growth inducing potential of a project could be considered significant if it fosters growth or results in a concentration of population in excess of what is assumed in adopted master plans, land use plans, or projections made by regional planning agencies, such as the San Diego Association of Governments (SANDAG). Additionally, a project could be considered growth inducing if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans or policies.

The Project is located within the San Dieguito Community Plan area. The Project site has a Semi-Rural General Plan Regional category and is designated for Semi-Rural (SR-1 and SR-10) land uses. The Semi-Rural land use designation allows for development of residential uses, limited by the slopes located on-site. The Project site is allowed a maximum of 64 dwelling units. Pursuant to State law, the Project includes a Density Bonus Permit to allow for a 20% increase in the maximum allowable number of residential dwelling units in exchange for reserving 5% of the dwelling units on-site for “Low” Income Affordable Housing (defined as 50% to 80% of the Area Median Income [AMI]). Approval of the Density Bonus Permit would allow for an increase in the maximum allowable dwelling units from 64 dwelling units to 76 single-family dwelling units in exchange for reserving seven units restricted for “Low” Income Affordable Housing. Pursuant to California Government Code Sections 65915 through 65918, any increases in density under the State Density Bonus Law are consistent with the General Plan. Thus, although the Project proposes 76 dwelling units, the Project is considered consistent with the land use designations applied to the site by the County of San Diego General Plan.

While the Project would increase the number of residential dwelling units in the County, this change would generally be in response to population growth forecasts and the resulting County-wide demand for housing. For the San Dieguito Community Planning Area, where the Project is located, forecasts by SANDAG show an increase of 1,379 single-family dwelling units from 2020 to 2035 and an additional 504 single-family dwelling units from 2035 to 2050 (SANDAG 2013). The 76 single-family dwelling units proposed by the Project would be consistent with this population forecast. Because the

Project is consistent with the existing land use designation and would not generate population growth beyond the levels assumed for the region, the Project would not conflict with any population projections for the region and would, therefore, also be consistent with the Regional Plan. (Helix, 2023c)

Therefore, because the intensity proposed for the Project would be consistent with the County General Plan, and because the Project would not include infrastructure sized only for this Project and would not provide infrastructure improvements which could lead to growth beyond what is currently allowed for by the existing County General Plan, no significant growth would be induced as a result of the Project. Accordingly, the Project is not considered to be growth inducing pursuant to CEQA Guidelines Section 15126.2(d).

Table 1-1 Tentative Map No. 5643 Lot Summary

Land Use	Lot Numbers	Acreage
Single Family Residential	1-76	18.27
Park	A	0.31
Open Space	G-H, N-T	63.90
Detention Basins	F, J-L	2.40
Roadways	B-E	4.34
Totals	--	89.23

Table 1-2 Location of CEQA Required Topics

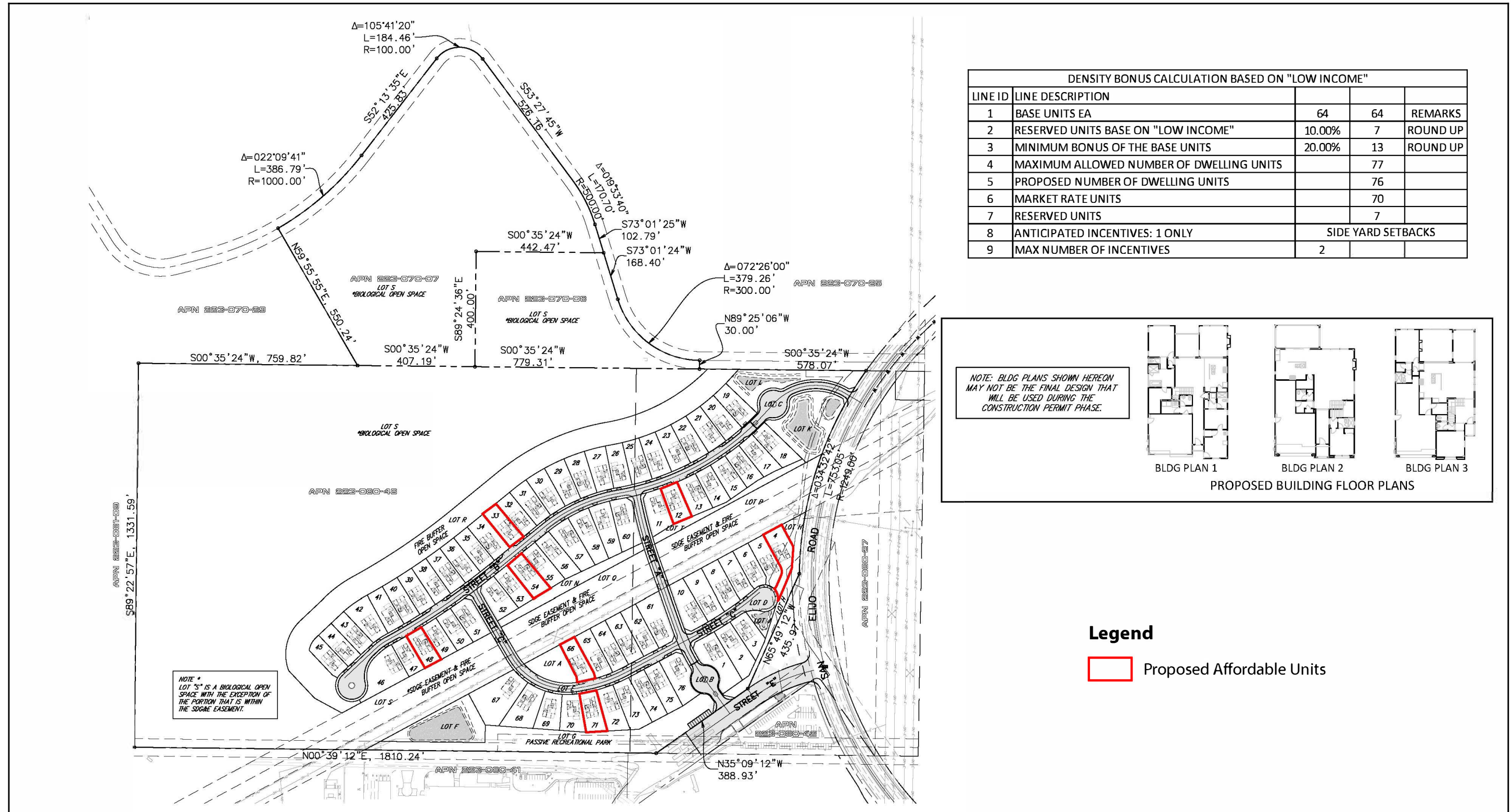
CEQA Required Topic	CEQA Guidelines Section Reference	Location in this SEIR
Table of Contents	15122	Table of Contents
Summary	15123	Section 1.0
Environmental Setting	15125	Section 4.0
Project Description	15124	Section 3.0
Significant Environmental Effects of the Project	15126.2(a)	Section 5.0
Energy Impacts	15126.2(b) & Appendix F	Subsection 5.6
Significant Environmental Effects Which Cannot be Avoided if the Project is Implemented	15126.2(c)	Section 5.0 & Section 6.2
Significant Irreversible Environmental Changes Which Would be Caused by the Project Should it be Implemented	15126.2(d)	Section 6.3
Growth-Inducing Impact of the Project	15126.2(e)	Section 6.4
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	15126.4	Section 5.0 & Table 1-1
Consideration and Discussion of Alternatives to the Project	15126.6	Section 7.0
Effects Not Found to be Significant	15128	Section 6.1
Organizations and Persons Consulted	15129	Section 8.0 & Technical Appendices
Discussion of Cumulative Impacts	15130	Section 5.0

Table 1-3 Matrix of Project Approvals

Approvals	Agency/Agencies
Tentative Map No. 5643	County of San Diego
Density Bonus Permit PDS2021-DB-21-001	
Site Plan Review (PDS2022-STP-22-018)	
Administrative Permit (PDS2020-AD-20-011)	
Grading Permit	
Section 1600 – Streambed Alteration Agreement	California Department of Fish and Wildlife
Waste Discharge Permit	San Diego Regional Water Quality Control Board
National Pollutant Discharge Elimination System (NPDES) Permit	San Diego Regional Water Quality Control Board

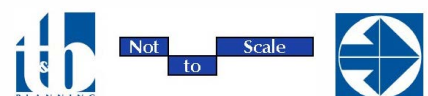
Table 1-4 Cumulative Developments

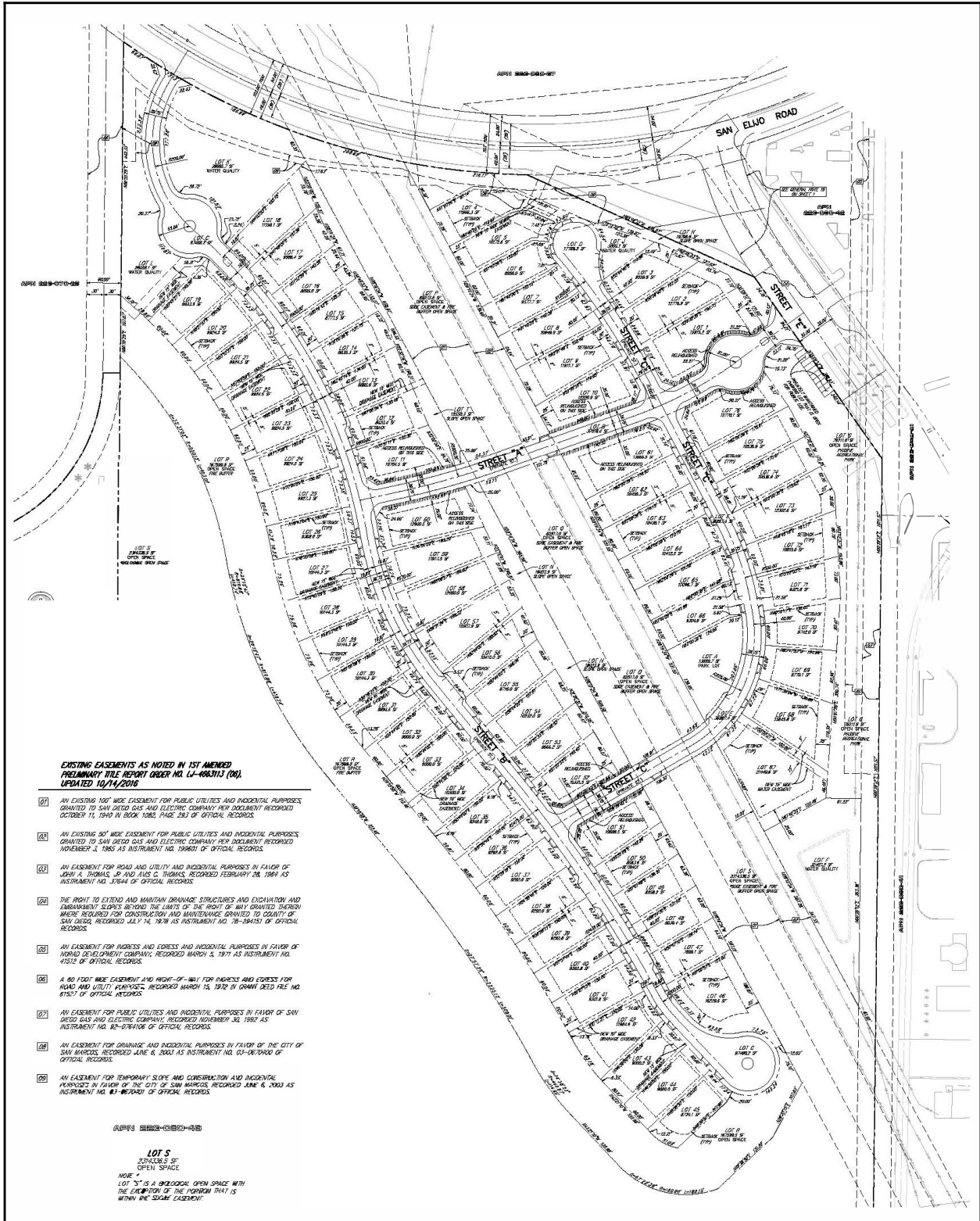
Cumulative Project	Land Use
Corner @ 2 Oaks	This project is located at the southwest corner of Twins Oaks Valley Road and San Marcos Boulevard intersection. This project proposes to construct a 13,499 square foot building for office and commercial use as well as 118 multi-family dwelling units.
Kaiser Permanente	This project is located at 400 Craven Road. This project proposes to construct a 428,500 square foot building for medical office space and accommodate 206 hospital beds. This project would be an extension of the already existing Kaiser Permanente located at same location.
Brookfield Residential (multi-family)	This project is located at the southwest corner of Twin Oaks Valley Road and South Village Drive. This project proposes to develop 220 multi-family dwelling units.
Fenton South (Discovery Village South)	This project is located at future extension of Discovery Street. This project proposes to develop 230 single family dwelling units.
Mesa Rim Climbing Gym	This project is located at 285 Industrial Street. This project proposes to construct 28,000 square foot building for indoor recreation climbing gym
Artis Senior Living	This project is located at the northeast corner of Rancho Santa Fe Road and San Elijo Road intersection. This project proposes to construct a congregate care facility accommodating 64 beds.
Block 3 Housing	This project is located at the northeast corner of June Way and Barham Drive intersection. This project proposes to develop a student housing facility accommodating 342 beds.
Loma San Marcos Specific Plan Phase 2	This project is located on San Elijo Road. This project proposes to construct 213,621 SF of Movie Production space and a 6-story office building measuring 120,000 SF.



Source(s): Excel Engineering (04-01-2021)

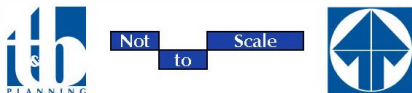
Figure 1-1



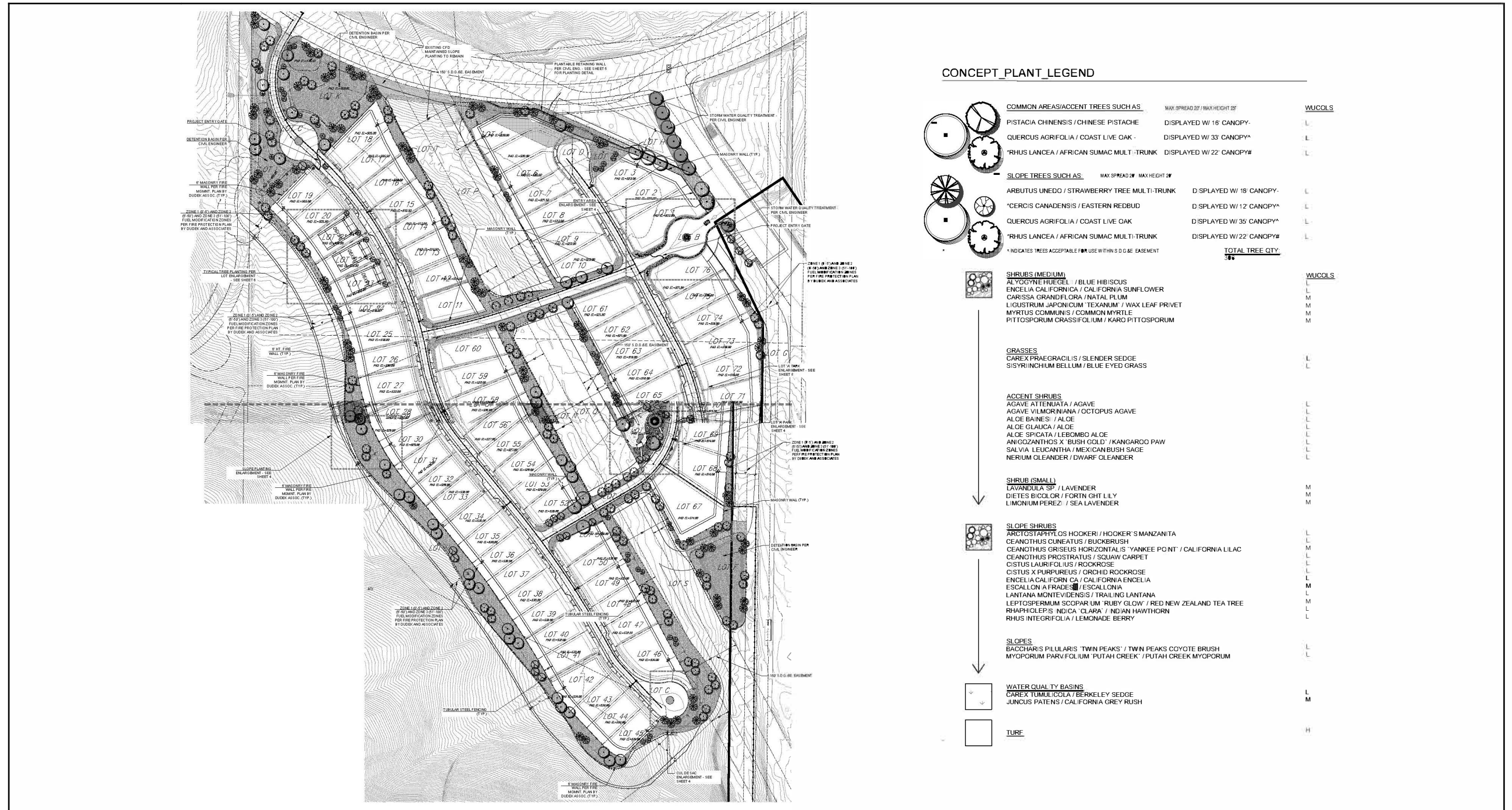


Source(s): San Diego County (March 2023)

Figure 1-2

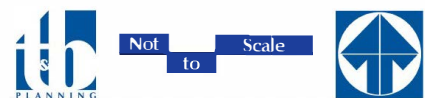


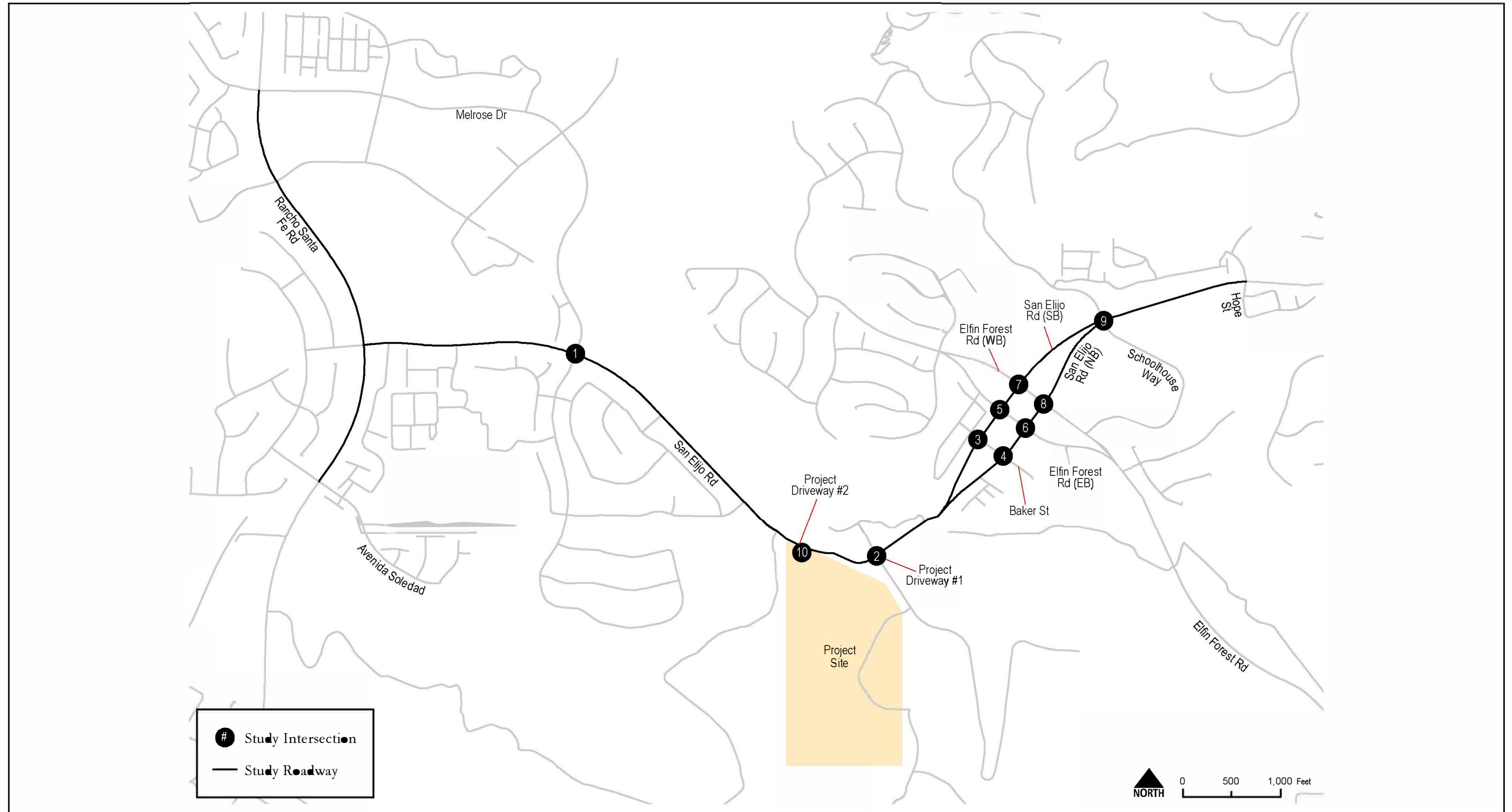
Tentative Map No. 5643



Source(s): Gillespie Moody Patterson, Inc. (08-12-2021)

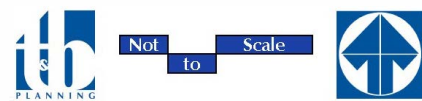
Figure 1-3

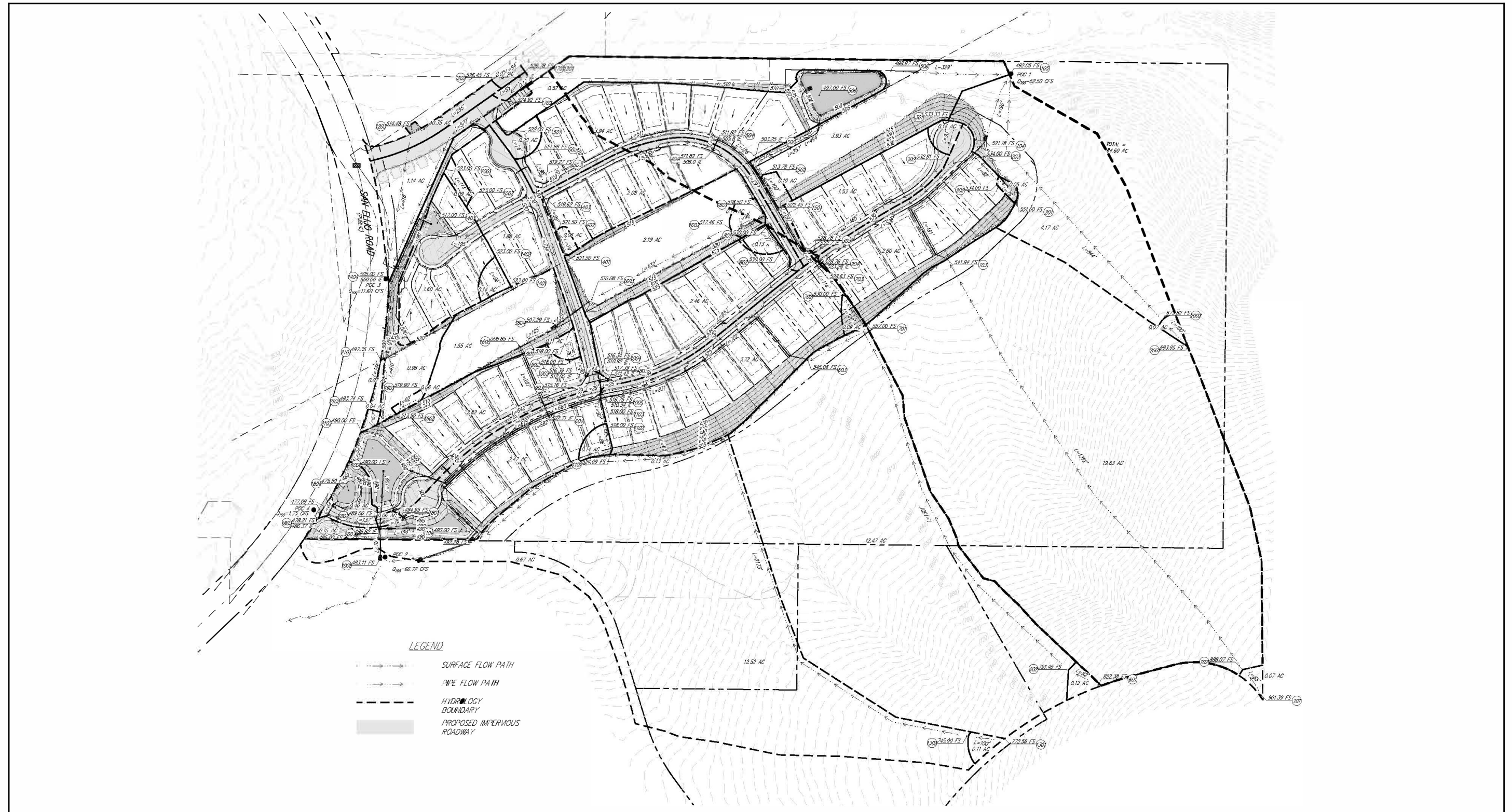




Source(s): Chen Ryan (05-30-2023)

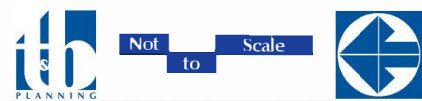
Figure 1-4

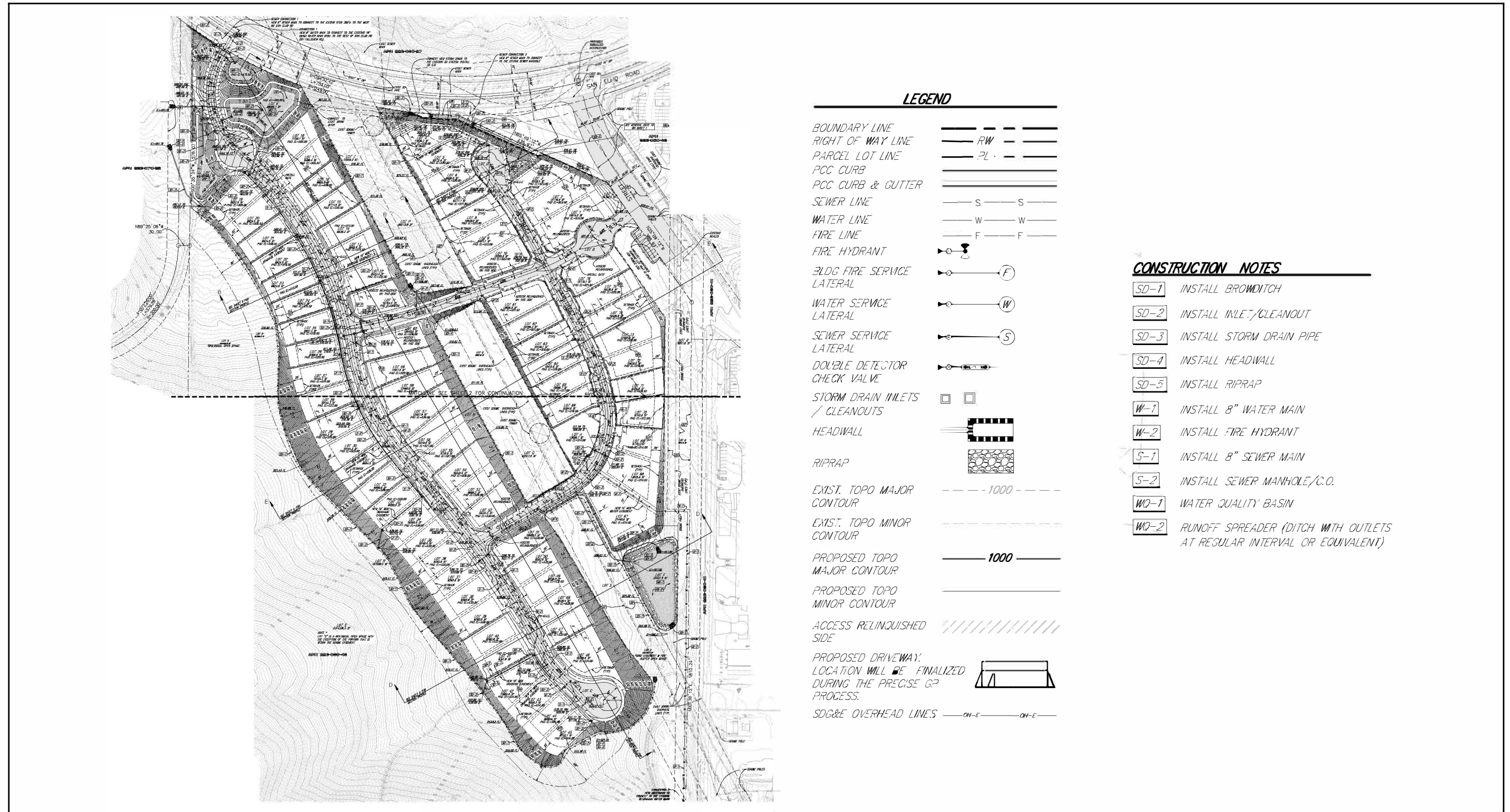




Source(s): Excel Engineering (04-01-2021)

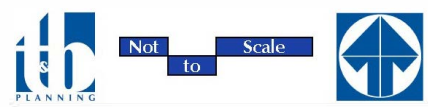
Figure 1-5

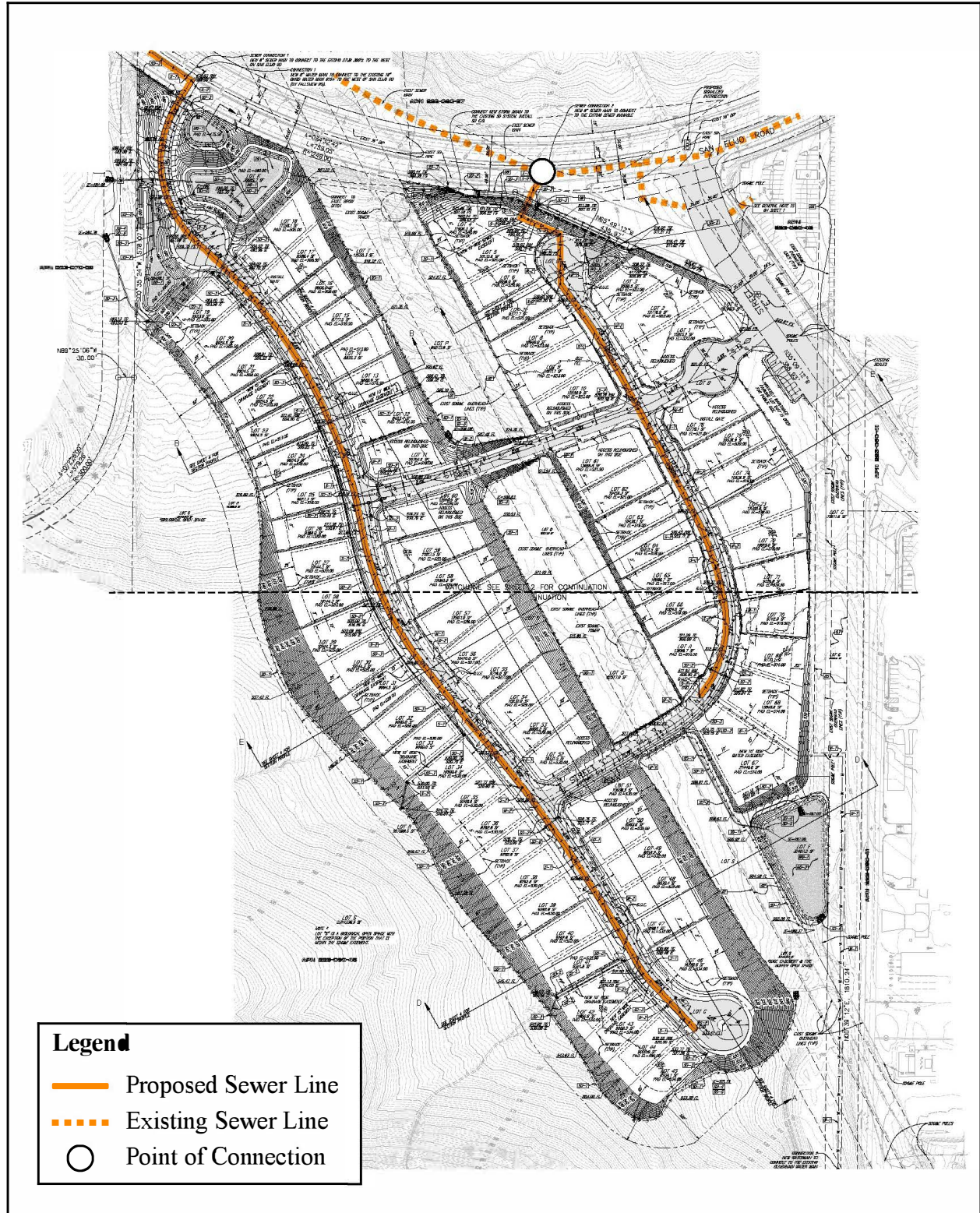




Source(s): San Diego County (March 2023)

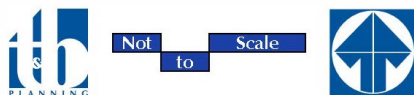
Figure 1-6



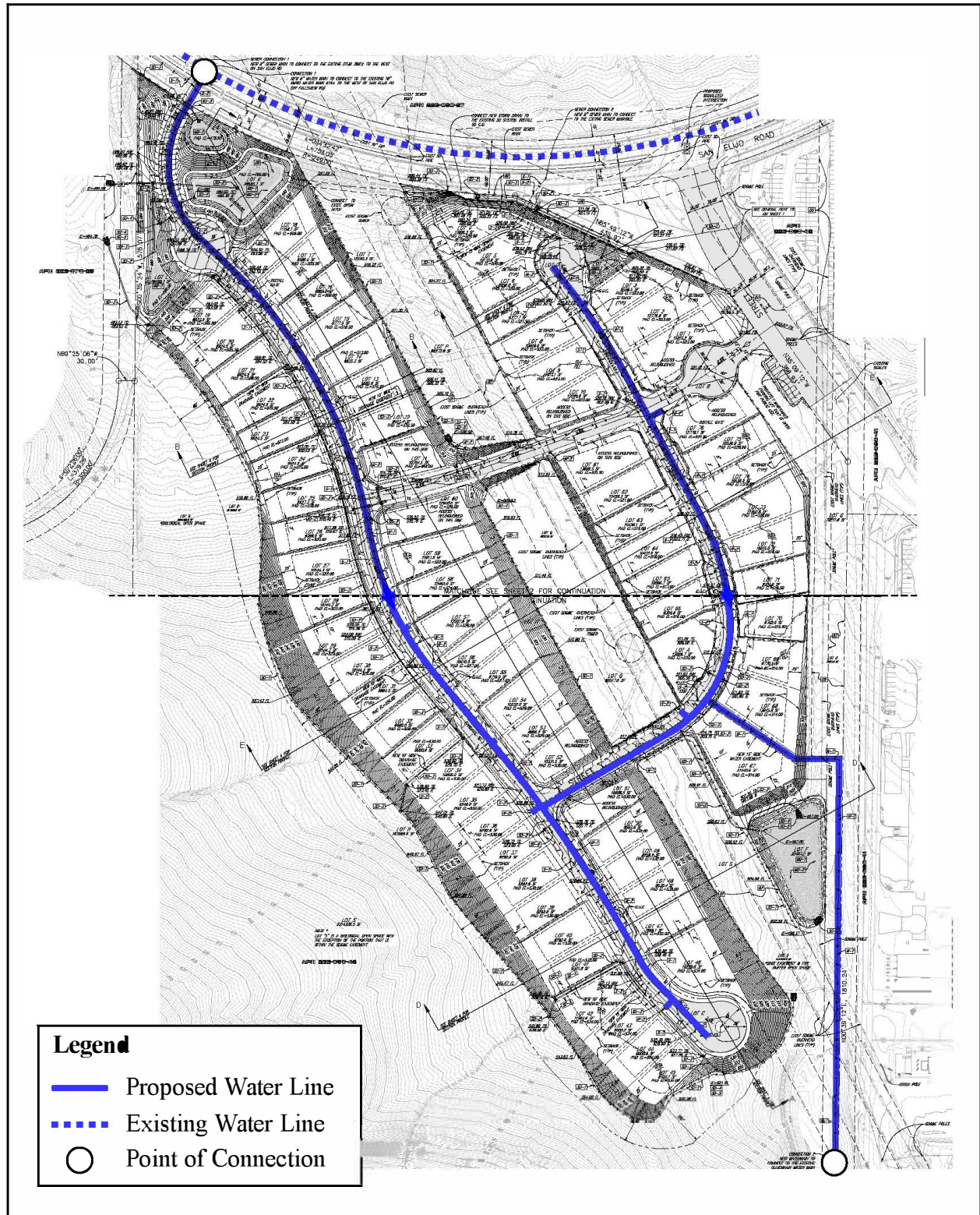


Source(s): San Diego County (March 2023)

Figure 1-7

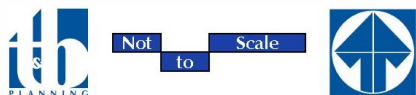


Sewer Plan

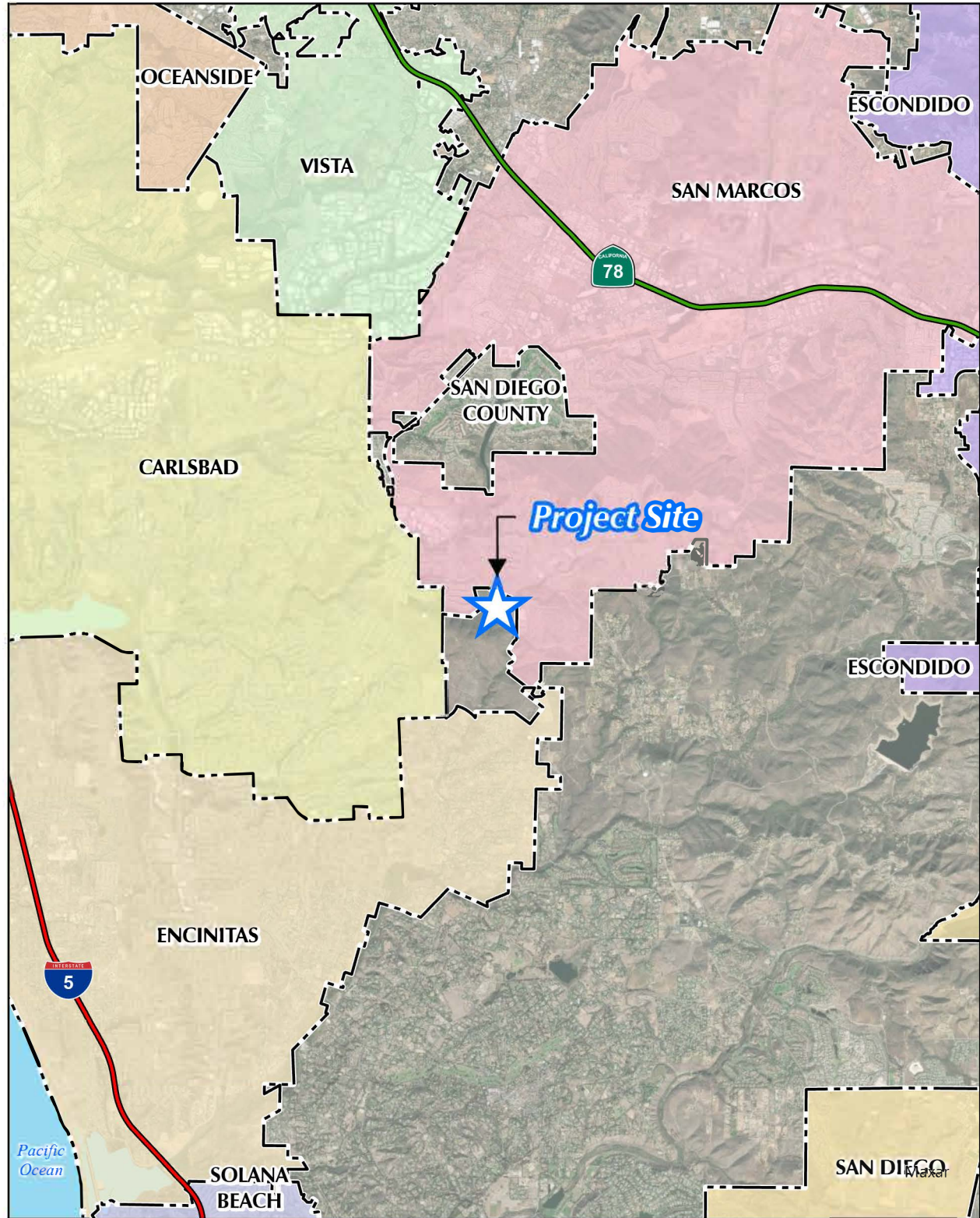


Source(s): San Diego County (March 2023)

Figure 1-8

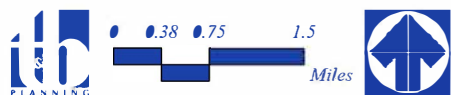


Water Plan



Source(s): Esri, SANGIS (2023)

Figure 1-9

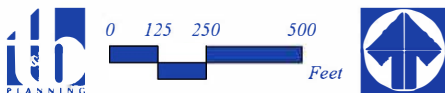


Regional Location Map

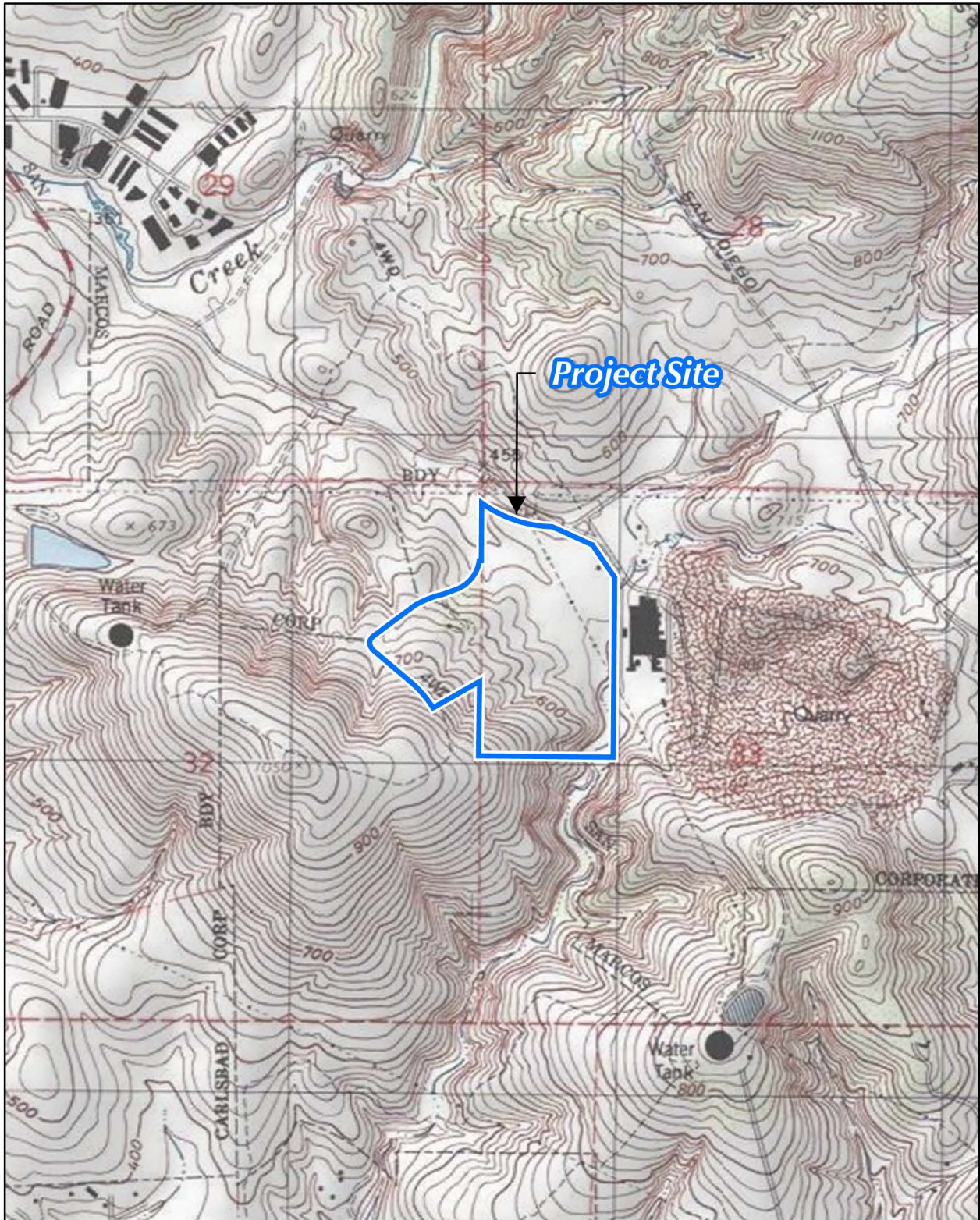


Source(s): Esri, Nearmap Imagery (September 2022)

Figure 1-10

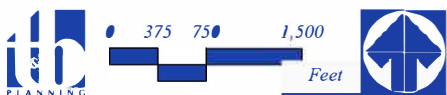


Aerial Photograph



Source(s): Esri, USGS (2022)

Figure 1-11



Topographic Map

2.0 ENVIRONMENTAL EFFECTS FOUND TO BE SIGNIFICANT

Effects found to be significant during the EIR preparation process are Biological Resources; Cultural Resources; Global Climate Change; Land Use and Planning Noise; Tribal Cultural Resources; and Transportation. These topics are analyzed in Chapter 2.0.

2.1 Biological Resources

The analysis contained in this section is based on a Biological Technical Report prepared for the Project by Alden Environmental, Inc. (herein, “Alden”) located in *Appendix B* of this EIR (Alden, 2024). This section describes, at a project-level, the existing biological resources on and adjacent to the Project site and the governing plans and policies relating to biological resources; identifies guidelines for determining the significance of biological impacts; evaluates potential Project effects, including cumulative effects, on biological resources; and identifies feasible mitigation measures. A Notice of Preparation (NOP) for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Seven comment letters related to biological resources were received. The Endangered Habitats League (received September 9, 2022) requested that the Project be clustered in the least sensitive location to the maximum extent possible, be evaluated for consistency with the North County MSCP, and impacts be fully mitigated. Jodi Rowin (received September 23, 2022) requested that the EIR evaluate impacts due to the removal of wildlife corridors and open space. Jerry Block (received September 27, 2022) requested that the EIR evaluate impacts on protected biological resources due to an increase in population. The California Department of Fish and Wildlife (CDFW) (received October 3, 2022) requested the EIR incorporate prior CDFW scoping efforts, include in-perpetuity preservation of mitigation lands, and in-perpetuity management and protection of mitigation lands. Jay Petrek (received October 3, 2022) requested that the EIR include provisions for ensuring the viability of on-site species. The Sierra Club (received October 3, 2022) requested that the EIR address how the Project’s proposed biological open space areas relate to the conservation areas in the surrounding areas, highlight linkages/wildlife corridors, and address restoration of coastal sage scrub. The Escondido Creek Conservancy (received October 2, 2022) requested that the Project implement maximum mitigation ratios be implemented, that the EIR addresses impacts to California Gnatcatcher Core areas, and that mitigation addresses wildlife movement and rare and threatened species.

2.1.1 Existing Conditions

2.1.1.1 Existing Setting

The Project site is characterized by a topographic saddle in the northerly/northeasterly portion of the site with relatively broad low-relief drainages flowing to the northwest and southeast. Elevations within the overall site limits range from a low elevation of 490 above mean sea level (amsl) in the southeastern drainage to a high of 930 amsl near the southwestern property limit, as shown on Figure 1-11. Under existing conditions, the Project site is undeveloped and includes several unimproved dirt roads and trails.

The northern portion of the site was subject to previous disturbance and was used as a laydown yard for construction equipment. Additionally, a portion of the western area of the site was used for agricultural uses. The site has a long history of disturbance, with clearing and construction-related activities visible in historic aerial imagery as far back as 1947 through the 2000s. (Alden, 2024)

Information pertaining to the biological resources on the Project site was accumulated through field investigations conducted by Alden in 2014 and 2020, as well as from a review of the California Natural Diversity Database (CNDDDB), the United States Fish and Wildlife Service (USFWS) database, and the SanBIOS database. This information was compiled and reviewed prior to biological field surveys. Detailed information, including survey methodologies, can be found in *Appendix B* to this EIR. (Alden, 2024)

Vegetation communities were mapped within the Project site and a 100-foot perimeter surrounding the Project site. Additionally, a special status plant species survey, surveys for the coastal California gnatcatcher (CAGN; *Polioptila californica californica*), Crotch's bumble bee (CBB; *Bombus crotchii*) and burrowing owl (BUOW; *Athene cunicularia*), and a habitat assessment for the Hermes copper butterfly (*Lycaena Hermes*) were conducted in June 2020. (Alden, 2024)

The Project site is dominated by non-native grassland and Mafic southern mixed chaparral. In total, nine distinct vegetation communities were mapped within the Project site: coastal sage scrub, disturbed coastal sage scrub, scrub oak chaparral, mafic chamise chaparral, mafic southern mixed chaparral, non-native grassland, eucalyptus woodland, disturbed habitat, and developed and ornamental habitat. Areas associated with the off-site proposed improvements, a total of 1.2 acres, consist of three vegetation communities: coastal sage scrub, disturbed habitat, and developed and ornamental habitat. Developed and ornamental land is the predominant land cover type within the off-site area. (Alden, 2024)

As shown in Table 2.1-1, *Existing Vegetation Communities/Habitat Types*, coastal sage scrub was subdivided as non-disturbed versus disturbed depending on the percent native shrub cover and dominance of nonnative species. The distribution of mapped vegetation communities is depicted in Figure 2.1-1, *Project Vegetation Communities and Sensitive Resources/Impacts*. Details regarding distribution and species composition of mapped vegetation communities are provided in *Appendix B*.

2.1.1.2 Special Status Species

For the purposes of this EIR, special-status species include the following:

- Species listed (or proposed for listing) under the FESA or CESA
- Species protected under other State or federal regulations (e.g., California Fish and Game Code Sections 3503 and 3512, MBTA)\
- Wildlife species identified by CDFW as Species of Special Concern (SSC)
- Plant species ranked by the California Native Plant Society (CNPS)
- Species considered sensitive by the County of San Diego (i.e., plants included on County Lists A through D and wildlife included in County Groups 1 or 2)

- Species covered by the Final Multiple Species Conservation Program MSCP Plan (see Table 3-5 of the MSCP Plan [MSCP 1998])

Focused surveys for special-status plant and wildlife species were conducted per appropriate protocols in 2020 as described in *Appendix B*.

Special-Status Plant Species

Four special-status plant species were confirmed to be located on the Project site. The plant species detected were Orcutt's brodiaea (*Brodiaea orcuttii*), Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), Nuttall's scrub oak (*Quercus dumosa*), and Ashy spike-moss (*Selaginella cinerascens*). (Alden, 2024)

Appendix J of the Project's Biological Technical Report in *Appendix B* to this EIR includes a list of potentially occurring special-status plant species that were not recorded during focused plant surveys. Other than the four species listed above that were found to be present on the site, the remaining species were determined to have low potential to occur or are not expected to occur.

Special-Status Wildlife Species

Five special-status animal species were recorded on the Project site during focused surveys conducted in 2020 and 2023. The site supports two federally listed animal species: the Coastal California gnatcatcher (*Polioptila californica californica*) and the Least Bell's vireo (*Vireo bellii pusillus*). Additionally, the site supports three State listed animal species: Western spadefoot toad (*Spea hammondi*), Cooper's hawk (*Accipiter cooperii*), and Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). Burrowing owl and CBB were not found during focused surveys. (Alden, 2024)

CDFW listed species with moderate potential to occur on the Project site are the coast horned lizard (*Phrynosoma coronatum*), the coast patch-nosed snake (*Salvadora hexalepis virgultea*), the coastal whiptail (*Salvadora hexalepis virgultea*), the two-stripe garter snake (*Thamnophis hammondi*), the Dulzura pocket mouse (*Chaetodipus californicus*), the Mexican long-tongued bat (*Choeronycteris mexicana*), the San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), the San Diego desert woodrat (*Neotoma lepida intermedia*), and the western mastiff bat (*Eumops perotis*). Species considered sensitive by the County of San Diego only (i.e., species identified by the County of San Diego as Group 1 or Group 2 and not identified with special status by USFWS or CDFW) are the Bell's sage sparrow (*Artemisospiza bell*), the California horned lark (*Eremophila alpestris actia*), the red-shouldered hawk (*Buteo lineatus*), and the turkey vulture (*Cathartes aura*). (Alden, 2024)

In total, 56 species of birds were observed or detected on the site, and the site supports a variety of shrubland, grassland, and eucalyptus woodland habitats that are expected to support year-round foraging and breeding season nesting of migratory birds. All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA). In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during

the nesting season (generally February 1 to September 1). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. As a standard condition, the Project must comply with the MBTA. (Alden, 2024)

2.1.1.3 Jurisdictional Wetlands and Waterways

During the field visits, the Project site was inspected for potential wetland resources potentially subject to U.S. Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), streambed habitats potentially subject to CDFW jurisdiction pursuant to Sections 1600 *et seq.* of California Fish and Game Code, and surface waters potentially subject to permitting from the Regional Water Quality Control Board (RWQCB). The effort also included determining the presence or absence of potential County Resource Protection Ordinance (RPO) wetlands. (Alden, 2024)

During the field visits, a single unvegetated streambed was found to occur in the southern portion of the site. This streambed is ephemeral in nature; therefore, it is not a Corps jurisdictional Waters of the U.S. However, the ephemeral unvegetated streambed in the southern portion of the Project site is a Waters of the State and subject to regulation by both the CDFW and RWQCB. There are no RPO wetlands on site; the streambed within the Project footprint does not meet the County criteria for wetlands. (Alden, 2024)

2.1.1.4 Wildlife Corridors and Habitat Linkages

A corridor is a specific route that is used for the movement of species. Local corridors allow wildlife access to resources such as food, water, and shelter within the framework of its daily routines. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A linkage is an area of land that supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stones that are comprised of a fragmented archipelago arrangement of habitat over a linear distance (Alden, 2023).

Important corridors and linkages have been identified on a local and regional scale throughout the Multiple Habitat Conservation Program (MHCP) and Multiple Species Conservation Program (MSCP) planning areas. Figure 2.1-2, *North County MSCP (Draft) Regional Map*, shows the Project's location within the Draft North County MSCP and the surrounding vicinity. Additionally, Figure 2.1-3, *Cumulative Study Area & Regional Context*, shows the Project site's location in comparison to cumulative development in the area and the location of the Draft North County MSCP preserve areas on a regional scale.

The planning objectives of most corridors and linkages in coastal San Diego County include establishing a connection between the northern and southern regional populations of the California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species. The proposed North County preserve system incorporates existing preserves and ensures connections between these preserves through soft-line conservation areas, referred to as the

Pre-approved Mitigation Area (PAMA). It is not expected that all land within PAMA will be incorporated into the preserve system. As shown in Figure 2.1-3, the Project site is located within the PAMA and designated preserve areas are located south and west of the Project site. While the Project site is inside the PAMA, the site is not within a core or linkage. (Alden, 2024)

Large mammals such as coyote detected on the site may use the Project site and the adjacent Rancho La Costa Reserve and additional PAMA to the south and west for movement. However, movement in the local area is partially restricted by existing development in the area. Therefore, the Project site is unlikely to contribute substantially to regional wildlife movement and habitat connectivity.

2.1.2 Regulatory Setting

Federal

Federal Endangered Species Act

Administered by the USFWS, the federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a ‘take’ under the ESA. Section 9(a) of the ESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” ‘Harm’ and ‘harass’ are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

The United States Fish and Wildlife Service (USFWS) identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. There is no critical habitat designated on site.

Sections 7 and 10(a) of the federal ESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major construction activity if it may affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species’ use of the site and impacts to Corps jurisdictional areas. Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP). The term “incidental” applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how steps taken would ensure the species’ survival must be submitted for issuance of Section 10(a) permits.

Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to September 1). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. As a standard condition, the Project must comply with the MBTA.

Rivers and Harbors Act and Clean Water Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the Clean Water Act (CWA). The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all WUS. Permitting for projects filling WUS (including wetlands) is overseen by the Corps under Section 404 of the CWA. Projects could be permitted on an individual basis or be covered under one of several approved Nationwide Permits. Individual Permits are assessed individually based on the type of action, amount of fill, etc. and typically require substantial time (often longer than 6 months) to review and approve, while Nationwide Permits are pre-approved if a project meets appropriate conditions.

State of California

California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. California ESA Section 2081 authorizes the CDFW to enter into a memorandum of agreement for the take of listed species for scientific, educational, or management purposes.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The California

ESA follows the NPPA and covers both plants and animals designated as endangered or threatened with extinction. Plants listed as rare under NPPA were also designated rare under the California ESA.

California Fish and Game Code

California Fish and Game Code (Sections 1600 through 1603) requires a California Department of Fish and Wildlife (CDFW) agreement for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement (SAA).

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1970 grants the State Water Resource Control Board (SWRCB) and its regional offices (RWQCBs) power to protect water quality and is the primary vehicle for implementation of the State's responsibilities under Section 401 of the CWA. The Porter-Cologne Act grants the SWRCB authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. Typically, the SWRCB and RWQCB act in concert with the Corps under Section 401 of the Federal CWA in relation to permitting fill of federal jurisdictional waters.

California Natural Communities Conservation Planning Act

The California Natural Communities Conservation Planning (NCCP) Act of 1991 (Section 2835) allows the CDFW to authorize interim take of species covered by plans in agreement with NCCP guidelines. A Natural Communities Conservation Program initiated by the State of California focuses on conserving coastal sage scrub, and in concert with the USFWS and the federal ESA, is intended to avoid the need for future federal and state listing of coastal sage scrub-dependent species. The County of San Diego became a participant in the NCCP in 1993 for projects located within the planning area for the Coastal Sage Scrub NCCP with the intent to "...provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP process guidelines were established as interim guidelines until formal subregional plans were approved. The draft NCMSCP will be the subregional plan for this portion of the County when adopted. Until then, an NCCP 4(d) take permit (Habitat Loss Permit; HLP) is required for the project to demonstrate compliance with the NCCP Act.

County of San Diego

Habitat Loss Permit Ordinance

The Habitat Loss Permit (HLP) Ordinance was adopted in March of 1994 in response to both the listing of the CAGN as a federal threatened species and the adoption of the NCCP Act by the State. Pursuant to the Special 4(d) Rule under the federal ESA, the County is authorized to issue "take permits" for the CAGN (in the form of HLPs) in lieu of Section 7 or 10(a) permits typically required from the USFWS. Although issued by the County, the USFWS and CDFW must concur with the issuance of an HLP for it to become valid as take authorization under the federal ESA. The HLP Ordinance states that projects

must obtain an HLP prior to the issuance of a grading permit, clearing permit, or improvement plan if the project would directly or indirectly impact any of several coastal sage scrub habitat types. The HLP Ordinance requires an HLP if coastal sage scrub or related habitat will be impacted, regardless of whether it is currently occupied by the California gnatcatcher (CAGN). An HLP is not required for projects within the boundaries of the MSCP that have an adopted subarea plan; this project lies within the boundaries of the draft NCMSCP, which is still in draft form. HLPs are also not required for projects that have separately obtained Section 7 or 10(a) permits for take of the CAGN; this project has not.

Approval of an HLP is based on findings made pursuant to the HLP Ordinance. Findings need to demonstrate that a project's loss of coastal sage scrub would not exceed the County's 5 percent interim allowable loss limit. It would also have to demonstrate that the habitat loss would not preclude connectivity between areas of high habitat values or preclude or prevent the preparation of a subregional NCCP plan. Additionally, the findings must show that the habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with Section 4.3 of the Southern California Coastal Sage Scrub NCCP Process Guidelines, and that the habitat loss would not appreciably reduce the likelihood of survival and recovery of listed species in the wild. Finally, the habitat loss must be incidental to otherwise lawful activities. An HLP application must be filed with the County if the draft NCMSCP has not been adopted at the time of its environmental review because impacts to coastal sage scrub occupied by the CAGN would occur.

Resource Protection Ordinance

The County regulates natural resources (among other resources) as sensitive biological resources via the Resource Protection Ordinance (RPO) (County 2011), the regulations of which cover wetlands, wetland buffers, sensitive plant and animal species, sensitive vegetation communities/habitat types, and habitats containing sensitive animals or plants.

RPO wetlands are defined as lands having one or more of the following attributes:

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained, hydric soil; or
- An ephemeral or perennial stream is present, whose substratum is predominately non-soil, and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

According to the RPO, the following are not considered RPO wetlands:

- Lands which have attribute(s) specified above, solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:
 - Have negligible biological function or value as wetlands;
 - Are small and geographically isolated from other wetland systems;
 - Are not vernal pools; and
 - Do not have substantial or locally important populations of wetland dependent sensitive species.

- Lands that have been degraded by past legal land disturbance activities to the point that they meet the following criteria as determined by the Director of Planning and Land Use:
 - Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
 - Do not have substantial or locally important populations of wetland dependent sensitive species.

As noted previously, the Project would not affect County RPO wetlands.

Sensitive Habitat Lands are defined by the RPO as:

- Land which supports unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the State CEQA Guidelines (14 Cal. Admin. Code Section 15000 et seq.), including the area which is necessary to support a viable population of any of the above species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning wildlife corridor.
 - “Unique vegetation community” refers to associations of plant species which are rare or substantially depleted. These may contain rare or endangered species, but other species may be included because they are unusual or limited due to a number of factors, for example: (a) they are only found in the San Diego region; (b) they are a local representative of a species or association of species not generally found in San Diego County; or (c) they are outstanding examples of the community type as identified by the CDFW listing of community associations.

There are no unique vegetation communities on the Project site; however, Sensitive Habitat Lands on-site include coastal sage scrub, scrub oak chaparral, mafic chamise chaparral, mafic southern mixed chaparral, and non-native grassland because it supports Orcutt’s brodiaea, which is a County List A Species.

The remaining portions of the Project site are not Sensitive Habitat Lands as they are not areas that are necessary to support a viable population of rare and endangered species in perpetuity, or which are critical to the proper functioning of a balanced natural ecosystem or a wildlife corridor.

2.1.3 Analysis of Project Effects and Determinations as to Significance

This section describes the potential impacts to sensitive biological resources resulting from Project implementation. The Project has been designed around an extensive open space system in close coordination with USFWS and CDFW. Development areas are positioned specifically to preserve wildlife movement corridors, species, and habitat, including vernal pools, San Diego fairy shrimp (*Branchinecta sandiegonensis*) and the Quino checkerspot butterfly (*Euphydryas editha quino*). As a result, potential impacts to sensitive biological resources have been greatly avoided and minimized. Nonetheless, potential impacts to sensitive biological resources are still expected to occur as a result of Project implementation.

Biological resources may be either directly or indirectly impacted, and these impacts may be either permanent or temporary in nature. These key terms are defined below.

- *Direct*: Direct impacts are caused by a project and occur at the same time and place as the project.
- *Indirect*: Indirect impacts occur later in time or are farther removed in distance but are still reasonably foreseeable and attributable to project-related activities.
- *Permanent (Long-term)*: All impacts that result in irreversible effects or removal of biological resources are considered permanent. For the purposes of this analysis, long-term impacts are synonymous with permanent impacts.
- *Temporary*: Any impacts considered to have reversible effects on biological resources may be viewed as temporary. As a general rule, impacts are considered temporary only if timely efforts would ensure that the impact is corrected to conditions equal to or superior to the conditions that existed prior to impact and if a monitoring program is implemented to ensure that the efforts are successful within a reasonable time frame.

Guidelines to determine the significance of each potential impact to sensitive biological resources are listed below. These significance guidelines are consistent with the County of San Diego's *Guidelines for Determining Significance and Report Format and Content Requirements – Biological Resources* (County Biology Guidelines) (County 2010) and Appendix G of the CEQA Guidelines. For organizational and presentation purposes, the order of the guidelines presented below differs slightly from the order presented in the County Biology Guidelines and CEQA Guidelines.

In accordance with these guidelines, a significant impact to biological resources would result if the Project would:

- Have a substantial adverse effect on riparian habitat or other sensitive natural communities (including riparian habitats) identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means.

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Interfere substantially with the movement of a 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.
- Conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or 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 following discussion of potential effects to sensitive biological resources is divided into five subject areas based on the significance guidelines outlined above: (1) riparian habitat and other sensitive natural communities; (2) federally protected wetlands; (3) special-status species; (4) wildlife movement and nursery sites; and (5) local policies, ordinances, and adopted plans. The analysis described herein for each of these subject areas considers the information presented in the County Biology Guidelines for each significance guideline.

2.1.3.1 Riparian Habitat and Other Sensitive Natural Communities

Guidelines for the Determination of Significance

A significant impact to riparian habitat and other sensitive natural communities would occur if the Project would:

- Have a substantial adverse effect on riparian habitat or another sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Guidelines Source

This significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

On-site Removal of Sensitive Vegetation Communities

As shown in Table 2.1-2, *Impacts to Vegetation Communities/Habitat Types*, the Project would result in permanent impacts to 7.2 acres of coastal sage scrub and coastal sage scrub-disturbed, 0.2-acre of scrub oak chaparral, 1.6 acres of mafic chamise chaparral, 2.8 acres of mafic southern mixed chaparral, and 15.4 acres of non-native grassland (Alden, 2024). The direct loss of these habitat communities is considered a significant direct impact and would require mitigation (**Significant Direct Impact BIO-1**).

Impacts to Jurisdictional Waters and Wetlands

The identified ephemeral streambed on the Project site is unvegetated and does not meet County or agency criteria for wetland/riparian habitat. As such, Project-related impacts to Corps, CDFW, RWQCB, or County RPO wetlands or riparian habitats would be less than significant.

The Project design does not propose any groundwater withdrawal or other activity that could lower the groundwater table; thus, no impact would occur.

Human Activity On-Site

Increases in human activity on the Project site could result in significant indirect impacts to adjacent preserved habitat through potential unauthorized access and disturbance. Landscaping associated with the Project also could result in the introduction of invasive, non-native plant species to the Project footprint and their spread outside the Project footprint into the proposed open space. Potential indirect impacts associated with human activities would thus be significant and would require mitigation (**Significant Indirect Impact BIO-2**).

2.1.3.2 Federally Protected Wetlands

Guidelines for the Determination of Significance

A significant impact to federally protected wetlands would occur if the Project would:

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Guidelines Source

This significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

The Project site contains an unvegetated streambed in the southern portion of the site. The unvegetated streambed is ephemeral and not subject to Corps jurisdiction; therefore, there would be no impacts to waters of the United States. However, the unvegetated streambed is considered a non-wetland waters of the State. Impacts to the non-wetland waters of the State from the Project total 0.01 acre (546 linear feet) and permits from the CDFW and RWQCB would be required. The unvegetated ephemeral streambed does not meet the criteria for County RPO wetlands. As such, there are no affected County RPO wetlands. Impacts to wetlands jurisdictional to CDFW and RWQCB are anticipated as a result of Project activities which would be significant and would require mitigation (**Significant Indirect Impact BIO-3**).

2.1.3.3 Special-Status Species

Guidelines for the Determination of Significance

A significant impact to special-status species would occur if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Guidelines Source

This significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

Special-Status Plant Species

Project construction would result in direct and permanent impacts to an estimated 1,710 individual Orcutt's brodiaea plants (County List A) out of an estimated population of 1,740 individuals on site (**Significant Direct Impact BIO-4**). The suitable habitat area mapped for the species on site is 3.8 acres (depicted on Figure 2.1-1), of which 3.4 acres would be impacted and 0.4 acre would be preserved. In addition, Project construction would result in direct and permanent impacts to 12 individual Nuttall's scrub oaks (County List A), which is the dominant species in scrub oak chaparral on site (**Significant Direct Impact BIO-4**). Project construction would preserve ashy spike-moss (County List D) and would avoid southwestern spiny rush (County List D) as both occur within the proposed on-site open space preserve area. (Alden, 2024)

Special-Status Animal Species

The western spadefoot toad (County Group 2) was observed opportunistically during a gnatcatcher survey visit in 2020. The species also was heard calling by a Project biologist on March 13, 2021, but no eggs, tadpoles, or adults were directly observed. The Project biologist observed eggs and tadpoles in two water holding basins on March 20, 2021; however, a total of eight basins (with a total area of 0.14 acre) were determined to be suitable for toad breeding because they are all deep enough, and evidence of current and/or previous ponding was observed (refer to Figure 2.1-1). The spadefoot toad likely uses the surrounding coastal sage scrub, chaparral, and grassland on site for non-breeding purposes. Project construction would result in the direct and permanent removal of three locations where western spadefoot toad were observed and eight water holding basins (totaling 0.14 acre in area) suitable for toad breeding (Figure 2.1-1). The Project would also result in the direct and permanent removal of 7.2 acres of Diegan coastal sage scrub and Diegan coastal sage scrub-disturbed habitat on and off site, 4.6 acres of chaparral on site, and 15.4 acres of non-native grassland on site that could be used for non-breeding purposes. Construction could also cause direct injury/mortality to individual

toads (**Significant Direct Impact BIO-4**). Project-related grading, clearing, construction or other activities would permanently remove sensitive native or naturalized habitat. (Alden, 2024)

The California gnatcatcher (CAGN) (federal threatened; County Group 1) was found on the site using the site for breeding, and based on the species' behavior patterns and habitat needs, it would also use the site for non-breeding purposes (e.g., feeding and sheltering). Based on the habitat needs and behavioral patterns of the southern California rufous-crowned sparrow (County Group 1), it likely breeds, feeds, and shelters on site, as well. The Cooper's hawk (County Group 1) was observed flying overhead and potentially foraging on site; it was not observed breeding on site (no raptor nests were observed). However, the eucalyptus trees on the site have potential to be used as nesting sites for the species. (Alden, 2024)

Project construction would result in the direct and permanent removal of 7.2 acres of Diegan coastal sage scrub and Diegan coastal sage scrub-disturbed habitat on- and off-site occupied by the CAGN. Project construction could also have temporary noise impacts on CAGN nesting (**Significant Direct Impact BIO-4**).

Project construction would result in the direct and permanent removal of 27.2 acres of the scrub, chaparral, and grassland habitats on- and off-site used, or potentially used, by the southern California rufous-crowned sparrow. Project construction could also have temporary noise impacts on this species' nesting (**Significant Direct Impact BIO-4 and BIO-5**).

Project construction would result in the removal of potential foraging habitat for the Cooper's hawk, and eucalyptus woodland that has potential to support Cooper's hawk breeding, feeding, and sheltering. Project construction could also have temporary noise impacts on Cooper's hawk nesting (**Significant Direct Impact BIO-4 and BIO-5**).

Indirect Impacts

Indirect impacts consist of secondary effects of a project that can occur during construction or from a project once built. As such, potential indirect impacts to sensitive plant and wildlife species may occur from Project-related night lighting; the potential introduction of invasive, non-native plant species; and unauthorized human access into sensitive areas during the Project's construction and long-term operation (**Significant Indirect Impact BIO-2**).

Fugitive Dust

Fugitive dust produced by construction could disperse onto native vegetation beyond the Project impact footprint. A continual cover of dust can reduce the overall vigor of individual plants by reducing their photosynthetic capabilities and increasing their susceptibility to pests or disease. This, in turn, can affect animals dependent on these plants. Fugitive dust also may make plants unsuitable as structural habitat for insects and birds. Fugitive dust would be a short-term, temporary impact of Project construction.

Noise

Excessive noise could impact the nesting success of the CAGN, southern California rufous-crowned sparrow, and/or Cooper's hawk through grading, clearing, fire fuel modification, and/or other noise-generating activities such as construction. This potential impact could occur during the general avian breeding season of January 15 through August 15 and affect each of these three species (the specific CAGN breeding season is February 15 to August 15, the specific breeding season for the southern California rufous-crowned sparrow is mid-March to mid-June [San Diego Management and Monitoring Program 2010], and the Cooper's hawk specific breeding season is January 15 to July 15).

Night Lighting

Night lighting that shines on or spills into native habitats adjacent to the project impact footprint can prevent nocturnal wildlife from using the habitat. It can also cause loss of native wildlife by providing nocturnal predators with an unnatural advantage over their prey. Night lighting could cause these impacts over the short-term during construction and over the long-term during operation of the Project.

Invasive, Non-native Plant Species

Invasive, non-native plant species are threats to native biological resources in that they can, for example, displace native plants, increase the threat of wildfire by increasing fuel load, and supplant plants used as forage by herbivorous species. Vehicles are the primary conduits for the spread of many invasive species, and activities and soil disturbance associated with construction of the Project could spread invasive, non-native plant species to adjacent areas supporting native vegetation. However, the adjacent undeveloped areas are like the Project site in plant species composition, so Project construction would not result in the spread of invasive, non-native plant species to those adjacent areas because they are already present. New invasive, non-native plant species could be introduced to the Project site, however, in erosion control materials.

Landscaping associated with the Project could include species that are not native to the area. Therefore, project landscaping could result in the introduction of invasive, non-native plant species to the Project footprint and their spread outside the project footprint.

Public Access

Increases in human activity in the area could result in degradation of preserved habitat and associated indirect impacts on special status species through the removal of vegetation and creation of unauthorized trails. In addition, illegal dumping of lawn and garden clippings, trash, and other refuse could occur.

Domestic Animals

The Project is residential in nature, so domestic predators (e.g., dogs and cats) may be introduced to the proposed preserve adjacent to the Project footprint. Such introductions have potential to harm native wildlife species through behavioral pattern disturbance and predation.

2.1.3.4 Wildlife Movement and Nursery Sites

Guidelines for the Determination of Significance

A significant impact to wildlife movement and nursery sites would occur if the Project would:

- Interfere substantially with the movement of a 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.

Guidelines Source

This significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

The Project site is not within a core or linkage and does not serve as a nursery site (Alden, 2024). Large mammals may, however, use the Project site and the local area for local movements, but movement opportunities are limited to the immediate north and east by existing development. Rather, the primary local movement pattern for large mammals occurs farther to the east through the Elfin Forest and Harmony Grove core areas identified in the draft NCMSCP. Therefore, the Project site has been determined to not contribute substantially to wildlife movement and habitat connectivity and, therefore, the Project's implementation would not substantially affect wildlife movement. As a benefit, however, the Project proposes a design that clusters residential development in the north portion of the site in order to preserve a corridor for local wildlife movement in the southern portion of the Project site connected with adjacent open space preserves to the west and south. Therefore, impacts to wildlife movement would be less than significant.

2.1.3.5 Local Policies, Ordinances, and Adopted Plans

Guidelines for the Determination of Significance

A significant impact to local policies, ordinances, and adopted plans would occur if the Project would:

- Conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Guidelines Source

This significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

Under the County of San Diego Significance Thresholds, impacts associated with consistency to local policies, ordinances, and adopted plans would occur if a project impacted any amount of wetland or sensitive lands as outlined in the RPO. As noted above under the discussion of Threshold a, the Project would not impact wetlands but would result in removal of sensitive vegetation communities in the Project's development footprint including: Diegan coastal sage scrub and Diegan coastal sage scrub-disturbed; scrub oak chaparral; mafic chamise chaparral; mafic southern mixed chaparral; and non-native grassland. Thus, impacts associated with Project consistency with the RPO would be potentially significant.

Also, implementation of the Project could potentially result in the taking of migratory birds or destruction of active migratory bird nests and/or eggs protected under the MBTA, as breeding birds may temporarily or permanently leave their territories to avoid construction activities, which could lead to reduced reproductive success and increased mortality. Although compliance with the federal MTBA is a mandatory regulatory requirement, potential impacts to migratory birds protected under the MTBA would be potentially significant during the Project's construction (**Significant Direct Impact BIO-5**).

2.1.4 Cumulative Impact Analysis

The cumulative study area is depicted on Figure 2.1-3, *Cumulative Study Area & Regional Context*. The area of consideration for cumulative impacts on biological resources (i.e., the cumulative study area) includes an area of unincorporated County including and surrounding the Project site and bordered by the cities of Carlsbad to the west, San Marcos to the north and west, Escondido to the east, and Encinitas to the southwest. The cumulative study area encompasses part of the Escondido Creek watershed and numerous preserves and reserves. The cumulative study area was chosen because it includes areas with similar biological resources to the Project site. This area includes lands within a reasonable distance from the Project site that may have a biologically based connection to the site in terms of habitat connectivity and development in the region. (Alden, 2024)

The loss of coastal sage scrub habitat would represent a potential cumulative impact on the western spadefoot toad, CAGN, southern California rufous-crowned sparrow, and other special status species with moderate potential to occur in this habitat. The Project would directly impact 7.2 acres of Diegan coastal sage scrub and Diegan coastal sage scrub-disturbed and one pair of CAGN through the removal of this habitat during construction. Projects are required to implement avoidance measures so that direct, inadvertent take of CAGN individuals is prevented. In addition, projects are required to compensate for impacts to coastal sage scrub at a minimum 1:1 ratio to ensure that the loss of occupied and suitable habitat for the CAGN is mitigated. Regardless, the Project would contribute to the

significant cumulative impact on the CAGN and other special status species. (Alden, 2024) (**Significant Cumulatively Considerable Impact BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5**).

2.1.5 Significance of Impacts Prior to Mitigation

Significant Direct and Cumulatively Considerable Impact BIO-1: Project-related grading, clearing, construction or other activities would permanently remove sensitive native or naturalized habitat.

Significant Indirect and Cumulatively Considerable Impact BIO-2: Human activities that occur near sensitive habitat communities and plant and wildlife species and their habitats have the potential to indirectly impact sensitive vegetation communities, plants, and wildlife.

Significant Indirect and Cumulatively Considerable Impact BIO-3: Project-related grading, clearing, construction or other activities would result in direct impacts to a non-wetland waters of the State subject to CDFW and RWQCB jurisdiction.

Significant Direct and Cumulatively Considerable Impact BIO-4: Project-related grading, clearing, construction or other activities would result in direct and indirect impacts to special-status plant species and special-status animal species.

Significant Direct and Cumulatively Considerable Impact BIO-5: Project-related grading, clearing, construction or other activities would impact sensitive lands and could potentially result in the taking of migratory birds protected under the MBTA.

2.1.6 Mitigation

M-BIO-1 Prior to vegetation clearance and issuance of grading permits, the Project Applicant shall provide evidence that on- and off-site preservation of 44.2 acres of sensitive vegetation communities, off-site preservation of 0.2 acre of non-sensitive communities, and on- and off-site restoration of 5.9 acres (including creation of 21 water holding basins suitable for western spadefoot toad breeding) as shown in Table 7 and on Figure 6 of the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental has occurred.

M-BIO-2 Prior to vegetation clearance and issuance of grading permits, temporary construction limits fencing with sign messaging indicating that the fencing shall not be crossed, shall be installed along the edges of the approved limits of physical disturbance where construction activities adjoin open space preservation areas. The positioning of the fencing shall be verified by a County-approved professional biologist prior to the commencement of ground-disturbing construction activities. The fencing shall be maintained in place over the duration of construction activities unless or until it is replaced with permanent open space fencing or another physical barrier.

M-BIO-3 Prior to issuance of the first certificate of occupancy, open space fencing and signage shall be installed at the following locations: 1) at the interface of the Project site and

the adjacent open space preserve; 2) at the southeast corner of the Project site where the site abuts non-preserve area; 3) at the trailhead entering the preserve from the southwest; and 4) around the off-site preserve area adjacent to an existing trail (refer to Figure 6 of the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental for specific locations). The remaining preserve area boundaries shall not be fenced as they are adjacent to Preserve Areas in the Draft NCMSCP (refer to Figure 2 the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental and have steep slopes with impenetrable vegetation, making fence installation unnecessary and infeasible.

- M-BIO-4** Prior to the issuance building permits, the County shall review the Project’s landscape plans and verify that only non-invasive plant species will be planted on the site (i.e., species not listed on the California Invasive Plant Council Inventory rated as Moderate or High).
- M-BIO-5** The Project’s homeowners association (HOA) CC&Rs shall require that 1) landscaping is prohibited from including species listed Moderate or High on the California Invasive Plant Council Inventory; and 2) all domestic cats are required to remain indoors. The HOA shall be responsible for providing information to residents to protect the adjacent open space preserve as the need arises. A copy of the CC&Rs shall be provided to the County for verification prior to issuance of the first certificate of occupancy.
- M-BIO-6** Prior to issuance of grading permits, the Project Applicant shall obtain the appropriate permits/approvals from the regulatory agencies, including the CDFW and RWQCB for impacts to the jurisdictional non-wetland water of the State.
- M-BIO-7** Prior to vegetation clearance and issuance of grading permits, the Project Applicant shall translocate Orcutt’s brodiaea corms from within the Project impact footprint to suitable habitat within the on-site preserve in accordance with a County-, CDFW-, and USFWS-approved translocation plan.
- M-BIO-8** If clearing of vegetation or grading activities will occur during the breeding season for the California gnatcatcher (CAGN) (February 15 to August 31) or nesting raptors such as the Cooper’s hawk (January 15 to July 15), pre-construction survey(s) shall be conducted by a qualified biologist to determine whether these species occur within the construction footprint and/or adjacent areas potentially impacted by construction noise (i.e., 60 dB(A) hourly average or ambient, if greater). If it is determined at the completion of pre-construction surveys that active nests belonging to these sensitive species are absent from the construction limits and adjacent potential noise-impacted area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to these sensitive species occur within the construction limits or adjacent noise-impacted area, the biologist shall determine the physical area in which construction activities cannot occur to protect the nesting

species, and one of two actions shall occur: (1) construction activities in the area delineated by the biologist shall be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) construction activities shall be postponed until a temporary noise barrier or berm is constructed at the edge of the development footprint or other location determined appropriate and effective by the biologist and an acoustical engineer to ensure that noise levels in the occupied habitat are reduced to below 60 dB(A) hourly average or ambient, if greater. Decibel output shall be confirmed by a County-approved acoustical engineer and intermittent monitoring by a qualified biologist shall occur to ensure that the reduced noise levels are being maintained. Implementation of this measure shall also mitigate for potential noise impacts to nesting southern California rufous-crowned sparrows.

2.1.7 Conclusion

The following provides a summary of the significance of the impact identified above under subsection 2.1.3 after incorporation of the mitigation measure identified under subsection 2.1.6.

Less-than-Significant Impact BIO-1 with Mitigation: Implementation of MM-BIO-1 would ensure that the Project's impacts to sensitive vegetation communities are mitigated through on- and off-site preservation and restoration. Accordingly, implementation of the required mitigation would reduce the Project's impacts to less-than-significant levels.

Less-than-Significant Impact BIO-2 with Mitigation: Implementation of MM-BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5 would ensure that potential indirect impacts associated with the Project are mitigated through implementation of fencing, review of landscape plans, and ongoing HOA enforcement actions to ensure no unauthorized human access into sensitive areas occurs, no invasive plant species are introduced to the Project area and that the community is operating responsibly and avoiding potential indirect impacts from invasive plants and domestic cat predation.

Less-than-Significant Impact BIO-3 with Mitigation: Implementation of MM-BIO-6 would ensure that impacts associated with the Project are mitigated by requiring the Project obtain the appropriate CDFW and RWQCB agency permits for impacts to the jurisdictional non-wetland water of the State.

Less-than-Significant Impact BIO-4 with Mitigation: Implementation of MM-BIO-1 would ensure that the Project's direct and potentially indirect impacts to sensitive habitat utilized by sensitive species are addressed through on- and off-site preservation and restoration. Implementation of MM-BIO-2, MM BIO-3, MM BIO-4, and MM BIO-5 would ensure that potential indirect impacts associated with the Project are mitigated through implementation of fencing, review of landscape plans, and ongoing HOA enforcement actions to ensure no unauthorized human access into sensitive areas occurs, no invasive plant species are introduced to the Project area and that the community is operating responsibly and avoiding potential indirect impacts from invasive plants and domestic cat predation. Implementation of MM-BIO-7 would ensure that impacts to Orcutt's brodiaea are addressed through translocation to open space areas on-site. Implementation of MM-BIO-8 would ensure that potential

impacts to sensitive bird species protected by the MBTA do not experience direct take and are sheltered from excessive construction-related noise. Accordingly, implementation of the required mitigation would reduce the Project's potential impacts to less-than-significant levels.

Less-than-Significant Impact BIO-5 with Mitigation: Implementation of MM-BIO-1 would ensure that the Project's impacts to sensitive habitat are addressed through on- and off-site preservation and restoration. Implementation of MM-BIO-8 would ensure impacts to sensitive bird species are protected from direct take and construction-related noise. Accordingly, implementation of the required mitigation would reduce the Project's potential impacts to federally protected migratory birds to less-than-significant levels.

Table 2.1-1 Existing Vegetation Communities/Habitat Types

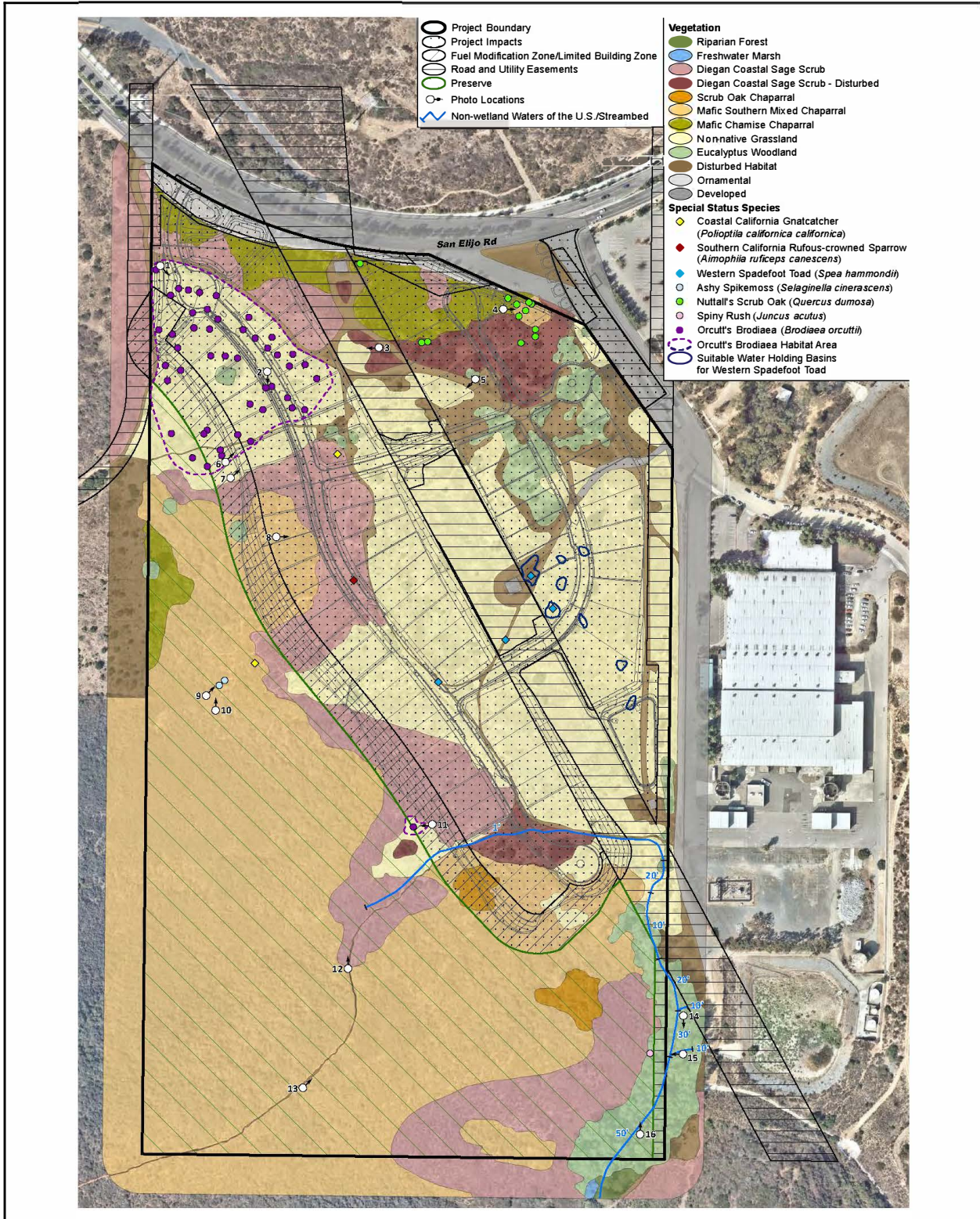
Vegetation Community/Habitat¹	On Site (acres)	Off Site² (acres)
Diegan coastal sage scrub (32500)	9.8	0.2
Diegan coastal sage scrub-disturbed (32500)	2.1	-
Scrub oak chaparral (37900)	0.6	-
Mafic chamise chaparral (37220)	2.4	-
Mafic southern mixed chaparral (37122)	25.7	-
Non-native grassland (42200)	20.9	-
Eucalyptus woodland (79100)	2.9	-
Disturbed habitat (11300)	3.7	0.2
Developed and ornamental (12000)	1.0	0.8
TOTAL ACRES	69.1	1.2

¹Categories and numeric codes are from Oberbauer et al. 2008.

²Off-site acreage values reflect off-site impacts of the Project outside of the Project site boundaries.

Table 2.1-2 Impacts to Vegetation Communities/Habitat Types

Vegetation Community/Habitat	On Site (acres)	Off Site (acres)	Total (acres)
Diegan coastal sage scrub (32500)	5.1	0.2	5.3
Diegan coastal sage scrub-disturbed (32500)	1.9	0.0	1.9
Scrub oak chaparral (37900)	0.2	0.0	0.2
Mafic chamise chaparral (37220)	1.6	0.0	1.6
Mafic southern mixed chaparral (37122)	2.8	0.0	2.8
Non-native grassland (42200)	15.4	0.0	15.4
Eucalyptus woodland (79100)	1.4	0.0	1.4
Disturbed habitat (11300)	2.4	0.2	2.6
Developed and ornamental (12000)	0.8	0.9	1.7
TOTAL ACRES	31.6	1.3	32.9



Source(s): Alden Environmental, Inc. (08-03-2021)

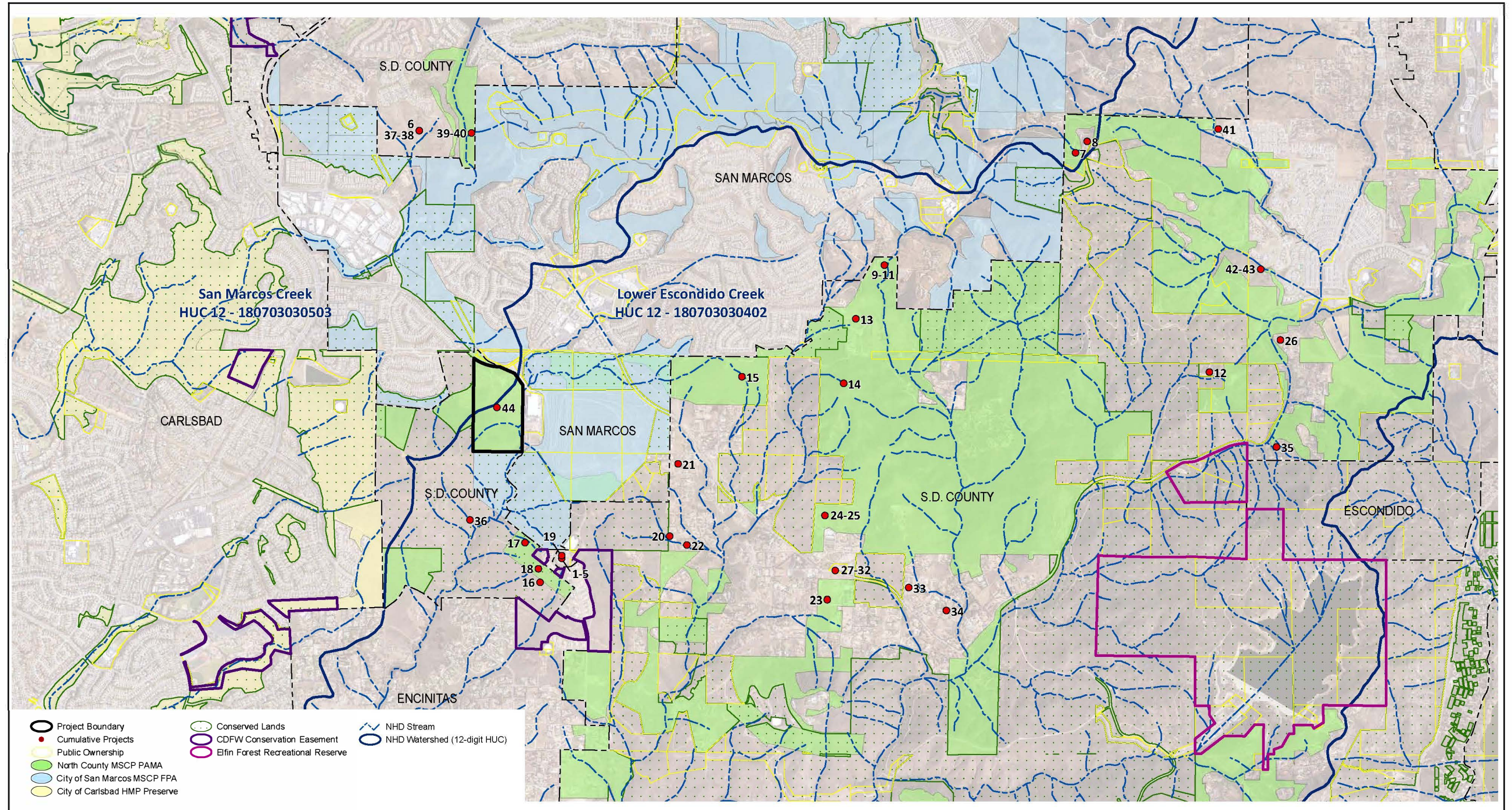
Figure 2.1-1



Not to Scale

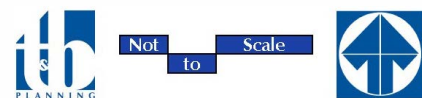


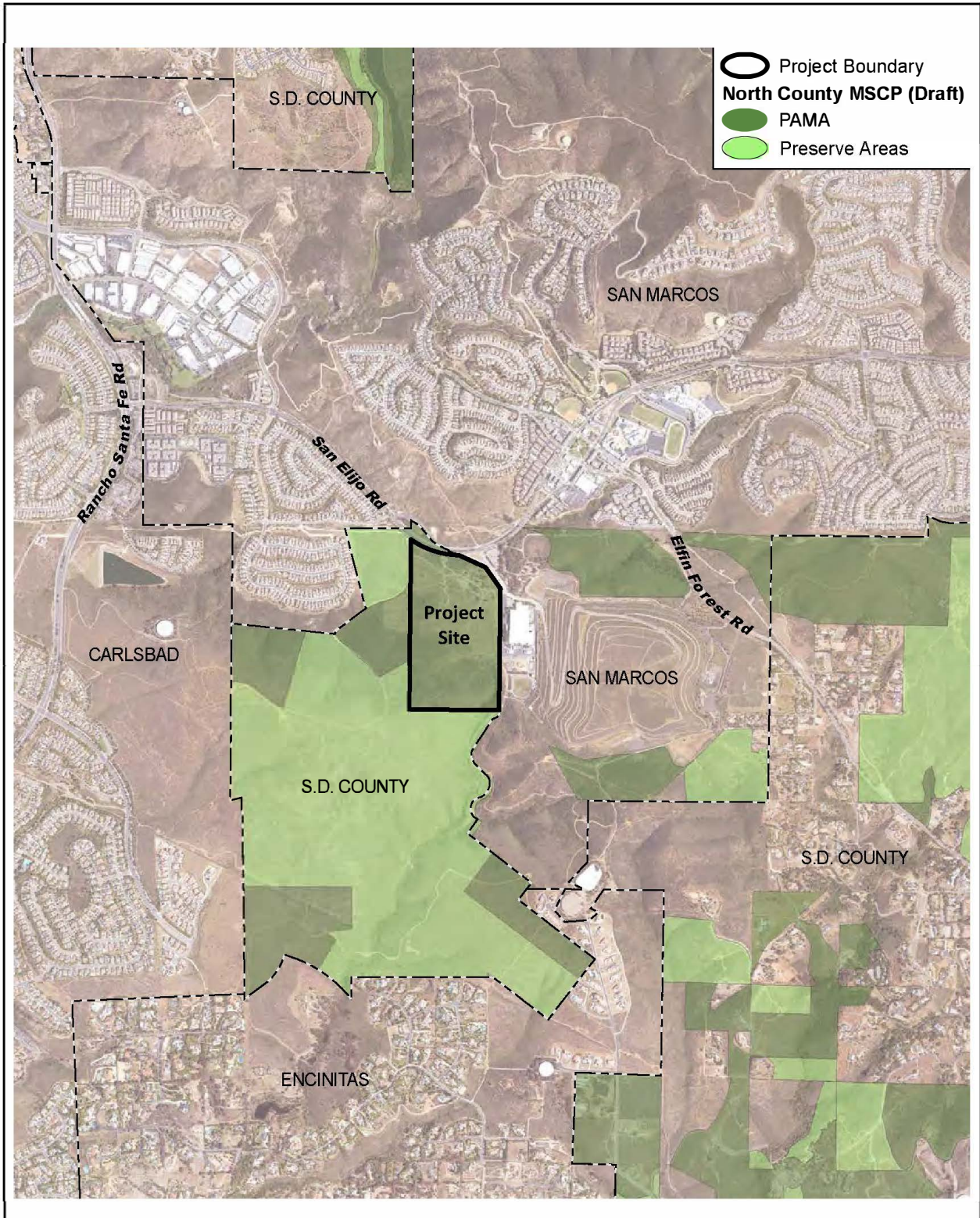
Project Vegetation Communities and Sensitive Resources/Impacts



Source(s): Alden Environmental, Inc. (10-19-2023)

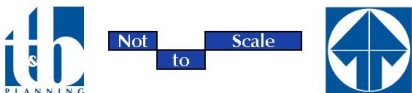
Figure 2.1-2





Source(s): Alden Environmental, Inc. (10-19-2023)

Figure 2.1-3



North County MSCP (Draft) Regional Map

2.2 Cultural Resources

This section provides a Project-specific analysis of the potential impacts to cultural (historical and archaeological) resources from implementation of the Project. The potential historical and archaeological resource impacts are evaluated in a report titled “Cultural Resources Study for Questhaven 64 Project” prepared by Brian F. Smith and Associates (BFSA) in February 2021 and appended to this EIR as *Appendix C1*. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Six comment letters related to tribal cultural resources were received. The Campo Band of Mission Indians (received September 14, 2022), the Barona Band of Mission Indians (received September 8, 2022), The Rincon Band of Luiseño Indians (received September 27, 2024), the San Pasqual Band of Mission Indians (received September 20, 2022), and the Agua Caliente Band of Cahuilla Indians (received September 26, 2022) requested tribal consultation. The Native American Heritage Commission (received September 9, 2022) noted that the Project is subject to AB 52.

It should be noted that confidential information has been redacted from *Appendix C1* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the County of San Diego, and BFSA is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR section, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

2.2.1 Existing Conditions

The Project site is located south of San Marcos Creek and San Elijo Road and primarily includes gently sloping to steep terrain that ranges from relatively flat near the northern boundary to ridges and hillsides near the property’s southern boundary. Topographic elevations within the Project site range from a low elevation of 490 above mean sea level (amsl) in the southeastern drainage to a high of 930 amsl near the southwestern property boundary. Overall, the Project site gently slopes upward from north to southwest. The property is currently undeveloped and has been previously disturbed by the establishment of dirt roads, agricultural uses, general weed abatement activity, and the construction of roads to the north and east. The least amount of disturbance was noted in the southwestern portion of the site.

The Project site is within the Kumeyaay and Luiseño traditional use areas. Three resources (SDI-9847, SDI-11,442, and SDI-22924) were identified within the Project area of potential effect (APE) through the records search and the field survey. Two resources (SDI-9847 and SDI-11,442) could not be located during the survey and were determined to be no longer existent. Archaeological resources and historic resources are located in the vicinity of the Project site and include prehistoric quarries, prehistoric habitation sites, bedrock milling feature sites, lithic scatters, historic road alignment segment, historic rock retaining wall, and historic mine. For a background context of the cultural history for the Project

site and surrounding area, see refer to the Project's Cultural Resource Study included in this EIR as *Appendix C1*.

Archaeological Resources Context

For the region, it is generally accepted that the earliest identifiable culture in the archaeological record is represented by the material remains of the Paleo Indian Period San Dieguito Complex. The San Dieguito Complex was thought to represent the remains of a group of people who occupied sites in this region between 10,500 and 8,000 years before present (YBP), and who were related to or contemporaneous with groups in the Great Basin. For additional information regarding the archaeological resources context, please refer to the Project's Cultural Resources Study, included in this EIR as *Appendix C1*.

Historical Context

San Diego County followed the settlement patterns of California from the 1530s to the early twentieth century. Refer to Technical Appendix C1 for more information. During the first two decades of the twentieth century, the population of San Diego County continued to grow. The population of the inland county declined during the 1890s, but between 1900 and 1910, it rose by about 70 percent. The pioneering efforts were over, the railroads had broken the relative isolation of southern California, and life in San Diego County became similar to other communities throughout the west. After World War I, the history of San Diego County was primarily determined by the growth of San Diego Bay. During this time period, the history of inland San Diego County was subsidiary to that of the City of San Diego, which became a Navy center and industrial city (Heiges 1976). In inland San Diego County, agriculture specialized and recreational areas were established in the mountain and desert areas.

2.2.1.1 Methodology

The cultural resources study appended to this EIR as *Appendix C1* includes the results of an institutional records search, an intensive historic and archaeological resource survey of the Project site, and the detailed recordation of all identified archaeological sites. This study was conducted in conformance with County of San Diego environmental guidelines, Section 21083.2 of the California PRC, and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification of each cultural resource, in addition to the County of San Diego RPO. Specific definitions for archaeological resource type(s) used in *Appendix C1* and this EIR section are those established by the State Historic Preservation Office (SHPO 1995).

Records Search

An archaeological records search for a one-mile radius around the Project site was conducted by the South Coastal Information Center (SCIC) at San Diego State University (SDSU). The SCIC reported that 20 archaeological sites were recorded within the one-mile search radius around the Project site, with two sites recorded within the Project boundaries, which are described below. The remaining 18

cultural resource locations include one historic road alignment segment, one historic rock retaining wall, one historic mine, three prehistoric quarries, two prehistoric habitation sites, five bedrock milling feature sites, and five lithic scatters.

Field Investigation

The information below provides the pertinent field results for the evaluation of significance of the Project's potential impacts to cultural resources. A testing program was implemented for archaeological resource sites that were previously recorded and for previously unrecorded sites in accordance with County of San Diego guidelines and site evaluation protocols on June 24, 2020. Alyssa Contreras, a Kumeyaay Native American representative from Red Tail Environmental was involved in the testing program. The potential for subsurface deposits was assessed through shovel test pit (STP) excavations at SDI-9847, SDI-11,442, and SDI-22,924. No significant historical resources were identified as being located on the Project site in the records search and during field surveys.

Site SDI-9847

Site SDI-9847 is located on the Project site and was originally recorded as an artifact scatter of five flake-based tools and one piece of debitage by Craig F. Woodman in 1983. The site location was revisited by BFSa during the current survey, but the cultural materials were not relocated. To determine if cultural resources had been buried or masked within the mapped location of the resource, five STPs were excavated to 50 centimeters across the site. The diameter of each STP averaged about 30 centimeters. No prehistoric or historic artifacts were recovered, and no culturally modified soil was observed.

The native soil across Site SDI-9847 includes a compact, brown, silty clay ranging between zero and 50 centimeters in depth, which became more compacted in the lower levels. Since no artifacts were recovered and no culturally modified soil was observed, the results of the subsurface excavations indicate that there is no subsurface component to the site. The testing program provided limited information, which facilitated the evaluation of SDI-9847 as a location of limited archaeological significance, as defined by the County of San Diego Archaeological and Historic Resources Guidelines. The site does not represent the level of focused prehistoric activity that would correspond to a prehistoric occupation site. Instead, the site is classified as a previously impacted artifact scatter that no longer retains a surface component, displays no evidence of a subsurface component, exhibits reduced integrity due to use of the land, and, therefore, no residual research potential following the data collection efforts during the current testing program. Site SDI-9847 is not a significant resource as defined by CEQA.

Site SDI-11,442

Site SDI-11,442 is located on the Project site and was previously recorded as a multicomponent site that included a prehistoric temporary camp with shell, lithics, and tools, as well as a historic refuse scatter (Pignuolo and Gallegos 1990). Site SDI-11,442 was revisited by PanGIS, Inc. in 2015 (Cordova 2015),

who was only able to relocate the historic refuse scatter. The site location was revisited by BFSa during the current survey, but no cultural materials were relocated. In order to determine if cultural resources had been buried or masked within the mapped location of the resource, four STPs were excavated to 50 centimeters across the site. The diameter of each STP averaged about 30 centimeters. No prehistoric or historic artifacts were recovered, and no culturally modified soil was observed.

The native soil across the site includes a compact, brown, silty clay with intermittent nodules ranging between zero and 50 centimeters in depth, which became more compacted in the lower levels. Since no artifacts were recovered and no culturally modified soil was observed, the results of the subsurface excavations indicate that there is no subsurface component to the site. The testing program provided limited information, which facilitated the evaluation of the portion of SDI-11,442 recorded within the Project site as a location of limited archaeological significance, as defined by the County of San Diego Archaeological and Historic Resources Guidelines. The site does not represent the level of focused prehistoric activity that would correspond to a prehistoric occupation site. Instead, the site is classified as a previously impacted habitation site that no longer retains a surface component, displays no evidence of a subsurface component, exhibits reduced integrity due to use of the land, and, therefore, no residual research potential following the data collection efforts during the current testing program. Site SDI-11,442 is not a significant resource as defined by CEQA.

Site SDI-22,924

Site SDI-22,924 was identified by BFSa as part of the field survey conducted in 2020/21. The site consists of two pieces of debitage and a lithic adze. In order to test the presence or absence of a subsurface component, five STPs were excavated to 50 centimeters across the site. The diameter of each STP averaged about 30 centimeters. No prehistoric or historic artifacts were recovered, and no culturally modified soil was observed.

The native soil across the site includes a compact, pale brown, silty clay with intermittent, sub-angular nodules ranging between zero and 50 centimeters in depth, which became more compacted in the lower levels. Since no artifacts were recovered and no culturally modified soil was observed, the results of the subsurface excavations indicate that there is no subsurface component to the site. The testing program has provided limited information, which facilitated the evaluation of SDI-22,924 as a location of limited archaeological significance, as defined by the County of San Diego Archaeological and Historic Resources Guidelines. The site does not represent the level of focused prehistoric activity that would correspond to a prehistoric occupation site. Instead, the site is classified as a limited artifact scatter that retains a limited surface component, displays no evidence of a subsurface component, exhibits reduced integrity due to use of the land, and, therefore, no residual research potential following the data collection efforts during the current testing program. Site SDI-22,924 is not a significant resource as defined by CEQA.

Field Survey Results

The survey methodology employed during the BFSAs field investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the Project site. The survey process was limited in some areas by ground cover, particularly in the southern portion of the Project site where heavy vegetation obscured the ground surface and prevented the observation of any artifacts that might be otherwise visible.

In general, the property follows a gradual downward slope from the southwestern reaches of the property to the northeastern terminus. The archaeological survey of the property was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately five-meter intervals. All potentially sensitive areas where cultural resources might be located were closely inspected. During the archaeological survey, one previously unrecorded archaeological site (SDI-22,924) was identified and the recorded locations of sites SDI-9847 and SDI-11,442 were visited. However, no surface evidence of previously recorded sites SDI-9847 and SDI-11,442 could be relocated. Despite this, the recorded locations of the sites identified by the SCIC were tested to search for buried evidence of these sites.

In summary, archaeological investigations at SDI-9847 and SDI-11,442 did not identify any archaeological materials at the recorded site locations within the Project site. The resources previously reported at these sites have likely been moved, buried, or destroyed as a result of previous agricultural activities and/or development to the north and east of the property. Site SDI-22,924 contained a limited surface artifact scatter. However, subsurface testing at the site did not identify any additional archaeological materials associated with the surface scatter.

Native American Consultation

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended added sections to the California Public Resources Code relating to Native Americans and tribal cultural resources. By considering tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available early in the project planning process to identify and address potential adverse impacts to Tribal Cultural Resources (TCRs).

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

Based upon the Sacred Lands File search conducted in 2020 by the NAHC, no sacred sites, TCRs, or Traditional Cultural Landscapes (TCLs) are known to exist within the Project site boundaries and the NAHC returned negative results in the larger Rancho Santa Fe Quadrangle. During the archaeological evaluation conducted by BFSa in 2020/21, no artifacts or remains were identified or recovered that could be reasonably associated with such practices.

For the proposed Project, the County of San Diego invited tribes to consult on the Project. Fourteen tribes (Barona, Campo, Jamul, Kwaaymii, Manzanita, Pala, Pechanga, Rincon, San Luis Rey, San Pasqual, Santa Ysabel, Soboba, Sycuan, and Viejas) were contacted on October 5, 2022. Three tribes (Campo, Rincon, and Viejas) requested consultation. The County requested meeting dates with Viejas on multiple occasions with no response. As such, consultation with Viejas was concluded due to lack of response. The County has consulted with Campo and Rincon. Consultation is ongoing with Campo and Rincon.

2.2.1.2 Regulatory Setting

Federal

National Historic Preservation Act (NHPA)

The National Historic Preservation Act (NHPA) was passed in 1966 and set the foundation for much of the more specific legislation that guides cultural resource protection and management in local jurisdictions such as the County of San Diego. The Act established an Advisory Council on Historic Preservation to help implement and monitor it. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties (both prehistoric and historic resources) and allow the Advisory Council a reasonable opportunity to comment on such undertakings. The goal of the Section 106 process is to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

National Register of Historic Places (NRHP)

Developed in 1981, the National Register of Historic Places (NRHP) is an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. Listing in the NRHP provides formal recognition of a property's historical, architectural, or archaeological significance based on national standards. Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association. The criteria for determining eligibility are essentially the same in content and order as those outlined in CEQA. National Register listing places no obligation on private property owners. There are no restrictions on the use, treatment, transfer, or disposition of private property.

State

California Environmental Quality Act (CEQA)

Section 15064.5 of the CEQA Guidelines, as amended, and the County guidelines, state that a cultural resource would be considered significant if it is:

1. A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in, the California Register (PRC §5024.1; Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
2. A resource included in the local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, 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 (PRC Section 5024.1, Title 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.
4. The fact that a resource is not listed in the California Register, determined not to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), and not identified in an historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(i) or 5024.1.

In accordance with CEQA, cultural resources must be assessed for project-related actions that could directly or indirectly impact them. Under this scenario, impacts to cultural resources not deemed important according to the above criteria would be considered less than significant. A summary of on-site and off-site cultural resources is provided in Section 2.4.2, along with a determination as to the significance of the impact pursuant to Section 15064.5 of the CEQA Guidelines.

California Register of Historical Resources (CRHR)

The California Register of Historical Resources (CRHR) is an authoritative guide for use by State and local agencies, private groups, and citizens to identify the State's historical resources. An historical resource can include any object, building, structure, site, area, or place that is determined to be historically or archaeologically significant. The CRHR also identifies historical resources for State and local planning purposes, determines eligibility for State historic preservation grant funding, and provides a certain measure of protection under CEQA, including Traditional Cultural Properties.

California Assembly Bill 52

California AB 52 states that current California law provides a limited measure of protection for sites, features, places, objects, and landscapes with cultural value to California Native American tribes; including sacred places, including, but not limited to, places of worship, religious or ceremonial sites, and sacred shrines. In recognition of their governmental status, AB 52 requires a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.

Local

San Diego County General Plan

The General Plan (2011a) contains a series of policies in the Conservation and Open Space Element relevant to archaeological and historical resources, human remains, and paleontological resources.

Grading, Clearing, and Watercourses Ordinance

Section 87.429 of the County's Grading and Clearing Ordinance requires that grading operations cease if human remains or Native American artifacts are found; and Section 87.216(a)(7) requires changes to grading plans/operations if it is determined that previously unknown historical resources or unique archaeological resources may be located on the site, and a modification is necessary to prohibit grading in the area of the resources so as to preserve the resources, or to redirect proposed grading so as to avoid the location of such resources until they can be retrieved, or potential impacts to them have been appropriately mitigated.

Section 87.430 of the Ordinance provides that the County official (e.g., permit compliance coordinator) may require a paleontological monitor during all or selected grading operations, to monitor for the presence of paleontological resources. If fossils greater than 12 inches in any dimension are

encountered, then all grading operations in the area of discovery must be suspended immediately and not resumed until authorized by the County official. The Grading Ordinance also requires immediate notification of the County official regarding the discovery. The County official must determine the appropriate resource recovery operation, which the permittee must carry out prior to the County official's authorization to resume normal grading operations.

Resource Protection Ordinance

The County of San Diego's Resource Protection Ordinance (RPO) protects significant cultural resources. The RPO defines "Significant Prehistoric or Historic Sites" as follows:

Sites that provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State, or federal importance. Such locations shall include, but not be limited to:

1. Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
 - a. Formally determined eligible or listed in the NRHP by the Keeper of the National Register; or
 - b. To which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or
2. One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and
3. Any location of past or current sacred religious or ceremonial observances, which is either:
 - a. Protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, or
 - b. Other formally designated and recognized sites, which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

The RPO does not allow non-exempt activities or uses damaging to significant prehistoric or historic lands on properties under County of San Diego jurisdiction. The only exempt activity is scientific investigation authorized by the County. All discretionary projects are required to be in conformance with applicable County of San Diego standards related to cultural resources, including the noted RPO criteria for prehistoric and historic sites. Non-compliance would result in a project that is inconsistent with the County's standards.

San Diego County Local Register of Historical Resources

The purpose of the San Diego County Local Register of Historical Places is to develop and maintain “an authoritative guide to be used by State agencies, private groups, and citizens to identify the County’s historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change.” Sites, places, or objects that are eligible to the NRHP or the CRHR are automatically included in the San Diego County Local Register of Historical Places. If a resource meets any one of the following criteria as outlined in the Local Register, it will be considered an important resource:

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

2.2.2 Analysis of Project Effects and Determinations as to Significance

The following discussion evaluates potential impacts to historic and archaeological resources resulting from implementation of the Project. Section 15064.5(c) of CEQA addresses effects on archaeological sites. It notes that if archaeological resources are not unique, project effects on those resources shall not be considered a significant effect on the environment. The resource and potential effects must be addressed in the EIR, but the site need not be further considered during the CEQA process.

2.2.2.1 Historical Resources

Guideline for the Determination of Significance

A significant cultural resources impact would occur if the Project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.

Guidelines Source

This guideline is from the County of San Diego Guidelines for Determining Significance for Cultural Resources (2007). Section 21083.2 of the CEQA Guidelines recommends evaluating historical resources to determine whether a proposed action would have a significant effect on unique historical resources.

Analysis

Based on the record search, no historic resources have been recorded on the site, and no historic resources were identified during BFSAs 2020/21 field survey. The site is undeveloped and contains no structures. Implementation of the Project would cause no impacts to historical resources.

2.2.2.2 Archaeological Sites

Guideline for the Determination of Significance

For the purposes of this EIR, a significant impact to cultural resources would occur if the Project would:

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site that contains or has the potential to contain information important to history or prehistory.

Guidelines Source

This guideline is derived from the County of San Diego Guidelines for Determining Significance for Cultural Resources (County of San Diego 2007) and CEQA. Section 15064.5 of the CEQA Guidelines recommends evaluating archaeological resources to determine whether a proposed action would have a significant effect on unique archaeological resources.

Analysis

Three archaeological resources have been recorded and identified on the Project site: SDI-9847, SDI-11,442, and SDI-22,924. Archaeological investigations at SDI-9847, SDI-11,442, and SDI-22,924 conducted in 2020/21 did not identify any subsurface archaeological materials and the three artifacts identified at SDI-22,924 were collected and documented. The resources previously reported at SDI-9847 and SDI-11,442 are assumed to have been moved, buried, or destroyed as a result of past agricultural activities and/or development to the north and east of the property. From a regional standpoint, given the lack of cultural materials at the mapped locations of SDI-9847 and SDI-11,442 and the limited resources identified at SDI-22,924, the sites and the study conducted by BFSAs in 2020/21 offer little information to place the resources in context. Overall, the sites lack the chronological, typological, and general archaeological data to answer any relevant research questions or to facilitate placement into the broader scope of San Diego prehistory. As a result, regionally speaking, these sites are similar to a multitude of sites around San Diego County that have been impacted by past agricultural activities and modern development, which culminated in the displacement and destruction of cultural resources. Therefore, all three sites lack additional research potential and the recordation of the surface materials at SDI-22,924 conducted by BFSAs in 2020/21 constitutes adequate and completed mitigation. Based upon field work and study including the testing program completed by BFSAs in 2020/21, SDI-9847, SDI-11,442, and SDI-22,924 do not qualify as important cultural

resources according to the criteria listed in CEQA Guidelines Section 15064.5. Any further impacts to these resource sites as a result of the Project's construction would be considered less than significant.

Given the presence of previously identified archaeological resources within the Project site and its vicinity, there is a potential for the Project site to contain unidentified subsurface archaeological resources. Therefore, ground-disturbing activities resulting from the Project's construction have the potential to impact previously undiscovered archaeological resources. If such resources are encountered during construction and are considered important cultural resources according to the criteria listed in CEQA Guidelines Section 15064.5, impacts would be significant prior to mitigation (**Significant Direct Impact CR-1**).

2.2.2.3 Disturbance to Human Remains

Guideline for the Determination of Significance

For the purposes of this EIR, a significant impact to human remains would occur if the Project would:

- Disturb any human remains, including those interred outside of formal cemeteries.

Guidelines Source

This guideline is from the County of San Diego Guidelines for Determining Significance for Cultural Resources (County of San Diego 2007) and CEQA. This guideline is included because human remains must be treated with dignity and respect and CEQA requires consultation with the Most Likely Descendant (MLD) as identified by the Native American Heritage Commission (NAHC) for any project in which human remains have been identified.

Analysis

No human remains were identified during the records search, field survey, or testing program. Sections 15064.5(d) and (e) of the CEQA Guidelines requires that if human remains are discovered on a project site that may be those of a Native American, no further excavation or disturbance shall occur, and the County Coroner shall be notified to determine whether the remains are those of a Native American, in accordance with California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq. If confirmed, the lead agency shall work with the NAHC to identify the person or persons most likely to be descended from the deceased Native American and the project applicant shall work with the descendent for treating or disposing of, with appropriate dignity, the human remains and any associated grave goods in accordance with the provisions of Public Resources Code Section 5097.98. Although no human remains were identified, there is the possibility that human remains could be present on the Project site and be encountered during grading. If human remains were found, the Project would be required to comply with California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq. Thus, Project's potential impacts to Native American human remains would be less than significant.

2.2.2.4 RPO Significant Cultural Resources

Guideline for the Determination of Significance

For the purposes of this EIR, a significant impact to cultural resources would occur if the Project would:

- Propose activities or uses damaging to significant cultural resources as defined by the County RPO and the project fails to preserve those resources.

Guidelines Source

This guideline is derived from the County's RPO, which does not allow non-exempt activities or uses damaging to significant prehistoric lands on properties under County jurisdiction. The only exempt activity is scientific investigation. The project is required to be in conformance with applicable County standards related to cultural resources, including the noted RPO criteria for prehistoric sites. Non-compliance would result in a project that is inconsistent with County standards. Any project that would have an adverse impact (direct, indirect, cumulative) on significant prehistoric resources as defined by this guideline would be considered a significant impact.

Analysis

As a result of the testing and site significance evaluation program, SDI-9847, SDI-11,442, and SDI-22,924 were identified as not significant resources pursuant to CEQA. They are not eligible for the California Register of Historical Resources (CRHR), and do not represent County of San Diego Resource Protection Ordinance (RPO) significant sites. The Project would not include activities or uses that would damage significant cultural resources as defined by the County RPO. Therefore, no impact would occur.

2.2.3 Cumulative Impact Analysis

Historical Resources

There are no significant historical resources located on the Project site and there is no reasonable potential for significant historical resources to be encountered during the Project's ground-disturbing construction activities. As such, the Project would not have a cumulatively considerable impact on historical resources.

Archaeological Resources

No significant archaeological resources were identified on the Project site or within the Project's off-site disturbance areas. As such, the Project would not result in any cumulatively considerable impacts to known archaeological sites and would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to California Code of Regulation, Section 15064.5. However, there is a possibility that previously undiscovered subsurface archaeological resources may be impacted

by Project-related ground disturbing construction activities. Other cumulative developments resulting from buildout of the San Diego County General Plan and the general plans of cities within the County also have the potential to result in impacts to archaeological sites or resources, including sites or resources that may be buried beneath the ground surface. As such, the Project's potential impacts to previously undiscovered archaeological sites or resources would be cumulatively considerable prior to mitigation (**Significant Cumulatively Considerable Impact CR-1**).

Potential Human Remains

The Project would be subject to compliance with the provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq. As such, while there is a remote potential for human remains identified as Native American to be uncovered as part of site grading activities, mandatory compliance with these provisions of State law would ensure that impacts to human remains would be less than significant. As other cumulative developments similarly would be subject to compliance with California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et. seq., the Project's potential impacts to Native American human remains would be less than significant on a cumulatively considerable basis.

2.2.4 Significance of Impacts Prior to Mitigation

Significant Direct and Cumulatively Considerable Impact CR-1: Project-related grading activities have the potential to encounter and impact previously undiscovered archaeological resources that could be determined to be important archaeological resources according to the criteria listed in CEQA Guidelines Section 15064.5.

2.2.5 Mitigation

M-CR-1: Prior to issuance of grading permits, the Project applicant shall enter into a Treatment Agreement and Preservation Plan with consulting tribe(s) and implement an Archaeological and Tribal Monitoring Program during earth disturbing activities. The Treatment Agreement and Preservation Plan and Archeological and Tribal Monitoring Program shall be provided to the County Archeologist for review and approval prior to issuance of the grading permit.

2.2.6 Conclusion

Less-than-Significant Impact CR-1 with Mitigation: If Project-related grading activities encounter archaeological resources that are determined to be important archaeological resources according to the criteria listed in CEQA Guidelines Section 15064.5, implementation of Mitigation Measure M-CR-1 would ensure that the resources are appropriately identified and treated to reduce impacts to less-than-significant.

2.3 Global Climate Change

This section analyzes the potential global climate change impacts resulting from the Project's greenhouse gas (GHG) emissions. Specifically, the section discusses the scientific, regulatory and policy developments surrounding global climate change; provides a quantitative inventory of the GHG emissions that would result from Project implementation; evaluates the significance of the Project's GHG emissions; and evaluates potential mitigation to mitigate the Project's impacts. The analysis presented in this section primarily is based on the Questhaven Project – Greenhouse Gas Emissions Technical Report (GHG Report), included in *Appendix G* of this EIR. (Helix, 2024).

This section quantifies and analyzes the significance of GHG emissions from the Project's one-time construction and vegetation change-associated activities, and annual operational activities. The operational activities that would generate GHG emissions include area sources (e.g., landscaping equipment and fireplaces); the consumption of electricity by residences; the treatment and distribution of water; the handling of solid waste; and, the use of vehicles for transportation-related purposes.

The GHG emissions estimates for the Project presented in this section were calculated using California Emissions Estimator Model (CalEEMod) Version 2022.1.1.13. CalEEMod provides a CEQA-oriented platform to calculate both construction and operational emissions from land use development projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with multiple air districts across the State of California, including the San Diego Air Pollution Control District (SDAPCD). Numerous lead agencies in the State, including the County of San Diego, utilize CalEEMod to estimate GHG emissions in accordance with CEQA Guidelines Section 15064.4(a)(1) and (c).

2.3.1 Existing Conditions

2.3.1.1 Global Climate Change

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting light in but preventing heat from escaping, thus warming the Earth's atmosphere. These gases allow solar radiation (sunlight) into the Earth's atmosphere but prevent radiative heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with the most recent nine years (2014 through 2022) ranking as the warmest years on record since 1880. The newest release in long-term warming trends announced 2022 ranked as tied with 2015 for the fifth warmest year on record with an increase of 0.9 degrees Fahrenheit compared to the 1951-1980 average (National Aeronautics and Space Administration [NASA] 2023). GHG emissions from human activities are the most significant

driver of observed climate change since the mid-20th century (United Nations Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a “high confidence” that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO₂e) by the year 2100.

Greenhouse Gases

The GHGs, as defined under California’s Assembly Bill (AB) 32, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Although water vapor is the most abundant and variable GHG in the atmosphere, it is not considered a pollutant; it maintains a climate necessary for life. Please refer to Section 2.2 of the GHG Emissions Technical Report for a detailed discussion of the different types of GHGs.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO₂. For example, and as indicated in in the IPCC Fourth Assessment Report (AR4), because CH₄ and N₂O are approximately 25 and 298 times more powerful than CO₂, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO₂ has a GWP of 1) (IPCC, 2007). CO₂e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO₂e.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC’s Second Assessment Report (SAR). IPCC updated the GWP values in its Third Assessment Report (AR3) in 2001 and again in 2007 in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. In 2013, IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5). However, United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values. Therefore, statewide and national GHG inventories have not yet updated their GWP values to the AR5 values. By applying the GWP ratios, project related CO₂e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO₂ over a 100-year period is used as a baseline. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 2.3-1, *Global Warming Potentials and Atmospheric Lifetimes*.

The California Air Resources Board (CARB) performed statewide inventories for the years 1990 to 2020, as shown in Table 2 of the Project’s GHG Report (*Appendix G* to this EIR). The inventory is divided into six broad sectors of economic activity: agriculture, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in million metric tons (MMT) CO₂e.

Statewide GHG source emissions totaled 431 MMT CO_{2e} in 1990, 462 MMT CO_{2e} in 2000, 443 MMT CO_{2e} in 2010, and 381 MMT CO_{2e} in 2021. The reduced amount of GHG emissions in 2021 was likely due to reduced travel and industrial activity as a result of the 2020 COVID-19 global pandemic. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions (CARB, 2007 and CARB, 2023).

An unincorporated San Diego regional emissions inventory that was prepared by the University of San Diego (USD) School of Law, Energy Policy Initiative Center (EPIC) accounted for the unique characteristics of the region. Its 2019 emissions inventory update for unincorporated San Diego County is presented in Table 2.3-2, *GHG Emissions by Category*. The sectors included in this inventory are somewhat different from those in the statewide inventory. Similar to the statewide emissions; however, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use. Regional GHG source emissions totaled 3.21 MMT CO_{2e} in 2019.

The 2019 inventory was included as part of the County of San Diego Draft Climate Action Plan (CAP), released for public review on October 26, 2023 (2019 Emissions Inventory). It should be noted at the time this EIR was prepared (April 2024) the CAP was not yet approved by the County.

2.3.1.2 Effects of Climate Change in California

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation, which can adversely affect human health. For example, days with weather conducive to ozone formation could increase. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth. Products likely to be most affected include wine grapes, fruits, and nuts. In addition, continued global climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the State's coastal regions. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

2.3.1.3 Regulatory Setting

Federal

Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency (USEPA)* that CO₂ is an air pollutant, as defined under the Clean Air Act (CAA), and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO₂, CH₄, N₂O, HFC, PFC, and SF₆) threaten the public health and welfare of the American people.

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA worked together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the CAA, and the NHTSA established Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025.

In December 2021, USEPA issued a new rule formally adopting standards previously proposed in August 2021 for model years 2023 and 2024 and finalizing more stringent standards than previously proposed for model years 2025 and 2026. The rule assumes a 17 percent electric vehicle (EV) market penetration by 2026. Although this is a departure from the NHTSA CAFE standards, USEPA did coordinate with NHTSA during development of the new standards. On April 12, 2023, USEPA announced new, more ambitious proposed standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027. The proposal builds upon USEPA's final standards for federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026 and leverages advances in clean car technology to result in benefits to Americans ranging from reducing climate pollution, to improving public health, to saving drivers money through reduced fuel and maintenance costs. The proposed standards would phase in over model years 2027 through 2032.

State

California Code of Regulations, Title 24, Part 6

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2022, and went into effect on January 1, 2023. The Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting, and the requirement for on-site photovoltaic (solar) energy generation for new residential buildings three or fewer stories high. The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach (CEC 2022).

California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) includes mandatory requirements for new residential and nonresidential buildings throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR. The current 2022

Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2023 (CBSC 2022).

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. In an effort to avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. EOs are not laws and can only provide the governor's direction to state agencies to act within their authority. Legislation is required to enact the goals of EO S-3-05 and establish a framework for statewide implementation. AB 32, described below, mandates the 2020 GHG reduction goals of EO S-3-05. The 2050 GHG reduction goal of EO S-3-05 has not been enacted by any legislation and remains only a goal of the EO.

Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006 (AB 32) and Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599), widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. AB 32 enacts the goals of EO S-3-05.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG reduction targets with those of leading international governments, including the 28-nation European Union. California is on track to meet or

exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050. Senate Bill (SB) 32, described below, mandates the 2030 GHG reduction goals of EO B-30-15.

Senate Bill 32

SB 32 (Amendments to the California Global Warming Solutions Action of 2006) extends California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

Assembly Bill 1279

Approved by Governor Newsom on September 16, 2022, AB 1279, The California Climate Crisis Act, declares the policy of the State to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO₂ from the atmosphere (carbon capture), and almost complete transition away from fossil fuels.

Senate Bill 905

Approved by Governor Newsom on September 16, 2022, SB 905, Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program, requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage Program to evaluate the efficacy, safety, and viability of carbon capture, utilization, or storage technologies and CO₂ removal technologies and facilitate the capture and sequestration of CO₂ from those technologies, where appropriate. SB 905 is an integral part of achieving the state policies mandated in AB 1279.

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve “the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State.” On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to merge its rules with the federal

CAFE rules for passenger vehicles (CARB 2013). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025.

Executive Order S-01-07

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs the CARB to determine whether a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit Court of Appeals reversed the District Court’s opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB, therefore, is continuing to implement the LCFS statewide.

Senate Bill 375

SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s Regional Transportation Plan (RTP). The RTP is discussed further in EIR Section 2.6, *Transportation*. Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as “transit priority projects” would receive incentives to streamline CEQA processing.

Executive Order N-79-20

EO N-79-20, signed by Governor Newsom on September 23, 2020, establishes three goals for implementation of zero emissions vehicles in California: first, 100 percent of in-state sales of new passenger cars and trucks will be zero-emissions by 2035; second, 100 percent of medium- and heavy-duty vehicles in the state will be zero-emissions vehicles by 2045 for all operations where feasible, and by 2035 for drayage trucks; and third, 100 percent of off-road vehicles and equipment will be zero emissions by 2035 where feasible.

California Air Resources Board Scoping Plan

The Scoping Plan is a strategy CARB develops and updates at least one every five years, as required by AB 32. It lays out the transformations needed across our society and economy to reduce emissions and reach our climate targets. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 mandate of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual. The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California’s GHG targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants. The 2017 Scoping Plan also assessed the progress toward achieving the 2020 limit and

provided a technologically feasible and cost-effective path to achieving the SB 32 mandate of reducing GHGs by at least 40 percent below 1990 levels by 2030. On December 15, 2022, CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent 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 (SLCPs); support for sustainable development; increased action on natural and working lands to reduce emissions and sequester carbon; and the capture and storage of carbon (CARB, 2022b).

Local

San Diego Association of Governments San Diego Forward: The Regional Plan

The SANDAG RTP/SCS “San Diego Forward: The 2021 Regional Plan” (Regional Plan) is the long-range planning document developed to meet the requirements of SB 375 and to address the region’s housing, economic, transportation, environmental, and overall quality-of-life needs. The Regional Plan establishes a planning framework and implementation actions that increase the region’s sustainability and encourage “smart growth while preserving natural resources and limiting urban sprawl.” The Regional Plan encourages the regions and the County to increase residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. The focus is on implementation of basic smart growth principles designed to strengthen the integration of land use and transportation (SANDAG 2021).

San Diego Association of Governments Climate Action Strategy

The SANDAG Climate Action Strategy serves as a guide to help policymakers address climate change as they make decisions to meet the needs of growing populations, as well as to maintain and enhance quality of life and promote economic stability (SANDAG 2010). The purpose of the strategy is to identify land use, transportation, and other related policy measures that could reduce GHG emissions from passenger cars and light-duty trucks as part of the development of the SCS for the 2050 RTP in compliance with SB 375. Additional policy measures are identified for buildings and energy use, protecting transportation and energy infrastructures from climate impacts, and assisting SANDAG and other local agencies in reducing GHG emissions from their operations.

County of San Diego General Plan

The County’s General Plan, adopted in 2011, provides guiding principles designed to balance future growth, conservation, and sustainability. The General Plan aims to balance the need for infrastructure, housing and economic vitality, while maintaining and preserving unique community, agricultural areas, and extensive open space (County 2011). The General Plan contains goals and policies specific to reducing GHG emissions, including efficient and compact growth and development; increasing energy efficiency and use of renewable energy sources; increasing recycling; and improving access to sustainable transportation.

The General Plan addresses AB 32 and climate change and provides an extensive list of policies designed to reduce GHG emissions and adapt to current climate change related impacts. Strategies listed to mitigate and reduce GHG emissions include: reduce vehicle trips, gasoline and energy consumption; improve energy efficiency by decreasing non-renewable energy consumption and generation; increase generation and use of renewable energy sources; reduce water consumption and waste generation; improve solid waste reuse and recycle and composting programs; promote landscapes designed to sequester CO₂; and preserve open space and agricultural lands. Adaptive strategies designed to prevent, and mitigate current climate change impacts, include the following: reduce wildfire and flood risk; conserve water during water shortages; promote agricultural lands to support local food production; and provide education and leadership.

County of San Diego Climate Action Plan

In February 2018, the County's Board of Supervisors adopted a Climate Action Plan (2018 CAP) that serves as a long-term programmatic plan that identifies strategies and measures to meet the County's targets to reduce GHG emissions by 2020 and 2030, consistent with the State's legislative GHG reduction targets.

In March 2018, several petitioners filed a lawsuit against the County. In December 2018, the San Diego County Superior Court issued a writ setting aside the 2018 CAP and the Supplemental Environmental Impact Report (SEIR). In The Fourth District Court of Appeal, Division One (Case No. D064243), subsequently upheld the Superior Court's ruling. In September 2020, the County Board of Supervisors voted to rescind the 2018 CAP and SEIR.

The County was directed to prepare a new CAP. The updated CAP and Draft SEIR were available for public review from October 26, 2023, to January 5, 2024. The County anticipates that the CAP will be presented to the Board of Supervisors at public hearing in Fall of 2024.

As noted above, the 2019 Emissions Inventory was completed as part of the CAP process. The 2019 Emissions Inventory is organized into nine emissions categories: on-road transportation, which totaled 1,331,000 MMT CO₂e; electricity, which totaled 599,000 MMT CO₂e; natural gas, which totaled 478,000 MMT CO₂e; solid waste, which totaled 193,000 MMT CO₂e; agriculture, which totaled 134,000 MMT CO₂e; propane, which totaled 121,000 MMT CO₂e; off-road transportation, which totaled 71,000 MMT CO₂e; water, which totaled 39,000 MMT CO₂e; and wastewater, which totaled 18,000 MMT CO₂e. The Emissions Inventory which is shown in Table 2.3-2, calculated 2,984,000 MMT CO₂e of GHG emissions for the year 2019.

2.3.2 Analysis of Project Effects and Determinations as to Significance

2.3.2.1 Generate GHG Emissions, Either Directly or Indirectly, that may have a Significant Impact on the Environment

Guidelines for the Determination of Significance

A significant global climate change impact would occur if implementation of the Project would do the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Guidelines Source

Neither the State of California, the SDAPCD, nor the County has adopted quantitative emission-based thresholds of significance for GHG emissions under CEQA. In the absence of any adopted numeric threshold, the significance of the Project's GHG emissions is evaluated herein consistent with CEQA Guidelines Section 15064.4.

CEQA Guidelines Section 15064.4 states;

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Quantify greenhouse gas emissions resulting from a project; and/or*
- (2) Rely on a qualitative analysis or performance based standards.*

(b) In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there*

is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

(c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

Determination of Significance Evaluation Methodology

The 2019 Emissions Inventory and unincorporated County GHG emission targets consistent with SB 32 and AB 1279 state goals for the years 2030 (43.6% below 2019 levels) and 2045 (85.4% below 2019 levels) are provided in the CAP (County 2023). These emissions targets were based on emissions reductions required to align future County GHG emissions with the State 2030 and 2045 mandates and goals. The CAP also provides emissions forecasts for the unincorporated county based on projected population and employment data. For unincorporated San Diego County, the 2019 residential population was 526,890 and the 2030 population forecast is 539,701 (County of San Diego, 2023). Based on the adjusted 2019 inventory, CAP emission targets, and population estimates, the County's efficiency metrics are calculated to be 5.29 MT CO_{2e} per resident per year for 2019 and 2.91 MT CO_{2e} per resident per year for 2030. (Helix, 2024)

The Project's GHG emissions, however, are evaluated against a Project-specific efficiency metric threshold for the Project's buildout year that was developed for the Project based on the 2019 Emissions Inventory and targets based on consistency with SB 32 and AB 1279 goals for 2030 and 2045. An efficiency metric threshold is calculated by dividing the allowable GHG emissions in a selected calendar year by the population, which then leads to the identification of a quantity of emissions that can be permitted on a per person basis without significantly impacting the environment. This approach focuses on the overall GHG efficiency of a project relative to regulatory GHG reduction goals. (Helix, 2024). Here, the Project's efficiency metric was calculated based on 2029 emissions level (the first full year of Project operations) and the Project's population (the number of residents provided by the Project). (Helix, 2024)

To develop the Project-specific population efficiency threshold, land use-related sectors in the County's 2019 Emissions Inventory were identified and GHG emissions were separated to tailor the inventory to emission sources that were relevant to the Project. For example, emissions associated with mining, airport ground support equipment, and other emissions sources not associated with residential land use activities were excluded. With these adjustments, Project-specific emissions in future years

could be compared with the State targets for 2030 and 2045 and the County's own 2030 and 2045 targets in the CAP (which are consistent with the State targets for 2030 and 2045) for the relevant land uses. (Helix, 2024)

The first full year of operation for the Project is anticipated to be 2029. Accordingly, a threshold reduced by 5.28 percent for each year starting in 2019 would meet the County's SB 32 target by 2030. The Project-specific GHG emissions efficiency threshold for the year 2029 was calculated to be 3.07 MT CO₂e per resident per year. Comparing the Project's GHG emissions per population to this 2029 efficiency threshold would demonstrate progress towards achieving the County's 2030 and 2045 GHG emissions target consistent with SB 32 and AB 1279, respectively. The threshold calculation sheets are included as Appendix C to the GHG Report (*Appendix G* to this EIR). (Helix, 2024)

Analysis

Construction

GHG emissions would be associated with the construction phases of the Project through the use of off-road heavy equipment, haul trucks, and vehicle trips from construction worker commutes. Emissions of GHGs related to the construction of the Project would be temporary and would occur within an approximately 27-month period. As shown in Table 2.3-3, *Construction GHG Emission*, total GHG emissions associated with construction of the Project are estimated at 894 MT CO₂e. For construction emissions, South Coast Air Quality Management District (SCAQMD) guidance recommends that the emissions be amortized (i.e., averaged) over 30 years and added to operational emissions. Amortized over 30 years, the proposed construction activities would contribute approximately 30 MT CO₂e emissions per year. (Helix, 2024)

Operational

Operational sources of GHG emissions include: (1) energy use (electricity); (2) area sources (landscaping equipment and consumer products); (3) vehicle use; (4) solid waste generation; (5) water conveyance and treatment, (6) refrigerant leaks, and (7) change in carbon sequestered in vegetation. The emissions per capita threshold calculated for the proposed Project totals 3.07 MT CO₂e per year. The Project's calculated GHG emissions inventory is shown in Table 2.3-4, *Estimated Project Annual GHG Emissions*. The complete modeling output is included in Appendix A to the GHG Report (*Appendix G* to this EIR).

The Project includes project design features (PDFs) to reduce GHG emissions. Specifically, the Project is designed to include all electric appliances and end uses (i.e., the Project will not include natural gas infrastructure). Using electric instead of natural gas-powered appliances and end uses replaces a more emissions-intensive fossil fuel source of energy with a less emissions-intensive source of energy, as electricity from the grid is increasingly transitioning to renewable sources. The Project will include 299 trees, which would assist with carbon sequestration on-site. Additionally, the Project is required to meet 2022 Title 24 Part 6 energy efficiency standards and Part 11, CALGreen standards, including the requirement for on-site photovoltaic (solar) energy generation for new residential buildings three

or fewer stories high and cool/green roofs. The current Title 24 energy efficiency standards include requirements for installation of electric vehicle (EV) chargers, and use of low-flow water appliances. The Project also would be required to comply with 2025 Title 24 energy efficiency standards, as building permits for the proposed Project would most likely be issued during the upcoming Title 24 cycle.

A soft surface trail is already provided along the Project site's frontage with San Elijo Road. There are existing Class II bicycle lanes directly adjacent to the Project site along San Elijo Road, which is consistent with the City of San Marcos Bicycle and Pedestrian Master Plan (May 2015). The nearest transit stop to the Project site is located approximately one mile from the site. The North County Transit District (NCTD) is the decision-making body for additional transit facility stops and routes, which are added based on demand in an area. The NCTD does not have any planned transit facility stops within the Project study area (CR Associates, 2024). The Project is providing a new trail connection from a proposed parking lot to the Copper Creek Trail to increase pedestrian connection.

It should be noted that mobile sources represent the majority (approximately 86 percent) of the Project's total emissions. Thus, implementation of vehicle miles traveled (VMT) = reduction measures would also lead to a reduction in GHG emissions. The CAPCOA GHG Handbook provides several mitigation measures for land use projects. The comprehensive list of transportation demand management (TDM) measures from the CAPCOA GHG Handbook is provided in Appendix A of the Project's Transportation Impact Study, *Appendix L1 of this EIR* for reference. (See also Table 2.5.4, *Feasibility of Project TDM Measures & VMT Reduction* and Table 2.5.5, *Feasibility of Project TDM Measures & VMT Reduction* for more information.) As explained in more detail in Section 2.5, none of the potentially applicable measures are quantifiable or feasible, with the exception of short-term bicycle racks on site, which would be implemented on the Project site.

For instance, non-quantifiable TDM measures from the Project's Transportation Impact Study include:

- Implement Commute Trip Reduction Marketing - This measure implements a voluntary commute trip reduction (CTR) program. However, it is not applicable as this measure is aimed at employment projects.
- Provide End-of-Trip Bicycle Facility - This measure calls for the installation and maintenance of end-of-trip facilities. The Project would provide short term bicycle racks at the Neighborhood Park. Since these racks will likely be utilized by residents in nearby communities, no VMT reduction was taken for these amenities. Moreover, this measure is not applicable as it aimed at employment projects.
- Integrate Affordable and Below Market Rate Housing - This measure requires below market rate (BMR) housing. The Project is providing seven affordable homes on the site. However, no VMT reduction was taken for these units to ensure a conservative, worst-case analysis.

As shown in Table 2.3-4, the Project would result in GHG emissions of 763 MTCO_{2e} per year, and 3.58 MT CO_{2e} per capita per year, based on a population of 213 (2.8 persons per household multiplied by 76 residences). The amount of Project GHG emissions includes addition of the amortized construction emissions and loss of sequestered carbon from the removal of trees and vegetation required as part of Project-related grading activities. This would exceed the Project-specific 2029 GHG efficiency metric threshold of 3.07 MT CO_{2e}. Therefore, the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. As such, the Project would have a cumulatively considerable significant impact on global climate change (**Significant Cumulatively Considerable Impact GHG-1**). (Helix, 2024)

2.3.2.2 Conflicts with Local Plans Adopted for the Purpose of Reducing GHG Emissions

Guidelines for the Determination of Significance

A significant global climate change impact would occur if implementation of the Project would do the following:

- Conflicts with local plans adopted for the purpose of reducing GHG emissions

Guidelines Source

Because there is no approved CAP in San Diego County and the CAP Checklist cannot be used to determine the significance of a project's cumulative GHG emissions impacts until such time as it is reappraised in compliance with CEQA, the analysis is based on guidance provided in CEQA Guidelines Appendix G and CEQA Guidelines Section 15064.4.

Analysis

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State initiatives are SB 32 and AB 1279, as implemented by the CARB Climate Change Scoping Plan. As shown in Table 2.3-4, the Project would result in a 3.58 MT CO_{2e} per capita per year efficiency, which would exceed the Project-specific emissions metric threshold based on the 2019 Emissions Inventory and targets based on consistency with SB 32 and AB 1279 goals for 2030 and 2045. As such, the Project would be inconsistent with the Statewide goals established by SB 32 and AB 1279. The Project would have a cumulatively considerable and significant impact on global climate change due to inconsistency with State goals that were established for the purpose of reducing GHG emissions to reduce adverse effects on global climate change.

CARB's 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. Per the 2022 Scoping Plan Appendix D, *Local Actions*, local jurisdictions should focus on three priority areas: transportation electrification, VMT reduction, and building decarbonization (CARB 2022). The Project's consistency with these priority areas is provided in Table 2.3-5, *CARB Scoping*

Plan Priority Area Consistency. As shown therein, the Project would be consistent with all but one applicable priority area. Because the Project would not result in a regional decrease in VMT for unincorporated County residents, the Project would be inconsistent with the VMT Reduction priority area.

Additional plans and regulations are being implemented at the statewide level, and compliance on a project-specific level is not addressed. A number of prominent statewide plans and regulations (e.g., AB 1493 and the LCFS), as well as the Regional Plan aimed at reducing GHG emissions focus on reducing transportation source emissions. The Regional Plan includes three goals: 1) the efficient movement of goods and people, 2) access to affordable, reliable, and safe mobility options for everyone, and 3) healthier air and reduced GHG emission regionwide. A reduction in regional VMT (and VMT-related GHG emissions) is a primary objective of the Regional Plan as the San Diego County RTP/SCS in accordance with the mandates of SB 375. Implementation of the RTP/SCS plans in the State's metropolitan areas to reduce VMT is a key component of the mobile source GHG emissions reduction policies and control measures in the CARB 2022 Scoping Plan. The Transportation Impact Study (included as *Technical Appendix L1* to this EIR) analyzed a list of TDM measures aimed at reducing VMT. As explained above; none of the measures were applicable and/or quantifiable. Most importantly, the Project will result in a significant and unavoidable transportation impact (CR Associates, 2023). Because the Project would not result in a regional decrease in VMT for unincorporated County residents, the Project would be inconsistent with the Regional Plan. **(Significant Cumulatively Considerable Impact GHG-2)**

2.3.3 Cumulative Impact Analysis

Given the relatively small levels of emissions generated by a typical project in relationship to the total amount of GHG emissions generated on a national or global basis, individual projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from individual projects could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts. As described above, the Project's maximum annual GHG emissions of 3.58 MT CO_{2e} per capita per year would exceed the 2029 GHG efficiency metric threshold of 3.07 MT CO_{2e}, and the Project would conflict with the goals established by SB 32 and AB 1279, as well as with CARB's 2022 Scoping Plan and the Regional Plan. Therefore, the Project's GHG emissions impacts would be cumulatively considerable and by extension, the Project's inconsistency with goals and policies established for reducing GHG emissions also would be significant and cumulatively considerable **(Significant Cumulatively Considerable Impacts GHG-1 and GHG-2)**.

2.3.4 Significance of Impacts Prior to Mitigation

Significant Cumulatively Considerable Impact GHG-1: The Project would result in GHG emissions of 763 MT CO_{2e} per year, and 3.58 MT CO_{2e} per capita per year, based on a population of 213 (2.8 persons per household multiplied by 76 residences). This would exceed the 2029 GHG efficiency metric threshold calculated for the Project to be 3.07 MT CO_{2e} per service population per year. As such, the Project would have a cumulatively considerable significant impact on global climate change.

Significant Cumulatively Considerable Impact GHG-2: Because the Project would emit 3.58 MT CO₂e per capita per year, which would exceed the 2029 GHG efficiency metric threshold calculated for the Project to be 3.07 MT CO₂e per population per year, and because the Project also would conflict with the goals established by SB 32, AB 1279, the CARB 2022 Scoping Plan, and the Regional Plan. Therefore, the Project would have a cumulatively considerable significant impact on global climate change.

2.3.5 Mitigation

No feasible mitigation measures are available.

2.3.6 Conclusion

Significant and Unavoidable Impacts GHG-1 and GHG-2: The Project's design and construction is required to comply with the California Green Building Standards Code (CALGreen; CCR Title 24, Part 11), which includes mandatory requirements for new residential buildings throughout California intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In addition, CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings is mandatory. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting, and the requirement for on-site photovoltaic (solar) energy generation. Further, the Project is designed to power homes only with electric.

In regard to reducing VMT, none of the measures provided in the Project's Transportation Impact Study (*Appendix L1*) are readily quantifiable because it is not possible to accurately predict human behavior responses to VMT reduction strategies. The Project's VMT impact was thus found to be significant and unavoidable. As explained in Section 2.5, there is no feasible mitigation to reduce the mobile source GHG emissions. Although the vehicle fleet in California is transitioning from gas to electric and zero-emission vehicles, it cannot be assured how many residents of the Project will use electric or zero-emission vehicles. Therefore, the conclusion that the Project would result in a significant GHG impact is based on SCAQMD recommended modeling and does not account for the continued progression toward an electric and zero-emission vehicle fleet. Because the Project would result in GHG emissions of 3.58 MT CO₂e per capita per year, which exceeds the 2029 GHG efficiency metric threshold calculated for the Project to be 3.07 MT CO₂e, and VMT reduction strategies to reduce GHG emissions are not quantifiable and not feasible because it is unknown what type of vehicles Project residents would own at this time. The Project would have a cumulatively considerable significant impact on global climate change that is significant and unavoidable.

Table 2.3-1 Global Warming Potentials and Atmospheric Lifetimes

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO ₂)	50-200	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-134a	14	1,430
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Source: IPCC 2007

HFC: hydrofluorocarbon; PFC: perfluorocarbon
(Helix, 2024)

Table 2.3-2 GHG Emissions by Category

Emissions Category	2019 GHG Emissions (MT CO ₂ e)	Percent of Total (%)
On-road Transportation	1,331,000	45
Electricity	599,000	20
Natural Gas	478,000	16
Solid Waste	193,000	6
Agriculture	134,000	4
Propane	121,000	4
Off-road Transportation	71,000	2
Water	39,000	1
Wastewater	18,000	1
Total	2,984,000	100

Table 2.3-3 Construction GHG Emissions

Year	Emissions (MT CO ₂ e)
2026	530
2027	337
2028	27
Total	894
Amortized Construction Emissions ¹	30

Source: CalEEMod (output data is provided in Appendix A)

Note: Values rounded to the nearest whole number.

¹ Construction emissions are amortized over 30 years consistent with SCAQMD guidance.

MT = metric tons; CO₂e = carbon dioxide equivalent

(Helix, 2024)

Table 2.3-4 Estimated Project Annual GHG Emissions

Emission Sources	Emissions (MT CO₂e/year)
Area Sources	1
Energy Sources	10
Vehicular (Mobile) Sources	656
Solid Waste Sources	11
Water Sources	6
Refrigerants	<0.5
Loss of Sequestered Carbon	49
Amortized Construction	30
Total	763
Emissions per Capita	3.58
<i>Calculated GHG efficiency Threshold (MT CO₂e per capita per year)</i>	3.07
Exceed Threshold?	Yes

Source: CalEEMod output data is provided in Appendix A
 MT = metric tons; CO₂e = carbon dioxide equivalent
 (Helix, 2024)

Table 2.3-5 CARB Scoping Plan Priority Area Consistency

Priority Area	Project Consistency
Transportation Electrification	The Project would be designed to meet the CALGreen standards in effect at construction including the requirements of Section A4.106.8 requiring new construction provide EV supply equipment to facilitate future installation and use of EV chargers.
VMT Reduction	According to the Project Transportation Impact Study, the regional average VMT per resident is 18.9 miles per day. Project residents would have a VMT of 24.1 miles per day (CR Associates, 2023). Therefore, the Project would not result in a regional decrease in VMT for unincorporated County residents.
Building Decarbonization	The Project would be designed to meet the latest applicable version, currently 2022, of the CALGreen standards, including the requirement for on-site photovoltaic (solar) energy generation for new residential buildings three or fewer stories high and cool/green roofs, (CEC 2022; CBSC 2022). Additionally, the Project would be designed to include all electric appliances and end uses. Using electric instead of natural gas replaces a more emissions-intensive fossil fuel source of energy with a less emissions-intensive source of energy, as electricity from the grid is increasingly transitioning to renewable sources.

2.4 Land Use and Planning

This land use analysis in this section describes the relevant land use policy and regulatory framework applicable to the Project, identifies guidelines for the determination of significance, evaluates potential environmental impacts related to the Project’s consistency with applicable land use policies, goals and regulations, and discusses feasible mitigation measures identified for the environmental topics analyzed in this chapter. The CEQA guidelines of significance used in this section require the EIR to consider whether a Project conflicts with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Under CEQA, a conflict or inconsistency with an applicable plan is not by itself considered a significant environmental impact. Instead, the inconsistency must result in a significant physical impact for there to be a significant impact under CEQA. In addition to the land use consistency analysis provided in this section, refer to the other environmental topics addressed in Chapters 2.0 and 3.0 of this EIR for analyses of the Project’s potential physical impacts related to consistency with applicable regulations, including County General Plan goals and policies, relevant to the environmental issue area under consideration.

A NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Two comment letters related to land use and planning were received. Caltrans (received September 29, 2022) requested collaboration regarding “smart growth” land use planning related to transportation. Ed Philbrick (received September 27, 2022) expressed concern regarding the loss of existing open space land uses.

2.4.1 Existing Conditions

Project Physical Characteristics and Land Use

The Project site is located within unincorporated San Diego County, while the properties to the north, east and west generally are located in the City of San Marcos. The Project site is within the City of San Marcos Sphere of Influence. The undeveloped parcel located adjacent to the northwest of the Project site is also within the unincorporated county.

The Project site is undeveloped and includes several unimproved dirt roads and trails. The northern portion of the site was subject to prior disturbance and was used as a laydown yard for construction equipment associated with a former recycling facilities use on an adjacent property. Additionally, a portion of the western area of the site was formerly used for agricultural uses.

The topography of the Project site ranges from gentle to steeply sloping. The site is characterized by a topographic saddle in the northerly/northeasterly portion of the property with relatively broad, low-relief drainages flowing to the northwest and southeast. A gently to moderately sloping hillside flanks the saddle to the south and north. Elevations within the Project site range from a low elevation of 490 above mean sea level (amsl) in the southeastern portion of the site where there is a drainage to a high of 930 amsl near the southwestern property boundary.

The uses of land surrounding the Project site are as follows. Refer to Figure 3.1-5, *Surrounding Community Context Aerial Photograph*, in Section 3.1, *Aesthetics and Visual Resources*, of this EIR to view the Project site’s relationship with surrounding land uses.

Existing Land Uses	
<i>Project Site</i>	Undeveloped
<i>North</i>	San Elijo Road, Open Space, Residential (San Elijo Hills)
<i>South</i>	Rancho La Costa Habitat Conservation Area
<i>East</i>	Loma San Marcos; Former San Marcos Landfill
<i>West</i>	Rancho La Costa Habitat Conservation Area, Residential (Old Creek Ranch)

General Plan Land Use and Zoning Designations

The Project site is designated by the County of San Diego General Plan for Semi-Rural land uses (SR-1 and SR-10). Additionally, a small portion of the site has a “No Jurisdiction” land use designation. The “No Jurisdiction” designation is the result of a mapping error and does not preclude the processing of the Project. Land uses designated by the County and the City of San Marcos for land surrounding the Project site are:

Existing General Plan Land Use Designations	
<i>Project Site</i>	Semi-Rural Residential (SR-1 and SR-10)
<i>North</i>	San Elijo Road, San Elijo Hills Specific Plan (City of San Marcos)
<i>South</i>	Open Space-Conservation
<i>East</i>	Rural Lands (RL-40)
<i>West</i>	Old Creek Ranch (University Commons) Specific Plan (City of San Marcos)

Pertaining the zoning, the Project site is zoned Rural Residential (RR) and Open Space (S80) by the County of San Diego, as shown on Figure 2.4-1, *Project Site Zoning Classifications*. Zoning classifications designated by the County and the City of San Marcos for land surrounding the Project site are:

Existing Zoning Classifications	
<i>Project Site</i>	Rural Residential (RR) and Open Space (S80)
<i>North</i>	San Elijo Hills Specific Plan (City of San Marcos)
<i>South</i>	Open Space-Conservation
<i>East</i>	Rural Lands (RL-40)

<i>West</i>	Rural Lands (RL-4); Old Creek Ranch (University Commons) Specific Plan (City of San Marcos)
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2.4.2 Regulatory Setting

Land use plans, policies, and ordinances that apply to the proposed Project are contained in the County of San Diego General Plan (2011), San Dieguito Community Plan (2011), County Zoning Ordinance, City of San Marcos General Plan (as an adjacent city and the Project site being in the City of San Marcos Sphere of Influence), the County’s Resource Protection Ordinance (RPO), the County’s Biological Mitigation Ordinance (BMO), as well as other plans, policies, and regulations adopted for the purpose of addressing environmental impacts. The site is within the boundaries of the draft North County Multiple Species Conservation Program (NCMSCP) area; however, this plan has not been adopted and therefore is not applicable to the Project. The plans, policies, and regulations discussed below are primarily related to land use and development.

County of San Diego General Plan

County of San Diego General Plan serves as a blueprint for the long-range build out of the unincorporated areas of the County. The General Plan is divided into seven elements: Land Use, Housing, Environmental Justice, Mobility, Safety, Conservation and Open Space. The last comprehensive update of the General Plan was conducted in 2011, with the Housing Element and Environmental Justice Elements updated in 2021.

The General Plan Land Use Element provides maps, goals, and policies and serves as the regulatory document guiding land use, conservation, and development in the unincorporated County. This element provides a framework to accommodate future development within the County in an efficient and sustainable manner. Land uses are applied to lands within the County’s land use jurisdiction, and the Land Use Element designates the Project site for Semi-Rural land uses (SR-1 and SR-10). Additionally, a small portion of the site has a “No Jurisdiction” land use designation. The “No Jurisdiction” designation is the result of a mapping error and does not preclude the processing of the Project.

The County’s General Plan Housing Element represents the 6th Cycle update covering the period of April 2021, through April 15, 2029. Housing elements are required by the State to be updated every eight years. The Housing Element is responsive to the Regional Housing Needs Assessment (RHNA) and seeks to balance the County’s housing requirements with infrastructure deficiencies, safety issues, and the rural character of many of the County’s unincorporated communities. Goals of the Housing Element are to accommodate County resident housing needs across a range of age, income, and other demographic characteristics; to provide residential neighborhoods that respect local community character and the natural environment while expanding opportunities for affordable housing; to assure that housing is suitable and affordable for all economic segments; to preserve affordable housing; to limit governmental constraints on

new housing development and existing housing; and to provide a framework for delivering housing services.

The Environmental Justice (EJ) Element was prepared in response to California Assembly Bill 100 (SB 100) which requires local governments to address pollution and other hazards that disproportionately impact low-income communities and communities of color within their jurisdiction as a way to proactively plan for and address environmental concerns when developing and updating components of the General Plan. The EJ Element is the County of San Diego's commitment to the fair treatment of people of all races, cultures, and incomes concerning the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. The EJ Element identifies four unincorporated County EJ communities, which are located in the southern portion of the County. The Project site is not located within or near a County-designated EJ community.

The Mobility Element describes the multi-modal transportation network within the County's unincorporated areas, including motor vehicle, public transportation, bicycle, pedestrian, rail, and air transportation facilities. Goals and policies address the safe and efficient operation, maintenance, and management of the transportation network, and identify major existing and planned road network components in the County. San Elijo Road that abuts the northern boundary of the Project site is not a Mobility Element roadway.

The Conservation and Open Space (COS) Element the conservation, management, and utilization of natural and cultural resources; protection and preservation of open space; and provision of park and recreation resources. Goals and policies included in this element address the following nine resource topics: biological resources; water resources; agricultural resources; cultural resources; paleontological resources and unique geologic features; mineral resources; visual resources; and air quality, climate change, and energy.

The Safety Element sets forth policies related to future development that will minimize the risk of injury, death, property and environmental damage associated with natural and human-made hazards. The Safety Element addresses how development is to account for physical constraints and natural hazards of the land. The goals and policies of the Safety Element intend to protect residents and areas from wildland and urban fire, crime, hazardous materials incidents, earthquakes, flooding and hazardous incidents associated with aircrafts and airports. Disaster preparedness and emergency response also are addressed in this element.

The Noise Element establishes Noise Compatibility Guidelines, which are to be used in the evaluation of proposed projects to determine the compatibility of land uses with community equivalent noise levels. The community noise control standards within the County's Noise Abatement and Control Ordinance are used in conjunction with the Noise Element in considering the environmental impacts of noise exposure. The Noise Element addresses transportation and non-transportation noise sources, noise-sensitive land uses, and existing and future noise levels.

This element was developed to preserve County residents' quality of life by providing protection from the obtrusive impacts of noise and noise-generating uses.

San Dieguito Community Plan

Community plans are adopted as integral parts of the County's General Plan and provide a mechanism for addressing each community's unique context that cannot be reflected in the broader policies of the countywide General Plan. Community plans are required to be consistent with the General Plan but can provide additional guidance reflective of the local community. The San Dieguito Community Plan, within which the Project site is located, was most recently updated in 2014. The Community Plan includes elements related to Community Character, Land Use, Circulation, Public Safety/Services/Facilities, Conservation, Recreation, Scenic Highways, Open Space, Noise, and Energy. General policies relate to rural residential living, utilization of open space to provide separate and distinct neighborhoods, the preservation of natural features, and high standards of design.

County Zoning Ordinance

Zoning classifications set forth by the San Diego County Zoning Ordinance guide and determine the allowed type, size, and intensity of development allowed on a property. As shown on Figure 2.4-1, *Project Site Zoning Classifications*, the Project site is zoned Rural Residential (RR) in the northern portion of the site and Open Space (S80) in the southern portion of the site. The RR zoning classification has a minimum lot size requirement of 1.0 acre and permits single family homes and other rural character uses. The S80 zoning classification is intended for recreation areas or areas with environmental constraints where development opportunities are constrained.

County Resource Protection Ordinance

The County's RPO protects prehistoric and historic sites and sensitive natural resources including wetlands, floodplains, steep slopes, and biological habitats.

City of San Marcos General Plan

The Project site is located within unincorporated San Diego County, while the properties to the north, east and west generally are located in the City of San Marcos. The Project site is within the City of San Marcos Sphere of Influence. Like the County's General Plan, the City of San Marcos General Plan addresses a wide range of issues that affect land within its jurisdiction such as physical development, environmental resources, and quality of life. The City's General Plan includes nine elements including Land Use and Community Design, Mobility, Conservation Open Space, Parks/Recreation/Community Health, Safety, Noise, Housing, and Environmental Justice. Although the Project site is not within the City but is within its Sphere-of-Influence, the most applicable element is the Land Use and Community Design Element, which identifies the Project site as being within the Questhaven/La Costa Meadows Neighborhood in the southernmost portion of the City and anticipated to be build out with Rural Residential land uses at a density of 1 – 2 units per acre (San Marcos General Plan Figure 2-5).

2.4.3 Analysis of Project Effects and Determinations as to Significance

Guideline for the Determination of Significance

A significant impact to land use and planning would occur if the Project would do the following:

- Physically divide an established community.

Guideline Source

The significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

The Project site is currently undeveloped but is designated for residential and open space uses by the General Plan. There is no reasonable potential that the Project could divide an established community. The area surrounding the Project site consists of undeveloped land and open space to the south and west, San Elijo Road to the north, and the Loma San Marcos recreational facility to the east. As such, there is no existing, established community surrounding the Project area that would be divided or disrupted by implementation of the proposed Project. In addition, the Project does not propose a major roadway, physical barrier, infrastructure improvement, buildings, or structures that would divide or disrupt an already established community. No impacts associated with physically dividing an established community would occur.

Guideline for the Determination of Significance

A significant impact related to land use and planning would occur if the Project would:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Guideline Source

The significance threshold is based on Appendix G of the CEQA Guidelines.

Analysis

The discussion below summarizes consistency with the applicable plans and regulations related to land use and planning relationships to environmental effects. Also refer to the other environmental topics addressed in Chapters 2.0 and 3.0 of this EIR for more detailed analyses of the Project's consistency with applicable plans and regulations relevant to specific environmental topics.

Consistency with Elements of the County of San Diego General Plan

Land Use Element: The Land Use Element designates the Project site for Semi-Rural land uses (SR-1 and SR-10), but a small portion of the site has a “No Jurisdiction” land use designation. The “No Jurisdiction” designation is the result of a mapping error and does not preclude the processing of the Project. The subject site does not meet the No Jurisdiction designation because it is not Federal Lands, Tribal Lands, a Specific Plan, Solid Waste Facility, Open Space Conservation or Open Space Recreation. The County’s Geographic Information System (GIS) mapping incorrectly mapped the limits of the No Jurisdiction category on the site by inadvertently adding the open space designated areas to the adjacent conservancy land which correctly has a regional designation of No Jurisdiction. The portion of the Project site incorrectly mapped as No Jurisdiction is a privately owned parcel and has a Community Plan designation of SR-1, which provides proof that the No Jurisdiction designation was incorrectly mapped in County GIS (Excel, 2019).

The SR-1 land use designation applies to properties with maximum densities of one home to every 1, 2, or 4 gross acres, depending on the extent of steep slopes. Paired with the site’s zoning classification of Rural Residential (RR) in the northern portion of the site, the RR zoning classification has a minimum lot size requirement of 1.0 acre and permits single family homes and other rural character uses. The SR-10 land use designation applies to properties with maximum densities of one home to every 10 or 20 gross acres depending on the extent of steep slopes, which is paired with the site’s S80 zoning classification that is intended for recreation areas or areas with environmental constraints. The Project’s design and proposal for the development of 76 residential homes clustered in the northern portion of the property for the benefit of preserving open space in the southern portions of the property is consistent with the site’s land use designations. Refer to Figure 2.4-2, *General Plan Density Consistency Analysis*.

Housing Element: The Project would be consistent with the Housing Element by providing homes for 76 households in San Diego County. The Project’s design and proposed Administrative Permit (PDS2020-AD-20-011) that allows for residential lot size averaging, respects local community character and the natural environment by clustering development in the flattest and least environmentally sensitive portions of the property while protecting the southern portions of the site in open space that adjoin the Rancho La Costa Habitat Conservation Area. The Project also includes a proposed Density Bonus Permit (PDS2021-DB-21-001) pursuant to State Assembly Bill 2345 (Government Code Section 65915 et seq.) to allow for a 20% increase in the maximum allowable number of residential dwelling units in exchange for reserving 5% of the dwelling units on-site for “Low” Income Affordable Housing (defined as 50% to 80% of the Area Median Income [AMI]). Additionally, the Project requests an incentive for 10-foot side yard setbacks, which is below the County’s 15-foot side yard setback requirement. This incentive would allow for clustering in order to avoid sensitive biological resources. Approval of the Density Bonus Permit would allow for an increase in the maximum allowable dwelling units from 64 dwelling units to a maximum of 77 single-family dwelling units in exchange for reserving seven units restricted for

“Low” Income Affordable Housing. However, the Project proposes 76 single-family dwelling units. This component of the Project meets the goals and policies of the Housing Element pertaining to the expansion of opportunities for affordable housing.

Environmental Justice (EJ) Element: The Project site is not located within or near a County-designated EJ community, so there is no reasonable possibility of the Project conflicting with EJ Element goals or policies.

Mobility Element: San Elijo Road that abuts the northern boundary of the Project site is not a Mobility Element roadway, so there is no potential for the Project to introduce conflicts associated with the planning for Mobility Element roads. In regard to transportation design and planning, the Project’s design would maintain the site-adjacent bike lane and soft surface trail on San Elijo Road that fronts the Project site. Pedestrians and bicyclists traveling to and from the Project site would use proposed Street “B” and Street “E” to reach the trail and bike lane system along San Elijo Road and would have no adverse effect on the planning for non-vehicular modes of travel. Further, the Project design is compatible with the regional trail system. The Project’s design provides for a privately maintained parking lot that would be open for public use at the terminus of Street “E.” The parking lot would provide public parking access to existing trail systems located south of the Project site. The Project also includes the installation of a new trail segment on-site that would connect the proposed parking lot to the existing Copper Creek Trail.

Conservation and Open Space (COS) Element: Goals and policies included in this element address the following nine resource topics: biological resources; water resources; agricultural resources; cultural resources; paleontological resources and unique geologic features; mineral resources; visual resources; and air quality, climate change, and energy. Refer to the related sections contained in Chapters 2.0 and 3.0 of this EIR for specific analyses about to these subject matters. Generally, the Project is consistent with the Conservation and Open Space Element, as a key feature of the Project’s design is the clustering of residential development for the purpose of proposing open space in perpetuity that connects with the Rancho La Costa Habitat Conservation Area. The Project’s proposed TM 5643 proposes nine lots as open space, totaling 63.9 acres. Of these lots, 53.13 acres (Lot S) is designated as biological open space, while the other lots accommodate SDG&E easements, fire management buffers, manufactured slopes, and one lot (Lot G) for recreational open space that is designed to accommodate a public parking lot and a 10-foot-wide decomposed granite trail segment that would connect to the existing, off-site Copper Creek Trail.

Safety Element: The Safety Element addresses wildfires, crime, hazardous materials incidents, earthquakes, flooding, airport hazards, and emergency response. Refer to the related sections contained in Chapters 2.0 and 3.0 of this EIR for specific analyses about these subject matters. Generally, the Project is consistent with the Safety Element. Related to wildfire, fire management zones (FMZs) are shown on proposed TM 5643 and the Project’s landscape concept plan and are described in detail in Section 3.13, *Wildfire*, of this EIR. FMZ easements are accommodated along

the Project's western boundary and in other areas, within which fuel would be thinned for wildfire management. Also, a Conceptual Wildfire Evacuation Plan (CWEP) was prepared for the Project, which is contained as *Appendix M2*. The Project site is not located in a floodplain, is not located in an airport safety zone, and the proposed development would be constructed in accordance with all required seismic safety standards mandated by applicable State and County building codes.

Noise Element: Consistency of the Project with Noise Compatibility Guidelines set forth in the Noise Element is analyzed in detail in EIR Section 2.4, *Noise*. The analysis concluded that operation of the Project's proposed residential community would result in significant noise impacts and requires mitigation to ensure that the Project's residential lots are placed into a noise environment that is compatible for residential land uses. Mitigation is presented to address noise from HVAC unit operation and noise experienced by the Project from vehicular noise on adjacent San Elijo Road. With the mitigation measures presented in EIR Section 2.5 (and included herein), the Project is found to be consistent with the County's General Plan Noise Element. Therefore, consistent with the findings in Section 2.4, noise impacts would be less than significant with implementation of mitigation.

Consistency with San Dieguito Community Plan

The proposed Project is determined to be consistent with the San Dieguito Community Plan, for same the reasons presented above related to consistency with the County's General Plan. The Community Plan's general policies relate to rural residential living, utilization of open space to provide separate and distinct neighborhoods, the preservation of natural features, and high standards of design. The proposed Project meets these goals. The Project's design proposes the development of 76 high-quality residential homes, including seven homes that will be designated affordable, clustered in the northern portion of the property for the benefit of preserving open space in the southern portions of the property. Natural features will thus be permanently preserved including steep slopes and a drainage, which will in part serve local wildlife movement functions. The proposed development is designed as a distinct neighborhood with a character and quality that would complement the surrounding community as further described in section 3.1, *Aesthetics and Visual Quality*, of this EIR.

Consistency with County Zoning Ordinance

As shown on Figure 2.4-1, *Project Site Zoning Classifications*, the Project site is zoned Rural Residential (RR) in the northern portion of the site and Open Space (S80) in the southern portion of the site. The RR zoning classification has a minimum lot size requirement of 1.0 acre. However, an Administrative Permit (PDS2020-AD-20-011) is proposed as part of the Project to allow for residential lot size averaging. This will allow the proposed residential development to be clustered in the northernmost portion of the Project site, while reserving other portions of the RR zoned area and the S80 zoned area, that contain steep slopes and sensitive habitats, for open space preservation and wildlife movement. All other requirements of the RR zoning designation are assured to be met. Although the currently proposed entitlement applications do not include any site-specific building

footprints, the Project’s proposed the Site Plan Review (PDS2022-STP-22-018) provides the conceptual location of the future homes within the proposed Tentative Map lots in accordance with the Open Space (S80) zoning designation. As part of site plan applications for the development of individual lots, the County is obligated to ensure compliance with applicable zoning ordinance regulations.

Consistency with County Resource Protection Ordinance

The County’s RPO protects prehistoric and historic sites and sensitive natural resources including wetlands, floodplains, steep slopes, and biological habitats. There are no known significant prehistoric or historic sites, wetlands, or floodplains subject to the RPO on the Project site. Steep slopes (refer to Figure 2.4-1) would be preserved in the Project’s open space area. A focused biological survey of the Project site determined that the Project site contains RPO resources. Although there are no RPO jurisdictional wetlands on the site, the property contains sensitive habitat communities that are regulated by the RPO. Please refer to EIR Section 2.1, *Biological Resources*, for an analysis of the Project’s consistency with the RPO, as well as a discussion of potential impacts to biological resources and mitigation measures to reduce impacts to below a level of significance.

Consistency with City of San Marcos General Plan

The Project site is located within unincorporated San Diego County, but is within the City of San Marcos Sphere of Influence. The City’s Land Use and Community Design Element identifies the Project site within the City’s sphere, applying a perspective Rural Residential (RR) land use designation, which calls for a residential density of 1 – 2 units per acre. The Project’s proposed 76 units and overall design meets the expectation of the RR designation. Regarding the City of San Marcos General Plan Mobility Element, Policy M-1 relates to maintaining a level of service (LOS) of D or better on City roadways. Pursuant to CEQA Guidelines Section 15064.3(a), “...a project’s effect on automobile delay shall not constitute a significant environmental impact.” Regardless, the City’s Mobility Element states that complying with Policy M-1.4 supports “other General Plan goals such as providing environmental protections and enhancing community character. As concluded in EIR Section 2.6, *Transportation*, the Project would contribute vehicles to three intersections and one roadway segment in the City of San Marcos that would operate below LOS D. Mitigation is presented in EIR Section 2.6 to address these deficiencies but because implementation of the improvements would be in the City of San Marcos and the County of San Diego as the Lead Agency for this EIR does not have control over the nature and timing of improvements that would occur in the City of San Marcos, the County cannot assure that the required improvements would be in place at the time of Project occupancy; therefore, near-term Transportation impacts are determined to be significant and unavoidable under Near-Term 2024 conditions until the required improvements are in place. As such, the land use and planning impact related to policy consistency is determined to be significant.

2.4.4 Cumulative Impact Analysis

Cumulative land use and planning impacts may occur when project-specific impacts evaluated in an EIR are combined with the effects of other projects which, when examined individually, may not be considered to be significant. The projects listed in Table 1-3, *List of Cumulative Projects*,

would be built in accordance with the San Diego County General Plan. The Project would not divide an established community and would be consistent in the long-term with the County's General Plan, San Dieguito Community Plan, County Zoning Ordinance, and County RPO. However, the Project would not be consistent with the City of San Marcos General Plan Mobility Element Policy M-1.4. As such, the Project has the potential to result in a cumulatively considerable land use and planning impact.

2.4.5 Significance of Impacts Prior to Mitigation

As discussed above, the Project is consistent with the County of San Diego General Plan, the San Dieguito Community Plan, the County Zoning Ordinance, and the County RPO. However, the Project would have significant impacts due to conflicts with the County of San Diego General Plan Noise Element. Additionally, the Project would contribute vehicles to three intersections and one roadway segment in the City of San Marcos that would operate below LOS D. Thus, the Project would be inconsistent with the City of San Marcos General Plan Mobility Element Policy M-1.4. As such, the Project would result in a significant impact related to City of San Marcos General Plan Mobility Element policy consistency.

2.4.6 Mitigation

Section 2.4, *Noise*, provides the following Mitigation Measures:

- M-N-1** Prior to the issuance of each residential building permit, the County shall review the proposed locations of HVAC units. For HVAC units located less than 35 feet from the nearest property line, a three-sided barrier blocking the line of sight to adjacent properties shall be required. The barrier, if required, shall have a minimum height of 5.5 feet or be 1.75 times the height of the HVAC units and shall be constructed of materials with a minimum weight of 2 pounds per square foot. The barrier shall be solid with no holes, perforations, or gaps.
- M-N-2** Residential lots proposed within 400 feet of the San Elijo Road right-of-way (Lots 1 through 6 and 15 through 18 of Tentative Map 5643) shall have "noise protection easements" to mitigate vehicular noise levels from San Elijo Road. Such easements shall be shown on the final map or subsequent implementing tentative map, as applicable. The noise protection easements shall contain a restriction requiring that exterior noise levels not exceed 60 CNEL within the easement area of the lot. The restriction shall apply to the following minimum exterior use areas: 1) for lots less than 4,000 s.f. in area, the exterior area shall include 400 square feet; and 2) for lots larger than 4,000 s.f, the exterior area shall include 10 percent of the lot area. A noise study is required to be prepared and approved by the County Department of Planning and Development Services (PDS) prior to the issuance of building permits for these lots demonstrating that the residential lots within 400 feet of San Elijo Road would achieve these requirements. In the event that the noise study determines that one or more lots would not achieve the 60 CNEL noise limit within the minimum exterior use areas, the noise study shall identify noise attenuation measures that must be incorporated, such as the use of sound walls or berms, in order to achieve the exterior noise requirement

of 60 CNEL within the minimum exterior use areas. The County shall require that the noise attenuation measures be installed and be verified as effective in meeting the 60 CNEL requirement by an acoustical engineer prior to the issuance of certificates of occupancy.

M-N-3 To achieve interior noise levels at or below 45 CNEL in a windows closed condition, homes located on Lots 1 through 13 shall have mechanical ventilation (e.g., air conditioning) and standard windows with a minimum Sound Transmission Class (STC) rating of 27. The County shall verify that these features will be installed as part of the building permit plan check process.

M-N-4 Prior to the issuance of a grading or blasting permit that would permit these activities within 50 feet of the adjacent Loma San Marcos property line, a temporary noise barrier as described below or a functional equivalent as verified by a professional acoustical engineer shall be implemented to ensure that construction-related noise is maintained at or below 75 dBA Leq on the Loma San Marcos property, which occurs to the immediate east of the Project site's northeastern boundary.

- a. A temporary 12-foot-high noise barrier shall be installed along the eastern property line of the Project site where it borders the Loma San Marcos facility south of the roadway during grading and blasting activities. The barrier shall be of sufficient length to block the line of sight between Loma San Marcos and the construction activities. The noise barrier shall be constructed of material with a minimum weight of 2 pounds per square foot with no gaps or perforations. The noise barrier may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. The noise barrier shall be installed prior to grading, rock drilling, or blasting activities within 50 feet of the eastern property line, and shall remain in place throughout the duration of grading, construction, and blasting activities on the site.

Section 2.6, *Transportation and Traffic*, provides the following Mitigation Measures:

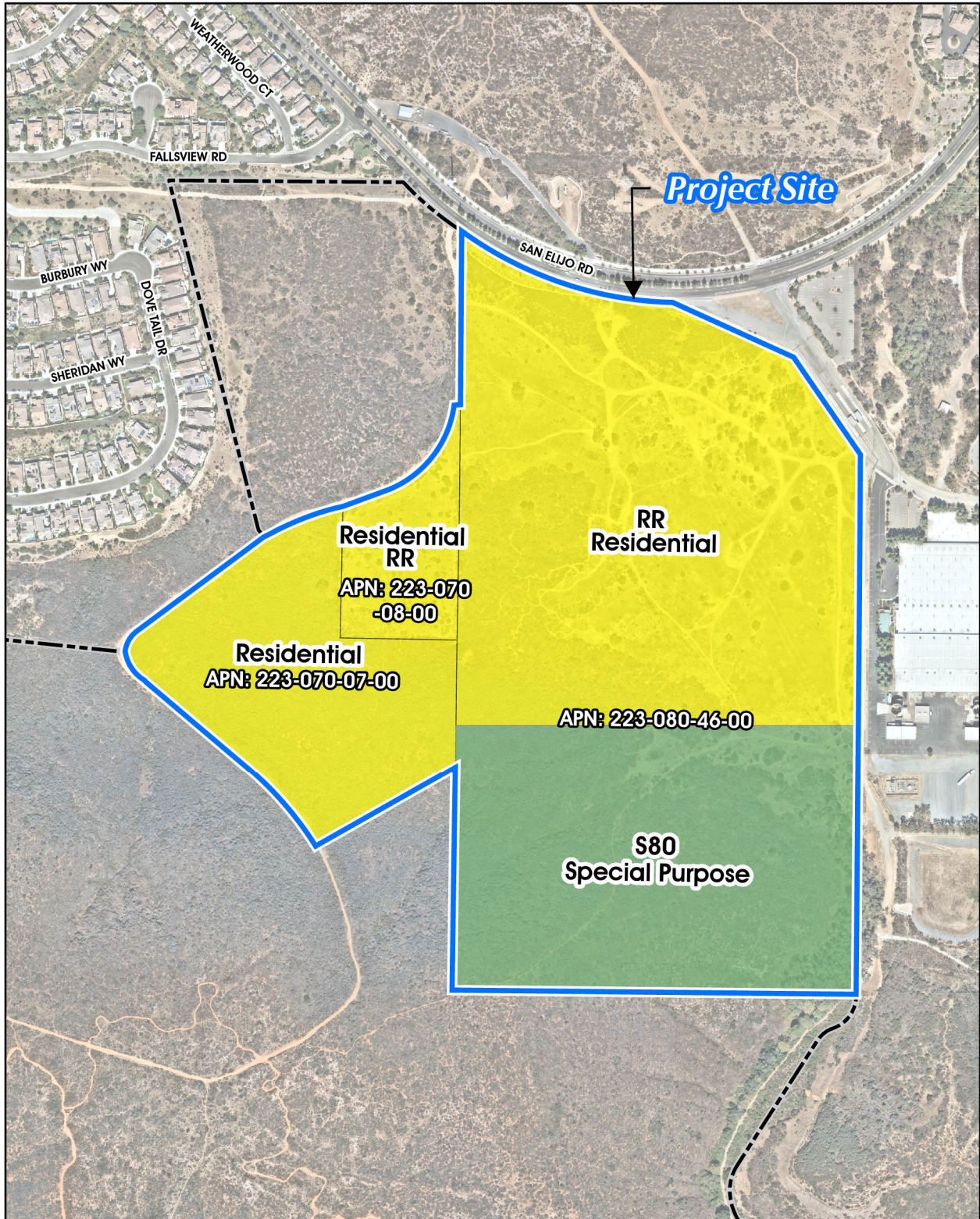
M-TRANS-1 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to optimize the traffic signal timing at the intersection of Melrose Drive and San Elijo Road. Signal optimization could include reoptimizing cycle lengths and/or signal splits to better accommodate future traffic demand along the corridor. It is important to note that if signal optimization is implemented, adjacent intersections within the coordinated system should be taken into consideration. Additionally, prior to issuance of the first certificate of occupancy, the north leg of the intersection (Melrose Drive) shall be restriped to accommodate southbound dual left-turn lanes and a shared through-right lane. A striping plan shall be prepared to the satisfaction of the City Engineer.

M-TRANS-2 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to install a traffic signal at the intersection of Streete “E” and San Elijo Road. Additionally, prior to issuance of the first certificate of occupancy, the south leg of the intersection (Street “E”) shall be reconfigured to include dual left-turn lanes and an exclusive right turn lane.

2.4.7 Conclusion

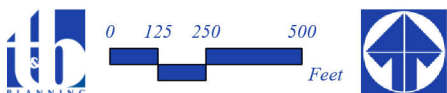
Implementation of Mitigation Measures M-N-1 through M-N-4 would ensure noise-related impacts would be reduced to below the threshold of significance. Therefore, implementation of the required mitigation would reduce the Project’s noise impacts to less-than-significant levels (see Section 2.5, *Noise*).

Upon implementation, and as stated in Section 2.5, the improvements identified as part of M-TRANS-1 and M-TRANS-2 would achieve consistency with the City of San Marcos General Plan Mobility Element Policy M-1.4. However, because the mitigation requires the implementation of improvements in the City of San Marcos and the County of San Diego as the Lead Agency for this EIR does not have control over the nature and timing of improvements that would occur in the City of San Marcos, the County cannot assure that the required improvements would be in place at the time of Project occupancy; therefore, the Project would result in a significant and unmitigable land use and planning impact until the required improvements are in place (see Section 2.6, *Transportation*).



Source(s): Esri, Nearmap Imagery (September 2022), SanGIS (2022)

Figure 2.4-1



Project Site Zoning Classifications

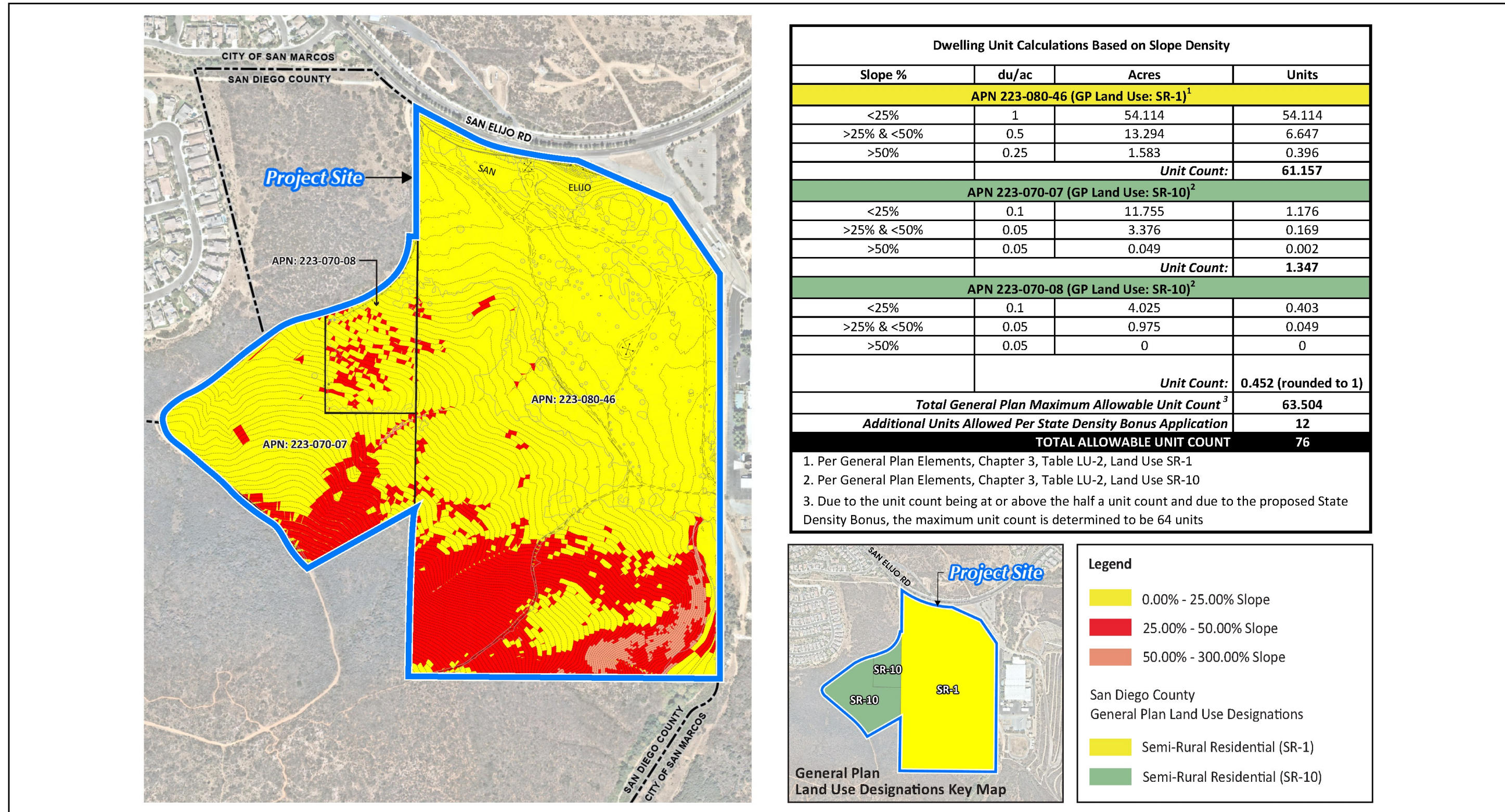
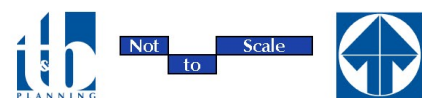


Figure 2.4-2

Source(s): Esri, Nearmap Imagery (2022), Excel Engineering (06-05-2020)



2.5 Noise

An acoustical impact analysis was prepared to determine the potential for short- and long-term noise impacts as a result of Project implementation. The report, titled, “Questhaven Residential Neighborhood Noise Impact Analysis” (herein, “NIA”), dated April 3, 2024, was prepared by Urban Crossroads, Inc. (herein, “Urban Crossroads”), and is provided as *Appendix K* to this EIR (Urban Crossroads, 2024). An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. One comment letter related to noise was received. The San Dieguito Planning Group (received September 30, 2022) requested that the EIR address mitigation measures for noise pollution created by the Project.

2.5.1 Existing Conditions

2.5.1.1 Noise Definitions

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Figure 2.4-1, *Typical Noise Levels*, presents a summary of the typical noise levels and their subjective loudness and effects. (Urban Crossroads, 2024, p. 7)

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet, which can cause serious discomfort. Another important aspect of noise is the duration of the sound and the way it is described and distributed in time. (Urban Crossroads, 2024, p. 7)

Environmental noise descriptors generally are based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (Leq). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the “average” noise levels within the environment. (Urban Crossroads, 2024, p. 7)

Peak hour or average noise levels, while useful, do not completely describe a given noise environment, however. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over

24 hours. The time-of-day corrections require the addition of 5 decibels to dBA Leq sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA Leq sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The County of San Diego relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources. (Urban Crossroads, 2024, p. 8)

2.5.1.2 Existing Noise Conditions

Existing Noise Setting

The Project site is located within unincorporated San Diego County, while the properties to the north, east and west generally are located in the City of San Marcos. The undeveloped parcel located adjacent to the northwest is also within the unincorporated county. All off-site noise sensitive land uses (NSLUs) assessed herein consist of residential uses located within the City of San Marcos, other than a sports facility, Loma San Marcos, located adjacent to and east of the Project site. (Urban Crossroads, 2024, p. 6)

To the west of the Project site is open space associated with the Rancho La Costa Habitat Conservation Area, beyond which is existing residential development. North of the Project site is land designated for open space, beyond which are existing residential uses. East of the Project site is a former recycling facility that is currently used as an indoor sports complex known as Loma San Marcos. To the south of the Project site is open space associated with the Rancho La Costa Habitat Conservation Area. The Project site is adjacent to the San Elijo Hills development in the City of San Marcos and is within the City's Sphere of Influence. (Urban Crossroads, 2024, p. 6)

Existing Noise Levels

To assess the existing noise level environment, 24-hour noise level measurements were taken at five locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Figure 2.4-2, *Project Site and Noise Level Measurement Locations*, provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. in January 2021. Refer to subsection 1.2.3 of the Project's Noise Impact Analysis (NIA) (*Appendix K*) for a description of the methodology used for collecting existing noise level measurements. (Urban Crossroads, 2024, p. 13)

The noise measurements presented below focus on the average or equivalent sound levels (Leq). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 2.4-1, *24-Hour Ambient Noise Level Measurements*, identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Table 2.4-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 1.2 to the Project's NIA (*Appendix K*) provides summary worksheets of the noise levels for each hour as well as the minimum, maximum,

L1, L2, L5, L8, L25, L50, L90, L95, and L99 percentile noise levels observed during the daytime and nighttime periods. The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with surface streets in addition to background residential land use activities. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations. (Urban Crossroads, 2024, pp. 13, 15)

2.5.1.3 Regulatory Setting

California Code of Regulations

Title 24 of the California Code of Regulations requires that residential structures, except detached single-family dwellings, be designed to prevent the intrusion of exterior noise so that the interior CNEL with windows closed, attributable to exterior sources, shall not exceed 45 dBA in any habitable room.

San Diego County General Plan

The following Goal and Policies of the County General Plan Noise Element are relevant to the Project:

GOAL N-2

Protection of Noise Sensitive Uses. A noise environment that minimizes exposure of noise sensitive land uses to excessive, unsafe, or otherwise disruptive noise levels.

Policies

N-2.1 Development Impacts to Noise Sensitive Land Uses. Require an acoustical study to identify inappropriate noise level where development may directly result in any existing or future noise sensitive land uses being subject to noise levels equal to or greater than 60 dBA CNEL and require mitigation for sensitive uses in compliance with the noise standards listed in San Diego County General Plan Table N-2.

N-2.2 Balconies and Patios. Assure that in developments where the exterior noise level on patios or balconies for multi-family residences or mixed-use developments exceed 65 dBA CNEL, a solid noise barrier is incorporated into the building design of the balconies and patios while still maintaining the openness of the patio or balcony.

For all projects except single-family detached dwellings, exterior noise is defined as “noise measured at all exterior areas that are provided for group or private usable open space purposes.” For single-family projects, exterior noise is defined as “noise measured at an outdoor living area that adjoins and is on the same lot as the dwelling, and which contains at least the following minimum area:

- Net lot area up to 4,000 square feet: 400 square feet
- Net lot area 4,000 square feet to 10 acres: 10 percent of net lot area
- Net lot area more than 10 acres: 1 acre

County of San Diego Noise Ordinance

The County Noise Ordinance, Section 36.404, sets limits on the noise levels generated from one property to another, such as from mechanical equipment. Section 36.410 of the Noise Ordinance also regulates noise generated by construction activities.

Section 36.404. Sound Level Limits

Unless a variance has been applied for by an applicant and granted by the County, it is unlawful for a person to cause or allow noise generated on a particular property to exceed the 1-hour average sound level set forth in Section 36.404 and shown herein as Table 2.4-2, *County of San Diego Noise Ordinance Sound Level Limits*. The noise level limits vary with the zoning of the properties concerned. The Project site is currently zoned Rural Residential (RR) and Open Space (S80). Adjacent properties are zoned S80, Agriculture (A72), and Limited Control (S87).

Section 36.408. Hours of Operation of Construction Equipment

Except for emergency work, it is unlawful for any person to operate or cause to be operated, construction equipment:

- a. Between 7 p.m. and 7 a.m.
- b. On a Sunday or a holiday. For purposes of this section, a holiday means January 1st, the last Monday in May, July 4th, the first Monday in September, December 25th and any day appointed by the President as a special national holiday or the Governor of the State as a special State holiday. A person may, however, operate construction equipment on a Sunday or holiday between the hours of 10 a.m. and 5 p.m. at the person's residence or for the purpose of constructing a residence for himself or herself, provided that the operation of construction equipment is not carried out for financial consideration or other consideration of any kind and does not violate the limitations in Ordinance sections 36.409 and 36.410.

Section 36.409. Sound Level Limitations on Construction Equipment

Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 decibels for an eight-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

Section 36.410. Sound Level Limitations on Impulsive Noise

In addition to the general limitations on sound levels in section 36.404 and the limitations on construction equipment in section 36.409, the following additional sound level limitations apply:

- a. Except for emergency work or work on a public road project, no person shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in County of San Diego Noise Ordinance Table 36.410A, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period, as described

in subsection (c) of County of San Diego Noise Ordinance section 36.409. The maximum sound level depends on the use being made of the occupied property. The uses in County of San Diego Noise Ordinance Table 36.410A are as described in the County Zoning Ordinance.

City of San Marcos General Plan

The Noise Element of the City of San Marcos General Plan contains applicable noise/land use compatibility guidelines, which are shown in Table 2.4-3, *City of San Marcos Noise and Land Use Compatibility Guidelines for Transportation-Related Noise*. Policies from the City's General Plan and that are relevant to the Project's potential noise impacts include the following:

- 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.
- N-1.2: Ensure that acceptable noise levels are maintained near noise-sensitive uses.
- 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.
- 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 2.4-3.
- N-2.2: Promote coordinated site planning and traffic control measures that reduce traffic noise on noise-sensitive land uses.
- 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.
- N-2.5: Examine the applicability and noise reduction capabilities of cost effective alternative roadway surfaces, such as rubberized asphalt.
- N-3.1: When adjacent to noise sensitive receptors, require developers and contractors to employ noise reduction techniques during construction and maintenance operations.
- N-3.2: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

According to Table 2.4-3, for single-family residential uses, noise levels that are below 60 dBA CNEL are considered "acceptable", noise levels between 60 and 75 dBA CNEL are considered "conditionally acceptable", and noise levels that exceed 75 dBA CNEL are considered "unacceptable".

For multifamily residential uses, passive recreational areas, open space areas, and active recreational areas, noise levels below 65 dBA CNEL are considered “acceptable”, noise levels between 65 and 75 dBA CNEL are considered “conditionally acceptable”, and noise levels exceeding 75 dBA CNEL are considered “unacceptable”.

City of San Marcos Noise Ordinance

The City’s existing Noise Ordinance (Chapter 10.24 of the San Marcos Municipal Code, Ordinance No. 2008-1300) prohibits loud, annoying, or unnecessary noises. It provides definition for and examples of prohibited noise sources but does not establish numeric noise thresholds for transportation related (e.g., vehicle, railroad, aircraft traffic) or non-transportation related (e.g., air conditioner units, loading docks, construction) noise sources. Section 10.24.020 of the City’s noise ordinance limits construction activities to Monday through Friday before 7:00 a.m. and after 6:00 p.m., or on Saturdays before 8:00 a.m. or after 5:00 p.m.

County Fire Code

The San Diego County Fire Code, Section 96.1.5607.16 addresses explosives, including blasting activities during grading. Blasting activities are only allowed to be conducted by persons who have a valid permit to conduct such activities, who have been approved by the Sheriff to conduct blasting operations and who have been placed on the list of approved blasters. A permit to blast in a specific location must be issued by the County Sheriff pursuant to Fire Code Section 105.6.15. According to Fire Code Section 5607.16.3.2, the Sheriff may impose written conditions and procedures as are deemed reasonably necessary to protect the public health and safety based upon the facts and circumstances of a particular blasting operation. Blasting is only allowed Monday through Saturday, between the hours of 7:00 a.m. and 6:00 p.m. or ½ hour before sunset, whichever occurs first. Prior to blasting activities, the property owner is required to provide a one-time notice in writing, to the local fire agency and dispatch center and to all residences, including mobile homes, and businesses within 600 feet of any potential major blast location or 300 feet from any potential minor blast location. The notice shall be given not less than 24 hours, but not more than one week, before a blasting operation and shall be in a form approved by the Sherriff.

Also, the blaster is required to retain an inspector to inspect all buildings and structures, including mobile homes, within 300 feet of the blast site before blasting operations, unless inspection is waived by the owner and/or occupant. The inspector is required to complete and sign pre-blast- inspection reports identifying all findings and inspection waivers. Following the blasting activity, the inspector is required to conduct a post-blast- inspection of any building and structure for which a written complaint alleging blast damage has been received. A written report of the inspection if required to be immediately filed with the Sherriff. (County, 2023a)

2.5.2 Analysis of Project Effects and Determinations as to Significance

2.5.2.1 Noise Sensitive Land Uses Affected by Airborne Noise

Noise generated as a result of the proposed Project would affect noise sensitive land uses located both within the County of San Diego and the City of San Marcos. However, as noted above, the City of San

Marcos Noise Ordinance does not establish numeric noise thresholds for transportation related (e.g., vehicle, railroad, aircraft traffic) or non-transportation related (e.g., air conditioner units, construction activities, etc.) noise sources. Although the City of San Marcos General Plan identifies land use compatibility guidelines, as shown in Table 2.4-3, the City's General Plan does not identify the level of noise increases that would be considered significant. Accordingly, for the analysis of potential noise impacts to existing land uses within the City of San Marcos, the analysis herein relies on the noise level increase criteria identified by the County of San Diego's Guidelines for Determining Significance and Report and Content Requirements for Noise, approved by the County Department of Planning and Land Use (DPLU) and Department of Public Works (DPW) on January 27, 2009.

Guidelines for the Determination of Significance

The Project would have a significant adverse noise effect if any of the following would occur as a result of a Project-related component:

- (1) Project implementation would result in the exposure of any on- or off-site, existing or reasonably foreseeable, future Noise-Sensitive Land Use (NSLU) to exterior or interior noise (including noise generated from the Project, together with noise from roads, railroads, airports, heliports, or all other noise sources) in excess of any of the following:
 - A. Exterior Locations:
 - i. 60 dB (CNEL)¹; or
 - ii. An increase of 10 dB (CNEL) over pre-existing noise.

In the case of single-family residential detached noise sensitive land use (NSLU), exterior noise shall be measured at an outdoor living area that adjoins and is on the same lot as the dwelling, and which contains at least the following minimum area:

- 1) Net lot area up to 4,000 square feet: 400 square feet
- 2) Net lot area greater than 4,000 square feet and up to 10 acres: 10 percent of net lot area
- 3) Net lot area over 10 acres; 1 acre

For all other projects, exterior noise shall be measured at all exterior areas provided for group or private usable open space.

- B. Interior Locations:
 - i. 45 dB (CNEL) except for the following cases:

¹ For residential land uses that would be exposed to noise levels above 60 dB CNEL, any Project-related "barely perceptible" increase of 3 dB CNEL or greater would be considered a significant impact.

- 1) Rooms that are usually occupied only a part of the day (schools, libraries, or similar facilities), the interior 1-hour average sound level due to noise outside should not exceed 50 decibels (A); and
- 2) Corridors, hallways, stairwells, closets, bathrooms, or any room with a volume less than 490 cubic feet.

Guideline Source

The significance thresholds are based on the County of San Diego's "Guidelines for Determining Significance, Noise" (January 27, 2009).

Analysis

Noise Effects due to Long-Term Operation (Non-Vehicular)

As a proposed residential community, long-term operational noise associated with the Project would consist of typical noise associated with residential communities. Other than noise from vehicles, the Project's long-term operations only would have the potential to result in significant noise impacts related to the operation of mechanical Heating, Ventilation, and Air Conditioning (HVAC) equipment on homes. HVAC equipment associated with single-family residential uses is often ground mounted in the rear or side yard. The noise sources are primarily the fans and compressors associated with the condenser units. (Urban Crossroads, 2024, p. 41)

Noise levels from HVAC equipment can vary substantially depending on unit efficiency, size, and location. Based on the Project location climate zone, a typical 2,500 to 3,000 square foot residence typically requires 5 tons of HVAC per unit. Based on review of several manufactures (Carrier, Trane, and Rheem) conducted by Urban Crossroads, sound level specifications for 5-ton units, generally range from 44 to 45 dBA Leq at a distance of 50 feet. Based on the typical operating conditions for properly sized HVAC units, an HVAC is reasonably expected to for an average of 40 minutes per hour during the daytime hours, and 15 minutes per hour during the nighttime hours. These operating times would lower HVAC noise levels by approximately 2 dB and 6 dB during the day and nighttime hours, respectively. Accounting for typical attenuation rates of 6 dB per doubling of distance, noise levels attributed to unshielded HVAC mechanical systems could exceed the County property line noise limit (50 dBA Leq) within 35 feet of the source depending on the operation schedule. At this time, no plans are available that show the location of the proposed structures or HVAC locations in relation to property lines. If the HVAC units must be located closer than 35 feet from any property line, a 5.5-foot-high barrier blocking the line to receivers would reduce noise levels by 10 dB, thus allowing HVAC units within 5 feet of property lines. Therefore, prior to mitigation, the Project's impacts due to noise from HVAC equipment would be potentially significant prior to mitigation (**Significant Direct Impact N-1**). (Urban Crossroads, 2024, pp. 41-42)

Off-Site Noise Effects from Project Vehicular Traffic

The Project would increase traffic volumes on local roadways. Noise level increases would be greatest nearest the Project site, which would represent the greatest concentration of Project-related traffic. Traffic noise primarily is a function of volume, vehicle mix, speed, and proximity. For purposes of this

evaluation, the vehicle mix, speed, and proximity are assumed to remain constant in the future. Thus, the primary factor affecting noise levels would be increased traffic volumes. Impacts were determined by comparing existing average daily traffic volumes with the existing condition plus the Project at full build-out and the Near-Term Year 2024 Cumulative Condition with and without the Project. Horizon Year impacts were determined by comparing the 2035 Horizon Year conditions with Project and without the Project to determining the Project's contribution to the future noise levels. (Urban Crossroads, 2024, p. 31)

Noise contours were used to assess the Project's incremental traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Tables 2-6 to 2-11 of the Project's NIA (*Appendix K*) present a summary of the exterior traffic noise levels for each traffic condition. Appendix 2.2 to the Project's NIA includes the traffic noise level contours worksheets for each traffic condition. (Urban Crossroads, 2024, p. 31)

Existing Project Traffic Noise Level Increases

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included herein to fully analyze all the existing traffic scenarios identified in the Project's Transportation Analysis ("TA"; *Appendix LI*). This condition is provided solely for informational purposes and would not occur, since the Project will not be fully developed and occupied under Existing conditions. Table 2-7 of the Project's NIA (*Technical Appendix K*) shows the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise levels are expected to range from 65.6 to 74.4 CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 2-7 of the Project's NIA shows the Existing with Project conditions would range from 65.6 to 74.4 CNEL. Table 2.4-4, *Existing with Project Traffic Noise Level Increases*, shows that the Project off-site traffic noise level impacts would range from 0.0 to 0.2 CNEL. Based on the significance criteria for off-site traffic noise (i.e., a "barely perceptible" increase of 3 dB CNEL or more for land uses exposed to noise levels above 60 dB CNEL), land uses adjacent to the study area roadway segments would experience less-than-significant noise-level increases on receiving land uses due to the Project-related traffic under Existing plus Project conditions. (Urban Crossroads, 2024, p. 35)

Near-Term Year 2024 Cumulative Project Traffic Noise Level Increases

Table 2-9 of the Project's NIA (*Technical Appendix K*) presents the Near-Term Year 2024 Cumulative without Project conditions CNEL noise levels. The Near-Term Year 2024 Cumulative without Project exterior noise levels are expected to range from 65.9 to 74.8 CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 2-10 of the Project's NIA shows the Near-Term Year 2024 Cumulative with Project conditions would range from 66.0 to 74.8 CNEL. Table 2.4-5, *Near-Term Year 2024 With Project Traffic Noise Increases*, shows that the Project off-site traffic noise level increases would range from 0.0 to 0.1 CNEL. Based on the significance criteria for off-site

traffic noise (i.e., a “barely perceptible” increase of 3 dB CNEL or more for land uses exposed to noise levels above 60 dB CNEL), land uses adjacent to the study area roadway segments would experience less-than-significant noise-level increases on receiving land uses due to the Project-related traffic. (Urban Crossroads, 2024, p. 35)

Horizon Year 2035 Project Traffic Noise Level Increases

Table 2-11 of the Project’s NIA (*Technical Appendix K*) presents the Horizon Year 2035 without Project conditions CNEL noise levels. The Horizon Year 2035 without Project exterior noise levels are expected to range from 66.8 to 74.6 CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 2-11 of the Project’s NIA shows the Horizon Year 2035 with Project conditions would range from 66.8 to 74.6 CNEL. Table 2.4-6, *Horizon Year 2035 With Project Traffic Noise Increases*, shows that the Project off-site traffic noise level increases would range from 0.0 to 0.1 CNEL. Based on the significance criteria for off-site traffic noise (i.e., a “barely perceptible” increase of 3 dB CNEL or more for land uses exposed to noise levels above 60 dB CNEL), land uses adjacent to the study area roadway segments would experience less-than-significant noise-level increases on receiving land uses due to the Project-related traffic. (Urban Crossroads, 2024, p. 35)

Vehicle Traffic Noise On-Site

Noise in Exterior Locations

Based on the exterior noise modeling, the expected future exterior noise levels were calculated. Table 2.4-7, *Exterior Ground Floor Noise Levels*, presents a summary of future exterior noise level impacts at the ground level within the Project site. Receiver locations represent anticipated exterior use areas, such as back yards. The on-site traffic noise level analysis indicates that the outdoor living areas facing, or adjacent to, San Elijo Road would experience unmitigated exterior noise levels ranging from 58.9 to 65.6 CNEL. Based on the exterior noise levels, the Project would exceed the County of San Diego 60 CNEL exterior noise standard by placing homes in a location near San Elijo Road that experiences traffic noise levels above residential standards. Accordingly, prior to mitigation, Project impacts due to the exposure of on-site dwelling units placed near San Elijo Road to exterior noise levels exceeding 60 CNEL would be significant (**Significant Direct Impact N-2**). The on-site traffic noise analysis calculations are provided in Appendix 2.1 to the Project’s NIA (*Technical Appendix K*). (Urban Crossroads, 2024, p. 26)

Noise in Interior Locations

The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with a “windows closed” condition. However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: [1] weather-stripped solid core exterior doors; [2] upgraded dual glazed windows; [3] mechanical ventilation/air conditioning; and [4] exterior wall/roof assemblies free of cut outs or openings. (Urban Crossroads, 2024, p. 27)

Table 2.4-8, *First Floor Interior Noise Impacts (CNEL)*, shows the future unmitigated exterior noise levels at the first-floor building façades are expected to range from 57.0 to 65.6 CNEL requiring an interior noise level reduction ranging from 12 to 20.6 CNEL. Table 2.4-9, *Second Floor Interior Noise Impacts (CNEL)*, shows the future unmitigated exterior noise levels at the second-floor building façades are expected to range from 56.5 to 65.1 CNEL requiring an interior noise level reduction ranging from 11.5 to 20.1 CNEL. Therefore, a windows-closed condition requiring a means of mechanical ventilation (e.g., air conditioning) is required for Lots 1 through 13. The interior noise level analysis shows that the County of San Diego 45 CNEL interior noise standards can be satisfied using mechanical ventilation and standard windows with a minimum STC rating of 27. Notwithstanding, in the absence of a “windows closed” condition, Project impacts due to interior noise levels being above residential standards due to placing homes in close proximity to San Elijo Road would be significant requiring mitigation (**Significant Direct Impact N-3**). The on-site traffic noise inputs are provided in Appendix 2.1 to the Project’s NIA (*Technical Appendix K*). (Urban Crossroads, 2024, p. 27)

Aircraft Noise

The closest airport is a private airport, the McClellan Palomar Airport, located approximately 4.75 miles northwest of the Project site. According to Exhibit II-1 (Compatibility Policy Map: Noise) of the McClellan-Palomar Airport Master Plan Update (October 2021), the Project site is located approximately 3.2 miles southeast of the 60 dB CNEL contour for the McClellan-Palomar Airport (San Diego County, 2021, Exhibit II-1). As such, due to distance, Project traffic-related noise would not combine with airport-related noise levels such that a significant impact would occur. In addition, the Project does not include any airport-related facilities, and there are no components of the proposed Project that would result in an increase in air travel such that airport-related noise levels in the local area would increase. Therefore, Project impacts due to aircraft noise would be less than significant.

2.5.2.2 Project-Generated Airborne Noise

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on noise if any of the following would occur as a result of a Project-related component:

- The Project will generate airborne noise which, together with noise from all other sources, will be in excess of either of the following:
 - A. Non-construction noise: The limit specified in San Diego County Code Section 36.404, General Sound Level Limits, at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise. The limits provided by Section 36.404 are summarized below in Table 2.4-10.
 - B. Construction Noise: Noise generated by construction activities related to the Project will exceed the standards listed in San Diego County Code Section 36.409, Sound Level Limits on Construction Equipment, and Section 36.410, Impulsive Noise Level Limits.

- C. Impulsive Noise: Noise generated by the Project will exceed the standards listed in San Diego Code Section 36.410, Sound Level Limitations on Impulsive Noise.

Guideline Source

This significance threshold is derived from the County of San Diego’s “Guidelines for Determining Significance, Noise” (January 27, 2009), and the County Noise Ordinance, Section 36.404, which sets limits on the noise levels generated from one property to another.

Analysis

Short-Term Construction Noise Emission Levels

Noise generated by the Project’s construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment are expected to occur in the following stages: site preparation, grading, building construction, paving, and architectural coating.

Typical Construction Noise Analysis

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearest NSLU locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. As shown on Table 2.4-13, *Unmitigated Construction Equipment Noise Level Summary*, the construction noise levels are expected to range from 59.8 to 81.9 dBA Leq, and the highest construction levels are expected to range from 69.9 to 81.9 dBA Leq at the nearest property line with an occupied structure. Appendix 3.1 includes the detailed CadnaA unmitigated construction noise model inputs. (Urban Crossroads, 2024, p. 43)

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest property lines, a construction-related noise level threshold of 75 dBA Leq is used as the threshold to assess the construction noise level impacts. The construction noise analysis shows that Receiver Location R5 would exceed the 75 dBA Leq significance threshold during Project construction activities, as shown on Table 2.4-14, *Typical Construction Noise Level Compliance (Without Mitigation)*. Therefore, the Project’s typical construction noise impacts would be significant and would require mitigation (**Significant Direct Impact N-4**). (Urban Crossroads, 2024, p. 45)

Blasting Noise Analysis

Blasting would be required for several areas within the Project site. Shallow blasting (<30 feet below existing grade) and moderate depth blasting (30–40 feet below existing grade) would occur in several areas across the site. The exact locations for blasting are not known at this time so reasonable assumptions have been made for analytical purposes. Blasting locations would be determined following geotechnical investigations regarding rock locations prior to the issuance of grading permits. (Urban Crossroads, 2024, p. 43)

Prior to blasting, small holes would be drilled into the rock in a pattern that allows each hole to remove a small amount of rock. In order to comply with the County Fire Code, the blasting contractor would calculate and use only the amount of explosive in each of the small holes necessary to break the rock around each hole while crushing the rock for removal. The explosive would be detonated at each hole in a sequence with at least 8 milliseconds delay between charges to limit the total amount of vibration generated by the explosive fire at any one time. The blasting orientation also would be controlled in such a way that fractures and the energy from each blast would move the rock towards a hole that has already been cleared, limiting the containment of the explosive, and reducing potential vibrations at nearby structures. Another factor the blasting contractor can use to limit vibrations from blasting includes timing of energy release, i.e., the delay between each charge. (Urban Crossroads, 2024, pp. 43, 45)

For blasting, it is estimated that drilling would occur in grids of 4 feet by 4 feet to 6 feet by 6 feet. The drill holes would be extended to a depth of approximately 18 to 24 inches below the proposed subgrade. Additionally, a five-foot-thick blanket of soil would be applied before drilling to reduce noise. Assuming the use of a single drill rig, it is estimated that the drilling, blasting, and excavation would be coordinated such that the duration of drilling and blasting combined would be require a few weeks to complete. Completion of excavation and stockpiling of fractured rock after the final blast may require an additional week or two. (Urban Crossroads, 2024, p. 45)

According to the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM), within the audible frequency range, a blast generates maximum noise levels on the order of 94 dB(A) Lmax. However, the total time for a blast would be a fraction of a minute and only one blasting event would occur in a given hour. Thus, hourly noise levels from blasting are calculated to be 74 dBA Leq at 50 feet. The explosive charges used in mining and mass grading are typically wholly contained in the ground with a minimum 5-foot overburden, which would further attenuate noise levels. (Urban Crossroads, 2024, pp. 17-18)

As discussed above, blasting and rock drilling are both calculated to be approximately 74 dBA Leq at 50 feet. Blast locations are unknown at this time, and blasting could be conducted anywhere within the construction activity footprint as shown on Figure 2.4-4, *On-Site Receiver Locations*. As the Project construction activity would occur less than 50 feet from the property line of Loma San Marcos, rock drilling and blasting noise levels conservatively are evaluated as a significant impact at this location for which mitigation would be required (**Significant Direct Impact N-5**). (Urban Crossroads, 2024, p. 45)

Long-Term Operational Noise Emission Levels

As previously discussed, as a proposed residential community, long-term operational noise associated with the Project would consist of typical noise associated with residential communities. The Project's long-term non-vehicular operations only would have the potential to result in significant noise impacts related to the Project's proposed mechanical HVAC equipment. HVAC equipment associated with single-family residential uses is often ground mounted in the rear or side yard. The noise sources are primarily the fans and compressors associated with the condenser units. (Urban Crossroads, 2024, p. 41)

Noise levels from HVAC equipment can vary substantially depending on unit efficiency, size, and location. Based on the Project location climate zone, a typical 2,500 to 3,000 square foot residence typically requires 5 tons of HVAC per unit. Based on review of several manufactures (Carrier, Trane, and Rheem) conducted by Urban Crossroads, sound level specifications for 5-ton units, generally range from 44 to 45 dBA Leq at a distance of 50 feet. Based on the typical operating conditions for properly sized HVAC units, an HVAC unit would operate an estimated to operate for an average of 40 minutes per hour during the daytime hours, and 15 minutes per hour during the nighttime hours. These operating times would lower HVAC noise levels by approximately 2 dB and 6 dB during the day and nighttime hours, respectively. Accounting for typical attenuation rates of 6 dB per doubling of distance, noise levels attributed to unshielded HVAC mechanical systems could exceed the County property line noise limit (50 dBA Leq) within 35 feet of the source depending on the operation schedule. At this time, no plans are available that show the location of the proposed structures or HVAC locations in relation to property lines. If the HVAC units must be located closer than 35 feet from any property line, a 5.5-foot-high barrier blocking the line to receivers would reduce noise levels by 10 dB, thus allowing HVAC units within 5 feet of property lines. Therefore, prior to mitigation, the Project's impacts due to noise from HVAC equipment would be potentially significant prior to mitigation (**Significant Direct Impact N-1**). (Urban Crossroads, 2024, pp. 41-42)

Potential Impulsive Noise Impacts

There are no significant known sources of vibration associated with Project operation, as the Project would consist of a proposed residential community. No onsite rock crushing is anticipated during the grading operations. No pile driving is anticipated during building construction. However, blasting is anticipated to be required to break up subsurface rock structures. (Urban Crossroads, 2024, p. 47)

Blasting involves drilling bore holes and placing small amounts of explosives in each hole. By limiting the amount of explosives in each hole the blasting contractor can limit the fraction of the total energy released at any single time, which can limit noise and vibration levels. Rock drilling generates impulsive noise from the striking of the hammer with the anvil within the drill body, which drives the drill bit into the rock. As previously discussed, rock drilling generates noise levels of approximately 85 dBA Lmax at 50 feet for approximately 20 percent of an hour. (Urban Crossroads, 2024, p. 47)

When explosive charges detonate in rock, almost all of the available energy from the explosion is used in breaking and displacing the rock mass. However, some blast energy escapes into the atmosphere. As previously discussed, due to the short duration of a blast, blasting is calculated to generate approximately 94 dBA Lmax at 50 feet for approximately 1 percent of an hour. (Urban Crossroads, 2024, p. 47)

Thus, the maximum noise levels from a rock drilling or blasting could exceed the County's maximum noise level threshold of 82 dBA; however, as rock drilling would only generate maximum noise levels 20 percent of an hour, and blasting would only generate maximum noise levels for 1 percent of an hour, neither activity would exceed the County impulsive threshold for 25 percent or more of an hour. Thus, based on duration, impulsive noise levels are anticipated to be below the County's impulsive noise level threshold. No impulsive noise impacts are anticipated, and no mitigation measures are required. (Urban Crossroads, 2024, pp. 47-48)

2.5.2.3 Ground-Born Vibration and Noise Impact Analysis

Guidelines for the Determination of Significance

The Project would have a significant adverse effect on noise if the following would occur as a result of a Project-related component:

- (3) *Project implementation would expose the uses listed in Table 2.4-15 and Table 2.4-16 to ground-borne vibration or noise levels equal to or in excess of the levels shown.*

Accordingly, impacts from general construction would occur if vibration levels exceed 0.0040 in/sec RMS (0.016 in/sec PPV) at any surrounding residential structure or 0.0056 in/sec rms (0.0224 in/sec PPV) at any non-residential structure. There are no special buildings near the Project site that could be affected by Project related vibrations.

Guidelines Source

The significance threshold is based on the County of San Diego's "Guidelines for Determining Significance, Noise" (January 27, 2009).

Analysis

No operational components of the Project include significant groundborne noise or vibration sources and no significant vibrations sources currently exist, or are planned, in the Project area. Thus, no significant groundborne noise or vibration impacts would occur with the operation of the proposed Project. As such, the analysis below focuses on the Project's potential to result in groundborne noise or vibration associated with the Project's construction activities. (Urban Crossroads, 2024, p. 50)

Typical Project Construction Vibration Levels

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). While vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. (Urban Crossroads, 2024, p. 50)

Ground vibration levels associated with various types of construction equipment are summarized on Table 2.4-17, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the FTA. The FTA provides the following equation: $PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$. Vibration receiver locations considered in the analysis are presented on Figure 2.4-5, *Vibration Receiver Locations* (Urban Crossroads, 2024, p. 50)

Table 2.4-18, *Typical Project Construction Vibration Levels*, presents the expected Project-related typical construction activity vibration levels at each of the nearest receiver locations. At distances ranging from 123 to 1,051 feet from the Project construction activities, the transient construction vibration velocity levels are estimated to range from 0.00018 to 0.00816 PPV in/sec. Based on maximum acceptable continuous vibration threshold of 0.016 PPV (in/sec) for residential structures or 0.0224 in/sec PPV for commercial buildings, the typical Project construction vibration levels would satisfy the thresholds at all the nearest receiver locations. Moreover, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter. Therefore, the vibration impacts due to the typical Project construction activities would be less than significant requiring no mitigation. (Urban Crossroads, 2024, p. 51)

Blasting-Related Construction Vibration Levels

Vibration levels associated with blasting are site-specific and are dependent on the amount of explosive used, soil conditions between the blast site and the receptor, and the elevation where blasting would take place (specifically, how far below surface elevation where bedrock would be encountered). At the current stage of the proposed Project design, a blasting and monitoring plan has not been completed; thus, specifics, such as the explosive, blasting quantities, and exact locations, have not been identified. However, it can be assumed all blasting locations would be associated with non-rippable rock, and to be conservative as the non-rippable rock locations are only generally known, the entire construction area (refer to Figure 2.4-5) conservatively is evaluated as a potential blasting location. (Urban Crossroads, 2024, p. 53)

As with noise, while almost all of the available energy from an explosion is used in breaking and displacing the rock mass, a small portion of the energy is released in the form of vibration waves that radiate away from the charge location. The strength, or ‘amplitude,’ of the waves reduces as the distance from the charge increases. The rate of amplitude decay depends on local geological conditions but can be estimated with a reasonable degree of consistency, which allows regulatory agencies to control blasting operations by means of relationships between distance and explosive quantity. (Urban Crossroads, 2024, p. 53)

The explosive charges used in mining and mass grading are typically wholly contained in the ground and are typically covered with overburden. Based on extensive research conducted by the United States Bureau of Mines and the Office of Surface Mining, universities, and private groups, vibration standards, vibration damage criteria, seismographs standards, and techniques to predict and control blast vibrations have been developed that greatly reduce the risk of offsite impacts from blasting. These methods and techniques are incorporated into blasting and monitoring requirements of the County Fire Code. (Urban Crossroads, 2024, p. 53)

The range of vibration levels in this analysis is based on the quantity of explosive, as all other parameters were held constant. As shown in Table 2.4-19, *Blasting Vibration Based on Charge Weight and Distance*, blasting is predicted to generate vibration levels ranging exceeding 1.0 in/sec PPV, depending on charge weight, anywhere from 20 feet to 70 feet from the blast. (Urban Crossroads, 2024, p. 53)

As indicated in Table 2.4-19, vibration levels associated with blasting can be controlled through the charge weight. However, the actual resulting PPV from blasting can be further controlled and reduced through best engineering practices used by professional, licensed, blasters, including, but not limited to, orienting the progressions of the charges away from receivers, decreasing confinement of the explosive energy, increasing spatial distribution of the charges, and increasing time of energy release or detonation. The County Fire Code includes a minimum energy release time for individual charges of 8 milliseconds to limit vibrations. However, based on empirical data, even shorter delays of as little as 5 milliseconds can minimize vibration in very close blasting situations (10 to 25 feet). (Urban Crossroads, 2024, p. 54)

The proposed Project would comply with the County Fire Code and would include all feasible vibration reduction strategies, including conducting pre- and post-construction surveys of all structures within 300 feet of any blast and would monitor blasting vibrations levels. The monitoring of blasting vibrations level would be used to reduce charge weights, increase timing between charges, or other appropriate measures as required to reduce vibrations from blasting. With the implementation of these requirements, vibrations from blasting would be reduced to 1.0 in/sec PPV or less at the nearest residence, and as such, blasting-related vibration impacts during construction would be less than significant. (Urban Crossroads, 2024, p. 54)

2.5.3 Cumulative Impact Analysis

For purposes of evaluating the Project's potential to result in cumulatively-considerable noise impacts, a study area has been defined. For analysis of construction-related noise and vibration impacts, the cumulative study area includes lands within 1,000 feet of the Project site, as construction activities occurring on properties located further than 1,000 feet of the Project site would not have the potential to combine with Project-related construction noise levels such that sensitive receptors would be exposed to noise levels exceeding the County's noise level standards. Similarly, for stationary noise impacts, the cumulative study area includes lands within 1,000 feet of the Project site, as operational noise from cumulative developments located further than 1,000 feet of the Project site have no reasonable potential to combine with Project operational noise levels on site such that nearby sensitive receptors would be exposed to noise levels exceeding the County's noise standards. For the issue of traffic-related noise, the long-term analysis considers buildout of the County's General Plan land use plan and the land use plans of other jurisdictions based on the SANDAG Series 13 model. For near-term traffic-related noise, the cumulative study area includes cumulative projects that would contribute 50 or more peak hour trips to the Project's study area intersections (as listed in Table 2.4-4 through Table 2.4-6), and includes traffic from the following cumulative developments:

1. Corner @ 2 Oaks – This project is located at the southwest corner of Twins Oaks Valley Road and San Marcos Boulevard intersection. This project proposes to construct a 13,499 square foot building for office and commercial use as well as 118 multi-family dwelling units.
2. Kaiser Permanente – This project is located at 400 Craven Road. This project proposes to construct a 428,500 square foot building for medical office space and accommodate 206 hospital beds. This project would be an extension of the already existing Kaiser Permanente located at same location.

3. Brookfield Residential (multi-family) – This project is located at the southwest corner of Twin Oaks Valley Road and South Village Drive. This project proposes to develop 220 multi-family dwelling units.
4. Fenton South (Discovery Village South) – This project is located at future extension of Discovery Street. This project proposes to develop 230 single family dwelling units.
5. Mesa Rim Climbing Gym – This project is located at 285 Industrial Street. This project proposes to construct 28,000 square foot building for indoor recreation climbing gym.
6. Artis Senior Living – This project is located at the northeast corner of Rancho Santa Fe Road and San Elijo Road intersection. This project proposes to construct a congregate care facility accommodating 64 beds.
7. Block 3 Housing – This project is located at the northeast corner of June Way and Barham Drive intersection. This project proposes to develop a student housing facility accommodating 342 beds.
8. Loma San Marcos Specific Plan Phase 2 – This project is located on San Elijo Road. This project proposes to construct 213,621 SF of Movie Production space and a 6-story office building measuring 120,000 SF.

With respect to the Project’s non-vehicular operational-related noise, other than Loma San Marcos, the areas surrounding the Project site primarily consist of developed residential areas and thus generate a similar level of noise as the Project would. While the Project would potentially result in direct operational noise impacts associated with the operation of HVAC units, cumulatively-considerable operational noise impacts would be less than significant because there are no substantial off-site noise generating uses that could combine with the Project’s HVAC noise to exacerbate noise conditions on surrounding properties and cause the cumulative noise levels to substantially increase. (Urban Crossroads, 2024, p. 48)

Table 2.4-5 and Table 2.4-6 present the anticipated noise levels along study area roadways under near-term (2024) cumulative and horizon year (2035) conditions, respectively. As previously noted, Table 2.4-5 accounts for traffic from the list of projects provided above, while Table 2.4-6 accounts for buildout of the San Diego County General Plan and the general plans of other jurisdictions based on the SANDAG Series 13 model. As indicated in Table 2.4-5 and Table 2.4-6, the Project and other cumulative developments would not expose any nearby sensitive receptors to noise level increases exceeding 3 dB CNEL. As such, cumulatively-considerable traffic-related noise impacts would be less than significant.

Impacts associated with on-site traffic-related noise, which could potentially expose future on-site dwelling units to noise levels exceeding the County’s noise level standards, are impacts on, rather than impacts from, the proposed Project. As such, cumulatively-considerable impacts associated with on-site traffic-related noise would not occur.

There are no components of the proposed Project that could cumulatively contribute to excessive airport-related noise in the local area, as the Project site is located approximately 4.75 miles southeast of the McClellan Palomar Airport, is located approximately 3.2 miles outside the 60 dB CNEL noise

contour for this facility, and the Project does not include any uses that would cause or contribute to increased airport-related noise in the local area. Cumulatively-considerable impacts would not occur.

With respect to construction- and blasting-related noise, no cumulative projects are known within 1,000 feet of Project construction. As noted above, only future development projects in the direct vicinity (1,000 feet) of the Project site could add to construction noise generated by the Project and result in a cumulative noise impact. As such, cumulatively-considerable noise impacts associated with Project construction and blasting activities would be less than significant on a cumulatively-considerable basis. (Urban Crossroads, 2024, p. 48)

There are no significant known sources of vibration associated with Project operation, as the Project would consist of a proposed residential community. No onsite rock crushing is anticipated during the grading operations. No pile driving is anticipated during building construction. Thus, cumulatively-considerable impulsive noise impacts associated with long-term operation of the Project and associated with these types of construction activities would not occur. Although the Project's grading would require blasting activities, as noted above there are no cumulative developments within 1,000 feet of the Project site and that could be under simultaneous construction. As such, cumulatively-considerable impulsive noise impacts associated with the Project's blasting activities would be less than significant.

As a proposed residential community, the Project does not include any uses that could cause or contribute to long-term operational-related groundborne noise or vibration. The analysis of Project-specific impacts presented above demonstrates that groundborne noise and vibration impacts during construction activities would be less than significant. As there are no cumulative developments located within 1,000 feet of the Project site and that could be under construction at the same time as the Project, cumulatively-considerable impacts associated with groundborne noise and vibration would be less than significant.

2.5.4 Significance of Impacts Prior to Mitigation

Significant Direct Impact N-1: The operation of unshielded HVAC mechanical systems for the Project's residential homes could exceed the County property line noise limit (50 dBA Leq) within 35 feet of the source depending on the operation schedule. This represents a potentially significant direct operational noise impact.

Significant Direct Impact N-2: Proposed outdoor living areas (residential yards) facing, or adjacent to, San Elijo Road would experience unmitigated exterior noise levels ranging from 58.9 to 65.6 CNEL. Because outdoor living areas would exceed the County of San Diego 60 CNEL exterior noise standard, the noise impact from vehicular noise is considered a significant direct impact.

Significant Direct Impact N-3: For proposed residential homes facing, or adjacent to, San Elijo Road, unmitigated exterior noise levels at the second-floor building façades are expected to range from 56.5 to 65.1 CNEL requiring an interior noise level reduction ranging from 12 to 20.6 CNEL to meet the County's 45 CNEL standard. In the absence of a "windows closed" condition, impacts due to traffic-related interior noise levels would be significant.

Significant Direct Impact N-4: During the Project’s construction, maximum construction-related noise levels at the adjacent occupied land use to the east, Loma San Marcos, would exceed the 75 dBA Leq significance threshold. Therefore, the Project’s short-term construction-related noise impact on Loma San Marcos would be significant.

Significant Direct Impact N-5: Blasting and rock drilling activities would produce noise levels of approximately 74 dBA Leq at 50 feet. Blasting could be conducted anywhere within the construction activity footprint and because Project construction activity would occur less than 50 feet from the property line of Loma San Marcos, rock drilling and blasting noise levels conservatively are evaluated as a significant impact at this location.

2.5.5 Mitigation

M-N-1 Prior to the issuance of each residential building permit, the County shall review the proposed locations of HVAC units. For HVAC units located less than 35 feet from the nearest property line, a three-sided barrier blocking the line of sight to adjacent properties shall be required. The barrier, if required, shall have a minimum height of 5.5 feet or be 1.75 times the height of the HVAC units and shall be constructed of materials with a minimum weight of 2 pounds per square foot. The barrier shall be solid with no holes, perforations, or gaps.

M-N-2 Residential lots proposed within 400 feet of the San Elijo Road right-of-way (Lots 1 through 6 and 15 through 18 of Tentative Map 5643) shall have “noise protection easements” to mitigate vehicular noise levels from San Elijo Road. Such easements shall be shown on the final map or subsequent implementing tentative map, as applicable. The noise protection easements shall contain a restriction requiring that exterior noise levels not exceed 60 CNEL within the easement area of the lot. The restriction shall apply to the following minimum exterior use areas: 1) for lots less than 4,000 s.f. in area, the exterior area shall include 400 square feet; and 2) for lots larger than 4,000 s.f, the exterior area shall include 10 percent of the lot area. A noise study is required to be prepared and approved by the County Department of Planning and Development Services (PDS) prior to the issuance of building permits for these lots demonstrating that the residential lots within 400 feet of San Elijo Road would achieve these requirements. In the event that the noise study determines that one or more lots would not achieve the 60 CNEL noise limit within the minimum exterior use areas, the noise study shall identify noise attenuation measures that must be incorporated, such as the use of sound walls or berms, in order to achieve the exterior noise requirement of 60 CNEL within the minimum exterior use areas. The County shall require that the noise attenuation measures be installed and be verified as effective in meeting the 60 CNEL requirement by an acoustical engineer prior to the issuance of certificates of occupancy.

M-N-3 To achieve interior noise levels at or below 45 CNEL in a windows closed condition, homes located on Lots 1 through 13 shall have mechanical ventilation (e.g., air conditioning) and standard windows with a minimum Sound Transmission Class (STC)

rating of 27. The County shall verify that these features will be installed as part of the building permit plan check process.

M-N-4 Prior to the issuance of a grading or blasting permit that would permit these activities within 50 feet of the adjacent Loma San Marcos property line, a temporary noise barrier as described below or a functional equivalent as verified by a professional acoustical engineer shall be implemented to ensure that construction-related noise is maintained at or below 75 dBA Leq on the Loma San Marcos property, which occurs to the immediate east of the Project site's northeastern boundary.

- a. A temporary 12-foot-high noise barrier shall be installed along the eastern property line of the Project site where it borders the Loma San Marcos facility south of the roadway during grading and blasting activities. The barrier shall be of sufficient length to block the line of sight between Loma San Marcos and the construction activities. The noise barrier shall be constructed of material with a minimum weight of 2 pounds per square foot with no gaps or perforations. The noise barrier may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. The noise barrier shall be installed prior to grading, rock drilling, or blasting activities within 50 feet of the eastern property line, and shall remain in place throughout the duration of grading, construction, and blasting activities on the site.

2.5.6 Conclusion

The following provides a summary of the significance of the impacts identified above under subsection 2.4.4 after incorporation of the mitigation measure identified under subsection 2.4.5.

Less-than-Significant Direct Impact N-1 with Mitigation: Implementation of Mitigation Measure M-N-1 would ensure that all HVAC units on site are either located more than 35 feet from the nearest property line, or would require the construction of a physical barrier blocking the line-of-sight to receivers. The required setback of HVAC units or installation of the required barriers would ensure that stationary noise sources associated with the Project-related operational activities would be reduced to below the 50 dBA Leq property noise level limit. Accordingly, implementation of the required mitigation would reduce the Project's potential long-term operational noise impacts to less-than-significant levels.

Less-than-Significant Direct Impact N-2 with Mitigation: Implementation of Mitigation Measure M-N-2 would ensure that exterior noise levels at the Project's residential lots are below the County standard of 60 CNEL. Through a performance-based measure requiring noise protection easements on lots within 400 feet of San Elijo Road and the conduct of an acoustical study(ies) to verify that the 60 CNEL requirement is met, implementation of the required mitigation would reduce the Project's impact due to placing residential lots in an area within 400 feet of San Elijo Road impacted by vehicular noise, to below a level of significance.

Less-than-Significant Direct Impact N-3 with Mitigation: Implementation of Mitigation Measure M-N-3 would ensure that homes located on Lots 1 through 13 have a mechanical ventilation (e.g., air conditioning) and standard windows with a minimum STC rating of 27. Implementation of the required mitigation would ensure that interior noise levels achieve the County's interior noise standard of 45 CNEL, reducing the potential interior noise level impact to below a level of significance.

Less-than-Significant Direct Impact N-4 with Mitigation: Implementation of Mitigation Measure M-N-4 would ensure that a temporary noise barrier is placed along the eastern property line that adjoins the adjacent Loma San Marcos sports complex when Project-related grading and blasting activities occur within 50 feet of the property line. As indicated in Table 2.4-20, *Typical Construction Noise Level Compliance (With Mitigation)*, with implementation of the required mitigation, Project-related construction noise would be reduced to below the threshold of significance of 75 dBA Leq at all receptor locations. Therefore, implementation of the required mitigation would reduce the Project's construction-related noise impact to less-than-significant levels.

Less-than-Significant Direct Impact N-5 with Mitigation: Implementation of Mitigation Measure M-N-4 would ensure that a temporary noise barrier is placed along the eastern property line that adjoins the adjacent Loma San Marcos sports complex when Project-related grading and blasting activities occur within 50 feet of the property line. As indicated in Table 2.4-20, *Typical Construction Noise Level Compliance (With Mitigation)*, with implementation of the required mitigation, Project-related rock drilling and blasting noise would be reduced to below the threshold of significance of 75 dBA Leq. Therefore, implementation of the required mitigation would reduce the Project's rock drilling and blasting related noise impacts to less-than-significant levels.

Figure 2.5-1 Typical Noise Levels

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	SPEECH INTERFERENCE
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80	LOUD	SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70		
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10		
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0	VERY FAINT	

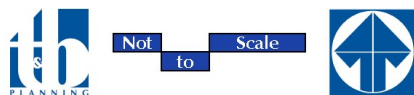
Source: Environmental Protection Agency Office of Noise Abatement and Control, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004)* March 1974.

(Urban Crossroads, 2024, Exhibit 1-C)

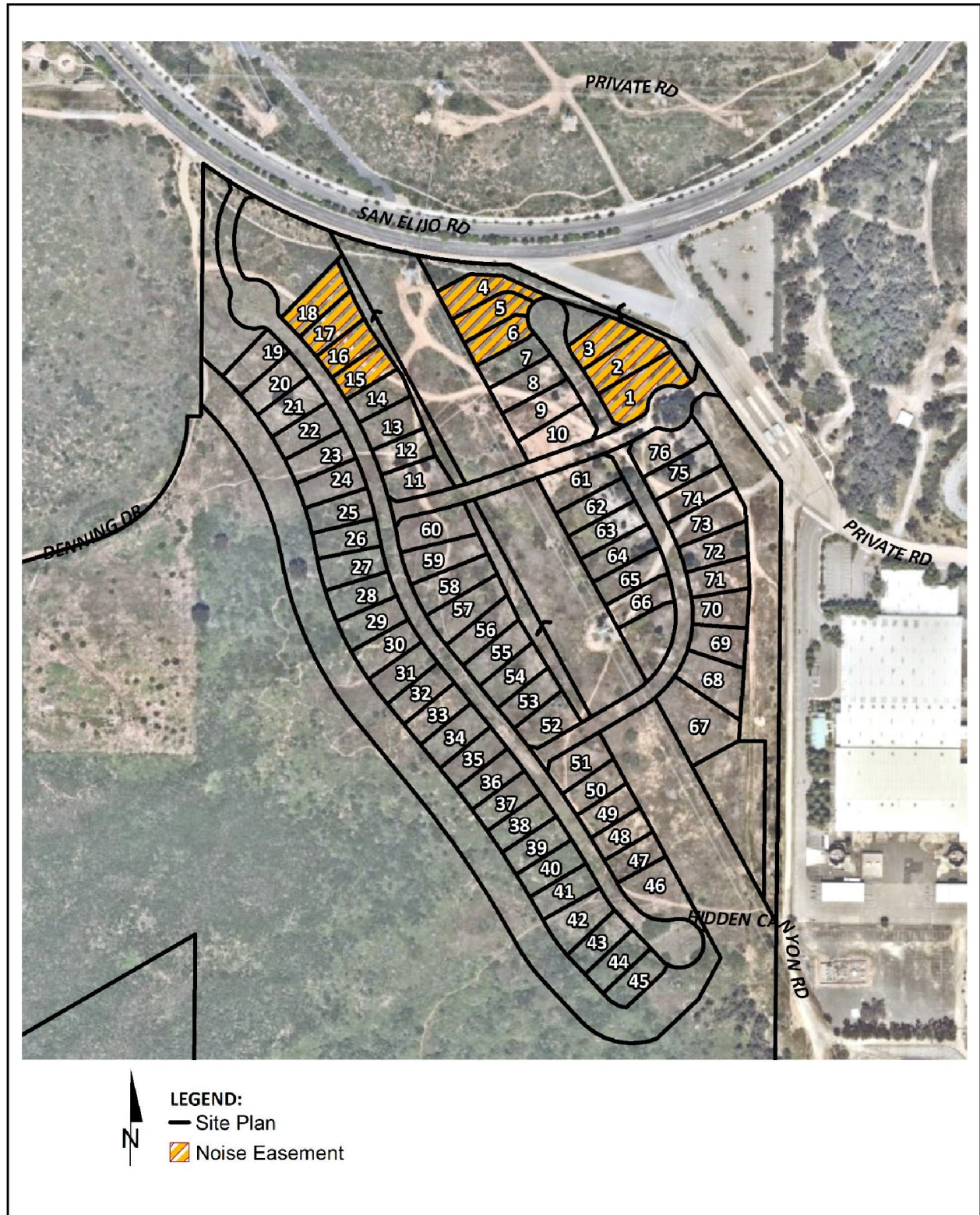


Source(s): Urban Crossroads (08-26-2021)

Figure 2.5-2

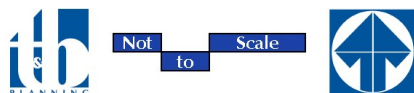


**Project Site and
Noise Level Measurement Locations**

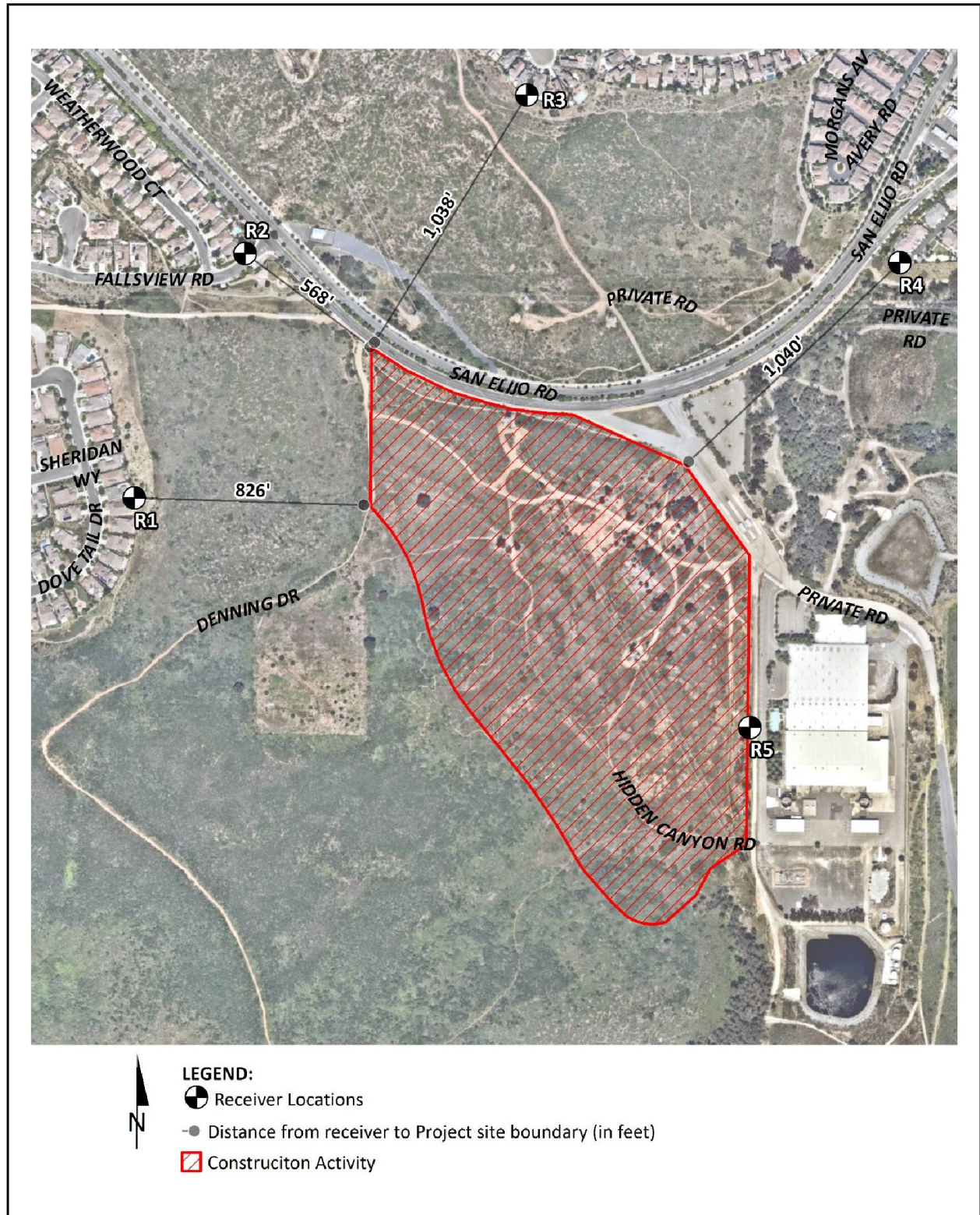


Source(s): Urban Crossroads (08-26-2021)

Figure 2.5-3

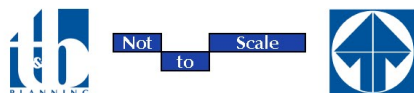


Noise Protection Easements

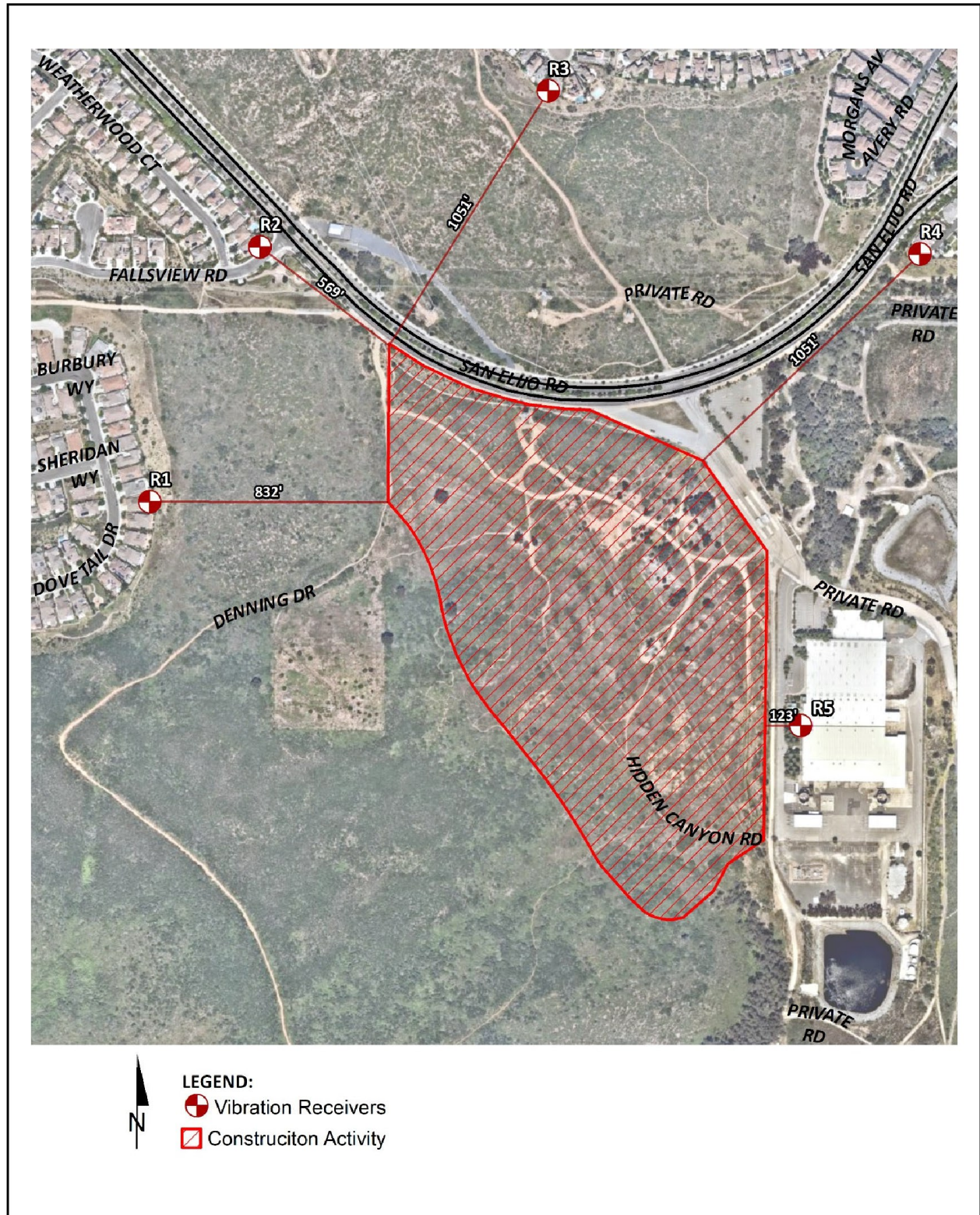


Source(s): Urban Crossroads (08-26-2021)

Figure 2.5-4

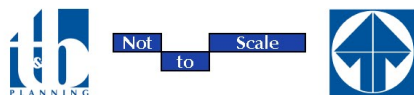


On-Site Noise Receiver Locations



Source(s): Urban Crossroads (08-26-2021)

Figure 2.5-5



Vibration Receiver Locations

Table 2.5-1 24-Hour Ambient Noise Level Measurements

Location ¹	Description	Energy Average Noise Level (dBA Leq) ²		CNEL
		Daytime	Nighttime	
L1	Located west of the Project site on Dove Tail Drive near existing single-family residential home at 2832 Dove Tail Drive.	44.9	42.6	49.7
L2	Located northwest of the Project site on Fallsview Road near Mahogany Park.	53.5	47.7	56.1
L3	Located on the intersection of River Crest Road and Black Walnut Drive near existing single-family residential home at 1554 Black Walnut Drive.	50.8	40.3	51.0
L4	Located northeast of the Project site on Dandelion Way near existing multi-family residential home at 1380 Dandelion Way.	53.0	49.5	56.9
L5	Located by the northeast boundary of the Project site near Play-by-Play Productions at 1601 San Elijo Road.	59.6	55.9	63.4

¹ See Exhibit 1-F for the noise level measurement locations.

² Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

(Urban Crossroads, 2024, Table 1-1)

Table 2.5-2 County of San Diego Noise Ordinance Sound Level Limits

Zone	Applicable Hours	Sound Level Limit dB L_{eq} (1 hour)
RS, RD, RR, RMH, A70, A72, S80, S81, S87, S90, S92, RV, and RU. Use Regulations with a density of less than 11 dwelling units per acre.	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
RRO, RC, RM, C30, S86, RV, RU and V5. Use Regulations with a density of 11 or more dwelling units per acre.	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
S94, V4, and all other commercial zones.	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
V1, V2	7 a.m. to 7 p.m.	60
	7 p.m. to 10 p.m.	55
V1	10 p.m. to 7 a.m.	55
V2	10 p.m. to 7 a.m.	50
V3	7 a.m. to 10 p.m.	70
	10 p.m. to 7 a.m.	65
M50, M52, M54	Anytime	70
S82, M56, and M58	Anytime	75
S88 (see subsection (c) below)		




Source: County of San Diego Noise Ordinance, Section 36.404 (San Diego County, 2015).

Notes:

- a) Except as provided in section 36.409 of this chapter, it shall be unlawful for any person to cause or allow the creation of any noise, which exceeds the one-hour average sound level limits in Table 36.404, when the one-hour average sound level is measured at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise
- (b) Where a noise study has been conducted and the noise mitigation measures recommended by that study have been made conditions of approval of a Major Use Permit, which authorizes the noise-generating use or activity and the decision making body approving the Major Use Permit determined that those mitigation measures reduce potential noise impacts to a level below significance, implementation and compliance with those noise mitigation measures shall constitute compliance with subsection (a) above.
- (c) S88 zones are Specific Planning Areas which allow for different uses. The sound level limits in Table 8 above that apply in an S88 zone depend on the use being made of the property. The limits in Table 4, subsection (1) apply to property with a residential, agricultural or civic use. The limits in subsection (3) apply to property with a commercial use. The limits in subsection (5) apply to property with an industrial use that would only be allowed in an M50, M52 or M54 zone. The limits in subsection (6) apply to all property with an extractive use or a use that would only be allowed in an M56 or M58 zone.
- (d) If the measured ambient noise level exceeds the applicable limit in Table 36.404, the allowable onehour average sound level shall be the one-hour average ambient noise level, plus three decibels. The ambient noise level shall be measured when the alleged noise violation source is not operating.
- (e) The sound level limit at a location on a boundary between two zones is the arithmetic mean of the respective limits for the two zones. The one-hour average sound level limit applicable to extractive industries, however, including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone in which the extractive industry is located.
- (f) Fixed-location public utility distribution or transmission facilities located on or adjacent to a property line are subject to the noise level limits in this table, as measured at or beyond 6 feet from the boundary of the easement upon which the equipment is located.

Table 2.5-3 City of San Marcos Noise and Land Use Compatibility Guidelines for Transportation-Related Noise

Land Use Category		Exterior Noise Level (CNEL)					
		55	60	65	70	75	80
A	Residential—single family residences, mobile homes, senior/age-restricted housing			■	■	■	■
B	Residential—multifamily residences, mixed use (residential/commercial)				■	■	■
C	Lodging—hotels, motels				■	■	■
D ²	Schools, churches, hospitals, residential care facility, child care facilities				■	■	■
E ²	Passive recreational parks, nature preserves, contemplative spaces, cemeteries				■	■	■
F ²	Active parks, golf courses, athletic fields, outdoor spectator sports, water recreation				■	■	■
G ²	Office/professional, government, medical/dental, commercial, retail, laboratories				■	■	■
H ²	Industrial, manufacturing, utilities, agriculture, mining, stables, ranching, warehouse, maintenance/repair				■	■	■

-  Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved
-  Conditionally Acceptable - New construction or development should be undertaken only after a detailed noise analysis is conducted to determine if noise reduction measures are necessary to achieve acceptable levels for land use. Criteria for determining exterior and interior noise levels are listed in Table 7-4, Noise Standards. If a project cannot mitigate noise to a level deemed Acceptable, the appropriate County decision-maker must determine that mitigation has been provided to the greatest extent practicable or that extraordinary circumstances exist.
-  Unacceptable - New construction or development shall not be undertaken.

(San Marcos, 2012, Table 7-3)

Table 2.5-4 Existing with Project Traffic Noise Level Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Noise-Sensitive Land Use? ²	Incremental Noise Level Increase Threshold	
			E	EP	Increase		Limit (dBA)	Exceeded?
1	Rancho Santa Fe Road	Melrose Drive to San Elijo Road	73.0	73.0	0.0	Yes	3	No
2	Rancho Santa Fe Road	San Elijo Road to Avenida Soledad	74.4	74.4	0.0	Yes	3	No
3	San Elijo Road	Rancho Santa Fe Road to Melrose Drive	69.4	69.5	0.1	Yes	3	No
4	San Elijo Road	Melrose Drive to Street "E"	70.9	71.0	0.1	Yes	3	No
5	San Elijo Road	Street "E" to Baker Street	69.8	70.0	0.2	Yes	3	No
6	San Elijo Road (SB)	Baker Street to Elfin Forest Road	66.8	66.9	0.1	Yes	3	No
7	San Elijo Road (SB)	Elfin Forest Road to Schoolhouse Way	65.8	65.8	0.0	Yes	3	No
8	San Elijo Road (NB)	Baker Street to Elfin Forest Road	66.8	66.9	0.1	Yes	3	No
9	San Elijo Road (NB)	Elfin Forest Road to Schoolhouse Way	65.6	65.6	0.0	Yes	3	No
10	San Elijo Road	East of Schoolhouse Way	68.5	68.6	0.1	Yes	3	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

(Urban Crossroads, 2024, Table 2-13)

Table 2.5-5 Near-Term Year 2024 With Project Traffic Noise Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Noise-Sensitive Land Use? ²	Incremental Noise Level Increase Threshold	
			NT 2024	NT+P 2024	Increase		Limit (dBA)	Exceeded?
1	Rancho Santa Fe Road	Melrose Drive to San Elijo Road	73.6	73.6	0.0	Yes	1	No
2	Rancho Santa Fe Road	San Elijo Road to Avenida Soledad	74.8	74.8	0.0	Yes	1	No
3	San Elijo Road	Rancho Santa Fe Road to Melrose Drive	71.0	71.1	0.1	Yes	1	No
4	San Elijo Road	Melrose Drive to Street "E"	72.2	72.2	0.0	Yes	1	No
5	San Elijo Road	Street "E" to Baker Street	70.2	70.2	0.0	Yes	1	No
6	San Elijo Road (SB)	Baker Street to Elfin Forest Road	67.2	67.2	0.0	Yes	1	No
7	San Elijo Road (SB)	Elfin Forest Road to Schoolhouse Way	66.2	66.3	0.1	Yes	1	No
8	San Elijo Road (NB)	Baker Street to Elfin Forest Road	67.2	67.2	0.0	Yes	1	No
9	San Elijo Road (NB)	Elfin Forest Road to Schoolhouse Way	65.9	66.0	0.1	Yes	1	No
10	San Elijo Road	East of Schoolhouse Way	68.9	69.0	0.1	Yes	1	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

(Urban Crossroads, 2024, Table 2-14)

Table 2.5-6 Horizon Year 2035 With Project Traffic Noise Increases

ID	Road	Segment	CNEL at Receiving Land Use (dBA) ¹			Noise-Sensitive Land Use? ²	Incremental Noise Level Increase Threshold	
			2035 CY	2035 CYP	Increase		Limit (dBA)	Exceeded?
1	Rancho Santa Fe Road	Melrose Drive to San Elijo Road	73.4	73.4	0.0	Yes	1	No
2	Rancho Santa Fe Road	San Elijo Road to Avenida Soledad	74.6	74.6	0.0	Yes	1	No
3	San Elijo Road	Rancho Santa Fe Road to Melrose Drive	70.6	70.6	0.0	Yes	1	No
4	San Elijo Road	Melrose Drive to Street "E"	71.5	71.5	0.0	Yes	1	No
5	San Elijo Road	Street "E" to Baker Street	70.4	70.4	0.0	Yes	1	No
6	San Elijo Road (SB)	Baker Street to Elfin Forest Road	66.8	66.8	0.0	Yes	1	No
7	San Elijo Road (SB)	Elfin Forest Road to Schoolhouse Way	67.5	67.6	0.1	Yes	1	No
8	San Elijo Road (NB)	Baker Street to Elfin Forest Road	66.9	66.9	0.0	Yes	1	No
9	San Elijo Road (NB)	Elfin Forest Road to Schoolhouse Way	67.0	67.1	0.1	Yes	1	No
10	San Elijo Road	East of Schoolhouse Way	71.7	71.7	0.0	Yes	1	No

¹ The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

² Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

(Urban Crossroads, 2024, Table 2-15)

Table 2.5-7 Exterior Ground Floor Noise Levels

Receiver Location ¹	Location	Unmitigated Exterior Noise Level (CNEL)
R01	Lot 1	58.9
R02	Lot 2	60.1
R03	Lot 3	61.4
R04	Lot 4	64.5
R05	Lot 5	62.2
R06	Lot 6	60.8
R07	Lot 7	59.6
R08	Lot 18	65.6
R09	Lot 17	62.6
R10	Lot 16	61.5
R11	Lot 15	60.2
R12	Lot 19	59.1
R13	Lot 20	57.0

1 See Figure 2.4-3 for the on-site receiver locations.

2 CadnaA noise model inputs and calculations are included in Appendix 2.1 to the Project's NIA (*Technical Appendix K*).

(Urban Crossroads, 2024, Table 2-3)

Table 2.5-8 First Floor Interior Noise Impacts (CNEL)

Receiver	Noise Level at Façade ¹	Required Interior NR ²	Estimated Interior NR ³	Upgraded Windows ⁴	Interior Noise Level ⁵	Threshold	Threshold Exceeded?
R01	58.9	13.9	25.0	No	33.9	45	No
R02	60.1	15.1	25.0	No	35.1	45	No
R03	61.4	16.4	25.0	No	36.4	45	No
R04	64.5	19.5	25.0	No	39.5	45	No
R05	62.2	17.2	25.0	No	37.2	45	No
R06	60.8	15.8	25.0	No	35.8	45	No
R07	59.6	14.6	25.0	No	34.6	45	No
R08	65.6	20.6	25.0	No	40.6	45	No
R09	62.6	17.6	25.0	No	37.6	45	No
R10	61.5	16.5	25.0	No	36.5	45	No
R11	60.2	15.2	25.0	No	35.2	45	No
R12	59.1	14.1	25.0	No	34.1	45	No
R13	57.0	12.0	25.0	No	32.0	45	No

¹ Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning).

² Noise reduction required to satisfy the 45 CNEL interior noise standard.

³ Estimated minimum interior noise reduction.

⁴ Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?

⁵ Estimated interior noise level with minimum STC rating for all windows.

(Urban Crossroads, 2024, Table 2-4)

Table 2.5-9 Second Floor Interior Noise Impacts (CNEL)

Receiver	Noise Level at Façade ¹	Required Interior NR ²	Estimated Interior NR ³	Upgraded Windows ⁴	Interior Noise Level ⁵	Threshold	Threshold Exceeded?
R01	58.5	13.5	25.0	No	33.5	45	No
R02	59.7	14.7	25.0	No	34.7	45	No
R03	61.0	16.0	25.0	No	36.0	45	No
R04	64.0	19.0	25.0	No	39.0	45	No
R05	61.8	16.8	25.0	No	36.8	45	No
R06	60.3	15.3	25.0	No	35.3	45	No
R07	59.1	14.1	25.0	No	34.1	45	No
R08	65.1	20.1	25.0	No	40.1	45	No
R09	62.2	17.2	25.0	No	37.2	45	No
R10	61.0	16.0	25.0	No	36.0	45	No
R11	59.7	14.7	25.0	No	34.7	45	No
R12	58.6	13.6	25.0	No	33.6	45	No
R13	56.5	11.5	25.0	No	31.5	45	No

¹ Exterior noise level at the façade with a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning).

² Noise reduction required to satisfy the 45 CNEL interior noise standard.

³ Estimated minimum interior noise reduction.

⁴ Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?

⁵ Estimated interior noise level with minimum STC rating for all windows.

(Urban Crossroads, 2024, Table 2-5)

Table 2.5-10 County of San Diego Noise Ordinance Sound Level Limits

Zone	Applicable Hours	Sound Level Limit dBA L _{eq} (1 hour)
(1) RS, RD, RR, RMH, A70, A72, S80, S81, S90, S92, RV, and RU with a General Plan Land Use Designation density of less than 10.9 dwelling units per acre.	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
(2) RRO, RC, RM, S86, V5, RV and RU with a General Plan Land Use Designation density of 10.9 or more dwelling units per acre.	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
(3) S-94, V4 and all other commercial zones.	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
(4) V1, V2	7 a.m. to 10 p.m.	55
V1	10 p.m. to 7 a.m.	55
V2	10 p.m. to 7 a.m.	50
V3	7 a.m. to 10 p.m.	70
	10 p.m. to 7 a.m.	65
(5) M-50, M-52, and M-54	Anytime	70
(6) S82, M56 and M58	Anytime	75
(7) S88 (see subsection (c) below)		

Source: County of San Diego Noise Ordinance, Section 36.404

Notes:

(a) Except as provided in section 36.409 of this chapter, it shall be unlawful for any person to cause or allow the creation of any noise, which exceeds the one-hour average sound level limits in Table 36.404, when the one-hour average sound level is measured at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise.

(b) Where a noise study has been conducted and the noise mitigation measures recommended by that study have been made conditions of approval of a Major Use Permit, which authorizes the noise-generating use or activity and the decision making body approving the Major Use Permit determined that those mitigation measures reduce potential noise impacts to a level below significance, implementation and compliance with those noise mitigation measures shall constitute compliance with subsection (a) above.

(c) S88 zones are Specific Planning Areas which allow for different uses. The sound level limits in Table 14 above that apply in an S88 zone depend on the use being made of the property. The limits in Table 14, subsection (1) apply to property with a residential, agricultural, or civic use. The limits in subsection (3) apply to property with a commercial use. The limits in subsection (5) apply to property with an industrial use that would only be allowed in an M50, M52 or M54 zone. The limits in subsection (6) apply to all property with an extractive use or a use that would only be allowed in an M56 or M58 zone.

(d) If the measured ambient noise level exceeds the applicable limit in Table 36.404, the allowable one-hour average sound level shall be the one-hour average ambient noise level, plus three decibels. The ambient noise level shall be measured when the alleged noise violation source is not operating.

(e) The sound level limit at a location on a boundary between two zones is the arithmetic mean of the respective limits for the two zones. The one-hour average sound level limit applicable to extractive industries, however, including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone in which the extractive industry is located.

(f) A fixed-location public utility distribution or transmission facility located on or adjacent to a property line shall be subject to the sound level limits of this section, measured at or beyond 6 feet from the boundary of the easement upon which the facility is located.

(Urban Crossroads, 2024, Table 3-1)

Table 2.5-11 County of San Diego Code Section 36.410, Maximum Sound Level (Impulsive) Measured at Occupied Property in Decibels

Occupied Property Use	Decibels (dBA)
Residential, village zoning or civic use	82
Agricultural, commercial, or industrial use	85

(Urban Crossroads, 2024, Table 3-2)

Table 2.5-12 County of San Diego Code Section 36.410, Maximum Sound Level (Impulsive) Measured at Occupied Property in Decibels for Public Road Projects

Occupied Property Use	Decibels (dBA)
Residential, village zoning or civic use	85
Agricultural, commercial, or industrial use	90

(Urban Crossroads, 2024, Table 3-3)

Table 2.5-13 Unmitigated Construction Equipment Noise Level Summary

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})					Highest Levels ²
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	
R1	71.1	69.3	67.4	67.0	61.0	71.1
R2	71.0	69.2	67.3	66.9	60.9	71.0
R3	69.9	68.1	66.2	65.8	59.8	69.9
R4	70.2	68.4	66.5	66.1	60.1	70.2
R5	81.9	80.1	78.2	77.8	71.8	81.9

1 Noise receiver locations are shown on Figure 2.4-4.

2 Construction noise level calculations based on distance from the Project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 3.1 to the Project's NIA (*Technical Appendix K*).

(Urban Crossroads, 2024, Table 3-4)

Table 2.5-14 Typical Construction Noise Level Compliance (Without Mitigation)

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})		
	Highest Construction Noise Levels ²	Threshold	Threshold Exceeded? ³
R1	71.1	75	No
R2	71.0	75	No
R3	69.9	75	No
R4	70.2	75	No
R5	81.9	75	Yes

- 1 Noise receiver locations are shown on Figure 2.4-4.
- 2 Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations as shown on Table 2.4-13.
- 3 Do the estimated Project construction noise levels exceed the construction noise level threshold? (Urban Crossroads, 2024, Table 3-6)

Table 2.5-15 Guidelines for Determining the Significance of Groundborne Vibration and Noise Impacts

Land Use Category	Groundborne Vibration Impact Levels (inches/sec RMS)		Groundborne Noise Impact Levels (dB re 20 micro Pascals)	
	Frequent Events ¹	Occasional or Infrequent Events ²	Frequent Events ¹	Occasional or Infrequent Events ²
Category 1: Buildings where low ambient vibration is essential for interior operations (research & manufacturing facilities with special vibration constraints) ⁶	0.0018 ³	0.0018 ³	Not applicable ^{4,5}	Not applicable ^{4,5}
Category 2: Residences and buildings where people normally sleep (hotels, hospitals, residences, & other sleeping facilities) ⁶	0.0040	0.010	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use (schools, churches, libraries, other institutions, & quiet offices) ⁶	0.0056	0.014	40 dBA	48 dBA

RMS = root mean square; re = relative

¹ "Frequent Events" is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.

² "Infrequent Events" is defined as fewer than 70 vibration events per day. This category includes most commuter rail systems.

³ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.

Vibration-sensitive manufacturing or research will require detailed evaluation to define acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

⁴ Vibration-sensitive equipment is not sensitive to groundborne noise.

⁵ There are some buildings, such as concert halls, TV and recording studios, and theaters that can be very sensitive to vibration and noise but do not fit into any of the three categories. Table 14 gives criteria for acceptable levels of groundborne vibration and noise for these various types of special uses.

⁶ For Categories 2 and 3 with occupied facilities, isolated events such as blasting are significant when the peak particle velocity (PPV) exceeds 1 inch per second. Non transportation vibration sources such as impact pile drivers or hydraulic breakers are significant when their PPV exceeds 0.1 inch per second. More specific criteria for structures and potential annoyance were developed by Caltrans (2004) and will be used to evaluate these continuous or transient sources in the County of San Diego.

(Urban Crossroads, 2024, Table 4-1)

Table 2.5-16 Guidelines for Determining the Significance of Groundborne Vibration and Noise Impacts for Special Buildings

Type of Building or Room	Groundborne Vibration Impact Levels (inches/sec rms)		Groundborne Noise Impact Levels (dB re 20 micro Pascals)	
	Frequent Events ¹	Occasional or Infrequent Events ²	Frequent Events ¹	Occasional or Infrequent Events ²
Concert Halls, TV Studios, and Recording Studios	0.0018	0.0018	25 dBA	25 dBA
Auditoriums	0.0040	0.010	30 dBA	38 dBA
Theaters	0.0040	0.010	35 dBA	43 dBA

RMS = root mean square; re = relative

¹ "Frequent Events" is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.

² "Infrequent Events" is defined as fewer than 70 vibration events per day. This category includes most commuter rail systems.

(Urban Crossroads, 2024, Table 4-2)

Table 2.5-17 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

(Urban Crossroads, 2024, Table 4-3)

Table 2.5-18 Typical Project Construction Vibration Levels

Receiver ¹	Structure Type ²	Distance to Const. Activity (Feet) ³	Typical Construction Vibration Levels PPV (in/sec) ⁴				Thresholds PPV (in/sec) ⁵	Thresholds Exceeded? ⁶
			Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level		
R1	Residential	832'	0.00018	0.00040	0.00046	0.00046	0.0160	No
R2	Residential	569'	0.00032	0.00070	0.00082	0.00082	0.0160	No
R3	Residential	1,051'	0.00013	0.00028	0.00033	0.00033	0.0160	No
R4	Residential	1,051'	0.00013	0.00028	0.00033	0.00033	0.0160	No
R5	Commercial	123'	0.00321	0.00696	0.00816	0.00816	0.0224	No

- 1 Receiver locations are shown on Figure 2.4-5.
- 2 Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Tables 19, p. 38.
- 3 Distance from receiver location to Project construction boundary to nearest structure.
- 4 Based on the Vibration Source Levels of Construction Equipment (Table 11-4 of the Project's NIA, included as *Technical Appendix K*).
- 5 Thresholds converted to PPV from County RMS threshold shown in Table 2.4-15.
- 6 Does the peak vibration exceed the acceptable vibration thresholds?
(Urban Crossroads, 2024, Table 4-4)

Table 2.5-19 Blasting Vibration Based on Charge Weight and Distance

Distance to Blast (feet)	Predicted Vibration Level by Charge Weight in/sec. PPV					
	8.00 Lbs.	4.00 Lbs.	2.00 Lbs.	1.00 Lbs.	0.50 Lbs.	0.25 Lbs.
10	26.52	15.23	8.75	5.02	2.89	1.66
20	8.75	5.02	2.89	1.66	0.95	0.55
30	4.57	2.63	1.51	0.87	0.50	0.29
40	2.89	1.66	0.95	0.55	0.31	0.18
50	2.02	1.16	0.67	0.38	0.22	0.13
60	1.51	0.87	0.50	0.29	0.16	0.09
70	1.18	0.68	0.39	0.22	0.13	0.07
80	0.95	0.55	0.31	0.18	0.10	0.06

Bolded numbers exceed the County standard for intermittent
(Urban Crossroads, 2024, Table 4-5)

Table 2.5-20 Typical Construction Noise Level Compliance (With Mitigation)

Receiver Location ¹	Construction Noise Levels (dBA L _{eq})		
	Highest Construction Noise Levels ²	Threshold	Threshold Exceeded? ³
R1	71.1	75	No
R2	71.0	75	No
R3	69.9	75	No
R4	69.5	75	No
R5	64.4	75	No

- 1 Noise receiver locations are shown on Figure 2.4-4.
- 2 Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations as shown on Table 2.4-13.
- 3 Do the estimated Project construction noise levels exceed the construction noise level threshold? (Urban Crossroads, 2024, Table 3-6)

2.6 Transportation and Traffic

This section presents a summary of the potential transportation-related impacts of the Project. The analysis presented herein is based on the Questhaven Traffic Impact Study (TIS) authored by CR Associates, dated March 2023, included as *Appendix L1* to this EIR, and the Questhaven Local Transportation Analysis (LTA), dated April 2024, included as *Appendix L2* to this EIR.

2.6.1 Analysis Methodology

The traffic analysis presented in this Section was conducted by CR Associates in accordance with the County of San Diego Traffic Study Guidelines (County TSG) and the CEQA Statute and Guidelines. Land development projects within the County of San Diego are required to conduct a detailed transportation VMT analysis for each land use component of the Project, unless the Project is presumed to have less than significant impacts based on Table 1 of the County TSG.¹ Projects or parts of a project that do not meet screening requirements are required to conduct a detailed transportation analysis. Because the Project does not meet the County TSG screening requirements, a detailed VMT analysis was conducted.

On December 28, 2018, updates to the California Environmental Quality Act (CEQA) Guidelines were approved by the Office of Administrative Law (OAL). As required by Senate Bill (SB) 743, Threshold b. of the CEQA Guidelines for the topic of Transportation now requires an evaluation of impacts due to VMT, which replaced the Level of Service (LOS) criteria (i.e., automobile delay) that was used in the past to evaluate potential effects to transportation under CEQA. Pursuant to CEQA Guidelines Section 15064.3(a), "...a project's effect on automobile delay shall not constitute a significant environmental impact." However, because both the County's General Plan Mobility Element and City of San Marcos General Plan Mobility Element contain a policy addressing LOS, LOS is discussed in this section in the context of General Plan policy consistency only.

2.6.2 Existing Conditions

2.6.2.1 Existing Roadway Network

The following is a description of the two major roadways located within the immediate vicinity of the Project site. Figure 2.5-1, *Existing Roadway Network*, depicts the existing traffic conditions and intersections within the Project site's vicinity.

Rancho Santa Fe Road is a six-lane roadway with a raised median between Melrose Drive and Avenida Soledad. The posted speed limit is 55 miles per hour. On-street parking is prohibited. North County Transit District (NCTD) Bus Route #304 is serviced along the corridor. According to the City of Carlsbad General Plan Mobility Element, Rancho Santa Fe Road is classified as an Arterial Street.

San Elijo Road is a four-lane roadway with a raised median between Rancho Santa Fe Road and 690 feet south of Baker Street. San Elijo Road splits into two two-lane one-way roadways 690 feet south

¹ See Table 2.1 of the Project's TIS for further detail on the County VMT screening criteria.

of Baker Street and converges back into a four-lane roadway with a raised median at Schoolhouse Way. The posted speed limit is 45 miles per hour between Rancho San Fe Road and 690 feet south of Baker Street, 25 miles per hour between 690 feet south of Baker Street and Elfin Forest Road (westbound), and 35 miles per hour between Elfin Forest Road (westbound) and Hope Street. On-street parallel parking is allowed between Boundary Lane and Schoolhouse Way. According to the City of San Marcos General Plan Mobility Element, San Elijo Road is classified as a 4-lane Major Road.

2.6.2.2 Existing Bicycle Network

Class II bicycle facilities are provided along both sides of San Elijo Road and Rancho Santa Fe Road within the vicinity of the Project site.

2.6.2.3 Existing Pedestrian Conditions

As shown on Figure 2.5-3, *Existing Pedestrian Conditions*, sidewalks are present along both sides of Rancho Santa Fe Road in the vicinity of the Project site. Sidewalks are present along both sides of San Elijo Road, with the exception of a dirt path approximately 1,940 feet in length between Fallsview Road and Boundary Lane, which includes the segment of San Elijo Road that fronts the Project site.

2.6.2.4 Existing Transit

North County Transit District (NCTD) Bus Route #304 is located in the vicinity of the Project site; however, the nearest stop is located approximately one mile from the Project site. Route #304 connects the Palomar College Transit Center to the Encinitas Station with 43 bus stops. Operation starts at 4:58 AM and ends at 8:23 PM between Monday through Friday and between 7:23 AM to 8:23 PM on Saturday. Route #304 currently does not operate on Sundays. This route operates on 40-minute headways. There are no planned transit facility stops adjacent to or within one mile of the Project site.

2.6.2.5 Existing Average Vehicle Miles Traveled

Using the San Diego Association of Governments (SANDAG) ABM 2 model (Series 14, base year 2016) the regional average resident vehicle miles traveled per person (VMT/Capita) is 19.0 miles.

2.6.2.6 Existing Traffic Volume Conditions

Although CEQA requires that the basis of transportation analysis be based on VMT, an assessment of vehicle volumes on the local circulation network was nonetheless conducted and is documented in *Appendix L2* as part of the Project's LTA. Traffic counts showed that all study area intersections operate at LOS D or better during both the AM and PM peak hours under existing conditions, with the exception to two intersections. The intersection of San Elijo Road (southbound) / Baker Street experiences LOS E conditions during the AM peak hour, primarily due to the westbound left-turn movement which experiences particularly high delay compared to all other movements at this intersection. The intersection of Schoolhouse Way / San Elijo Road experiences LOS E conditions during the AM peak hour primarily due to the high volume of vehicle trips and associated delay for the westbound left-turn movement. Most of these vehicle trips are student drop-off trips at both San Elijo Elementary and Middle Schools.

2.6.3 Regulatory Setting

State

Senate Bill 743

In September 2013, the Governor’s Office signed SB 743 into law, starting a process that changed the way transportation impact analysis is conducted under CEQA. In response to the passage of SB 743, the Governor’s Office of Planning and Research (OPR) was required to amend the CEQA Guidelines to provide a new approach to evaluating transportation impacts. These changes include the elimination of LOS which measures automobile delay as an analysis metric as the basis for determining significant impacts. The mandate of SB 743 was to devise an alternative traffic impact evaluation criterion that would promote the reduction of GHG emissions as well as foster the development of multi-modal transportation networks and a diversity of land uses. SB 743 further suggested that a measurement such as VMT would be appropriate method to evaluate traffic impacts. VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT is calculated based on individual vehicle trips generated and their associated trip lengths. In January 2016, the OPR issued the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, which provided recommendations for updating the CEQA Guidelines and in December 2018 OPR issued the accompanying Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory). Subsequently OPR and the Office of the Secretary of Natural Resources finalized the CEQA Guidelines for implementing SB 743 and as of July 1, 2020, the requirement to determine transportation impacts based on VMT applies statewide.

Local

SANDAG San Diego Forward: The 2021 Regional Plan

The SANDAG San Diego Forward: The 2021 Regional Plan (2021 Regional Plan) was adopted by the SANDAG Board of Directors on December 10, 2021, and includes the region’s Regional Transportation Plan (RTP); Sustainable Community Strategy (SCS), as required by SB 375; and Regional Comprehensive Plan. The 2021 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 SCS describes coordinated transportation and land use planning that exceeds the State’s target for reducing per capita greenhouse gas (GHG) emissions set by the California Air Resources Board (CARB).

One of the core strategies to achieve the 2021 Regional Plan goals is to implement innovative demand and system management. This involves reducing solo driving and congestion through increased remote work, carsharing, vanpooling, pricing strategies, and parking management programs that leverage partnerships and technology. The transportation system envisioned in the 2021 Regional Plan SCS includes “5 Big Moves”: Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and Next Operating System.

County of San Diego Transportation Study Guide

The County’s Transportation Study Guide (TSG) provides criteria on how projects should be evaluated for consistency related to the County’s transportation goals, policies and plans, and through procedures established under CEQA. The TSG aids in determining appropriate mitigation under CEQA, as well as site-specific improvements to the transportation system to accommodate project traffic. The TSG provides guidance on how to conduct transportation VMT analysis based on the project type and number of driveway trips, as well as the threshold where a project is considered to have a significant transportation-related impact. Table 2.6-2, *Summary of VMT Analysis Approach and Significance Thresholds*, displays a summary of the guidance for the different project types.

County of San Diego General Plan Mobility Element

The County’s General Plan Mobility Element provides a framework for a balanced, multi-modal transportation system within the unincorporated areas of the County of San Diego. The Mobility Element includes a description of the County’s transportation network and the goals and policies that address safety, efficiency, maintenance, and management of the transportation. The San Diego General Plan Mobility Element includes Policy M-2.1 that addresses LOS criteria for Mobility Element roads suggesting LOS D and higher as an acceptable standard in most circumstances. Other applicable policies address access to Mobility Element roads, environmentally sensitive road design, roadway noise buffers, safe and compatible roads, and a safe and efficient multi-modal system. Additionally, the County of San Diego Mobility Element contains Policy M-5.2, that addresses mitigation for impacts of road improvements and/or design modifications on adjacent communities.

City of San Marcos General Plan

The Project site is located in unincorporated San Diego County; however, all study roadway facilities are located within the cities of San Marcos and Carlsbad. The Project’s LTA does not include the analysis of any intersections or roadway segments under the jurisdiction of the County. Thus, in coordination with City of San Marcos staff, the Project’s LTA evaluates potential transportation-related inconsistencies with the City of San Marcos General Plan Mobility Element (Mobility Element) or the City of San Marcos Transportation Impact Analysis (TIA) Guidelines (November 2020).

The City of San Marcos General Plan’s Mobility Element identifies the proposed transportation network and strategies needed to support buildout of the City according to its General Plan. The Mobility Element’s policies promote a balanced, multimodal transportation network while minimizing environmental and neighborhood impacts. The Mobility Element contains policies that address walking, streets, transit, regional collaboration, bicycling, parking, the movement of goods, and other components of a transportation system. Policy M-1.4 address LOS, stating that LOS D or better for vehicles as a prioritized mode, which generally provides facilities that have minimum vehicle congestion during peak periods and where most motorists are delayed less than 55 seconds at a signal (or less than one signalized cycle). Together, the City’s Mobility Element policies advance a strategy for relieving congestion and increasing transportation choices. The relevant goals and policies from the Mobility Element are analyzed below in Section 2.5.3.1.

2.6.4 Analysis of Project Effects and Determinations as to Significance

Direct, indirect, and cumulatively considerable impacts pertaining to transportation are evaluated herein based on specified thresholds identified in the CEQA Guidelines, Appendix G, and in the County Guidelines for Determining Significance, including the following:

- Governor’s Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018
- County of San Diego Transportation Study Guidelines, September 2022.

The County’s Guidelines for Determining Significance are generally intended to address the questions posed in Appendix G of the CEQA Guidelines. In 2018, the CEQA Guidelines were updated and several of the questions listed in Appendix G were revised, deleted, or modified. Accordingly, this EIR analyzes the impacts from the Project using questions posed in Appendix G Section XVII, Transportation.

2.6.4.1 Potential Conflicts with Transportation Programs, Plans, Ordinances, and Policies

Guideline for the Determination of Significance

A significant transportation impact would occur if implementation of the Project would result in the following:

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

Guideline Source

The threshold of significance is based on Appendix G of the CEQA Guidelines.

Analysis

The analysis herein focuses on the Project’s consistency with the SANDAG San Diego Forward: The 2021 Regional Plan (2021 Regional Plan) and the City of San Marcos General Plan Mobility Element, which are the two primary applicable transportation plans relevant to the Project and the roadway infrastructure that would be affected by the Project.

Policies Pertaining to Alternative Transportation Modes

The Project is found to be consistent with policies pertaining to transportation modes other than solo-drive vehicles addressed in SANDAG’s Regional Plan and the County and City of San Marcos’ General Plan Mobility Elements. Specifically, the Project’s design would maintain the site-adjacent bike lane and soft surface trail on San Elijo Road that fronts the Project site. Pedestrians and bicyclists traveling to and from the Project site would use proposed Street “D” and Street “E” to reach the trail and bike lane system along San Elijo Road. Further, the Project design is compatible with the regional

trail system. The Project's design provides for a privately maintained parking lot that would be open for public use at the terminus of Street "E." The parking lot would provide public parking access to existing trail systems located south of the Project site. The Project also includes the installation of a new trail segment on-site that would connect the proposed parking lot to the existing Copper Creek Trail.

Table 2.6-1, *City of San Marcos Mobility Element Consistency Analysis*, addresses the Project's consistency with other relevant City of San Marcos General Plan Mobility Element policies.

Policies Pertaining to Roadway Operations

As previously stated, and pursuant to CEQA Guidelines Section 15064.3(a), "...a project's effect on automobile delay shall not constitute a significant environmental impact." However, County of San Diego General Plan Mobility Element contains Policy M-5.2, related to reducing impacts on adjacent communities. Additionally, City of San Marcos General Plan Mobility Element contains Policy M-1.4, related to maintaining an LOS of D or better on City roadways, and County of San Diego General Plan Mobility Element contains Policy M-2.1, related to maintaining LOS D and higher on Mobility Element Roads. As such, an evaluation of the Project's effects on LOS is below. Also refer to the Project's LTA included as *Appendix L2* to this EIR.

Near-Term 2024 Conditions - Intersections

All intersections in the Project's LTA study area would operate at an acceptable LOS D or better during both AM and PM peak hours under Near-Term Year 2024 Base conditions, with exception to the following four intersections:

- Melrose Drive / San Elijo Road – LOS E during AM peak hour and LOS F during PM peak hour. The Project is anticipated to increase delay by 3.7 seconds during AM peak hour and 7.0 seconds during the PM peak hour when compared to the 2024 Base conditions.
- Street "E" / San Elijo Road – LOS F during the PM peak hour. The Project is anticipated to increase delay by 37.9 seconds during AM peak hour and 75.9 seconds during the PM peak hour when compared to the 2024 Base conditions.
- San Elijo Road (southbound) / Baker Street – LOS E during AM peak hour. The Project is anticipated to increase delay by 18.3 during the AM peak hour and 5.2 seconds during the PM peak hour when compared to the 2024 Base conditions.
- Schoolhouse Way / San Elijo Road – LOS E during AM peak hour. This is primarily due to the high volume of vehicle trips and associated delay for the westbound left-turn movement. Most of these vehicle trips are student drop-off trips at both San Elijo Elementary and Middle Schools.

The implementation of the Project would increase the delay at the four intersections listed above and projected to operate at substandard LOS E under Near-Term Year 2024 Base with Project conditions.

The Project would increase delay by more than 2.0 seconds at three of the four intersections. Therefore, based upon County of San Diego Mobility Element Policy M-5.2, City of San Marcos Mobility Element Policy M-1.4 and the standards set forth in the City of San Marcos TIA Guidelines, the Project's contribution of vehicles to these intersections would be inconsistent with City of San Marcos Mobility Element Policy M-1.4 at the following intersections:

- Melrose Drive / San Elijo Road – LOS E
- Street "E" / San Elijo Road – LOS E
- San Elijo Road (southbound) / Baker Street – LOS E

Near-Term 2024 Conditions - Roadway Segments

Under Near-Term 2024 conditions, the following roadway segment would operate below LOS D:

- San Elijo Road, between Street "E" and Baker Street – LOS E

The Project would trigger the roadway segment operating at acceptable LOS D to operate at unacceptable LOS E and would increase the volume/capacity ratio by more than 0.02. Therefore, based upon Mobility Element Policy M-1.4 and the standards set forth in the City of San Marcos TIA Guidelines, the Project's contribution of vehicles to the roadway segment mentioned above would be inconsistent with Mobility Element Policy M-1.4.

Horizon Year 2035 Conditions - Intersections

The Project is consistent with the County of San Diego General Plan's land use designations; therefore, intersection analysis was not required to be conducted in the Horizon Year, which considers build out of long range conditions based on General Plan land use assumptions.

Horizon Year 2035 Conditions - Roadway Segments

Under Horizon Year 2035 conditions, the following roadway segment would operate below LOS D:

- San Elijo Road, east of Schoolhouse Way – LOS F

Although the roadway segment identified above is projected to continue operating at a substandard LOS with the addition of Project traffic, the increase in V/C ratio due to the Project is less than 0.02. Therefore, based upon the standards set forth in the City of San Marcos TIA Guidelines, the Project's contribution of vehicles to this roadway segment would not be inconsistent with Mobility Element Policy M-1.4.

Conclusion

The Project would add vehicles to the local roadway system and contribute towards three City of San Marcos intersections and one roadway segment operating at below LOS D under Near-Term 2024 conditions and thus would conflict with the City's General Plan Mobility Element Policy M-1.4. The Project's contribution to the City's inability to meet Policy M-1.4 would be significant and, in order to comply with County of San Diego Mobility Element M-5.2, would require implementation of intersection and roadway improvements to reduce impacts. City of San Marcos Mobility Element states that complying with Policy M-1.4 supports "other General Plan goals such as providing environmental protections and enhancing community character" (**Significant Direct Impact TRANS-1**). Impacts under Horizon Year 2035 conditions would be less than significant.

2.6.4.2 Vehicle Miles Traveled

Guideline for the Determination of Significance

A significant transportation impact would occur if implementation of the Project would result in the following:

- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Guideline Source

The threshold of significance is based on Appendix G of the CEQA Guidelines.

Analysis

Because the Project is calculated to generate fewer than 2,400 average daily trips (ADT), and is a residential project, per the County TSG, a VMT analysis is required to be conducted by identifying the location of the Project on the County's VMT per Resident map.

The Project's VMT per Resident would be considered the same as the VMT per Resident of the Traffic Analysis Zone where the Project is located because the distance to services and amenities would be the same within the Project site and development in the surrounding Traffic Analysis Zone. The Project also has the option to use the SANDAG Regional Travel Demand Model to determine the Project's VMT per Resident, which determines the VMT per resident based on a VMT Map prepared by SANDAG. For purposes of this analysis, the SANDAG Regional Travel Demand Model was used to determine the Project's VMT per resident. A residential project is considered to have a less than significant impact if a project's VMT per Resident is 15 percent or more below the VMT regional average (i.e., less than or equal to 85 percent of the regional average VMT per Resident). The regional average resident VMT/Capita is 19.0 miles and 85 percent of 19.0 miles is 16.07 miles.

In accordance with the County TSG, the Project's two land use components, a 0.3-acre neighborhood park and 76 residential units (including seven affordable housing units), are evaluated separately.

VMT Analysis – Neighborhood Park

The 0.3-acre Neighborhood Park was first evaluated using the screening criteria provided by the County TSG and the information in Table 2.6-2. Because the Neighborhood Park is limited in size and is anticipated to generate two vehicle trips per day, it was determined that the Neighborhood Park meets the “Locally Serving Public Facilities” screening criteria. The County TSG defines Locally Serving Public Facilities as facilities that serve the surrounding community or public facilities that have passive uses. These types of facilities may be presumed to have a less-than-significant impact. As such, the Neighborhood Park component of the Project would result in a less-than-significant VMT impact.

VMT Analysis – Residential

The 76 residential units proposed as part of the Project do not meet any of the screening criteria provided by the County, therefore, a detailed VMT analysis was conducted using the SANDAG San Diego Regional Travel Demand Model SB-743 VMT Map for the Year 2016 scenario (SANDAG 2016 VMT Map). While the Project buildout year is 2024, the Year 2016 scenario was selected to ensure a conservative review because future year scenarios may include Transportation Demand Measures (TDMs) that are currently not available. Table 2.6-3, *VMT Impact Analysis – Residential*, summarizes the VMT analysis results for the Project. As shown in Table 2.6-3, the Project’s residential land use is calculated to generate a VMT per Resident of 24.1 miles, which exceeds the significance threshold of 16.07 miles. Therefore, the residential component of the Project would have a significant VMT impact (**Significant Direct Impact TRANS-2**).

2.6.4.3 Potential Transportation Safety Hazards

Guideline for the Determination of Significance

A significant transportation impact would occur if implementation of the Project would result in the following:

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

Guideline Source

The threshold of significance is based on Appendix G of the CEQA Guidelines.

Analysis

There would be no hazardous design features resulting from incompatible uses introduced by the Project. The Project’s residential land use is consistent with the site’s land use designation in the County of San Diego General Plan and is a compatible land use for the surrounding area.

The Project site is undeveloped under existing conditions. As shown in Figure 2.5-2, *Site Access*, San Elijo Road abuts the northern boundary of the property and would provide access via two new private streets, Street “D” and Street “E”, which would connect the Project site to San Elijo Road. The Project’s access points are also shown on Figure 2.5-2.

- *Street “E” / San Elijo Road* – The proposed private driveway, named as Street “E”, is proposed to be located at the eastern end of the Project site. It is an existing T-intersection leg (south) that connects to San Elijo Road and currently provides access to the EdenPark recreational facility. As part of the Project’s design, this intersection would be improved to satisfy both County and City of San Marcos standards as follows and would be required to meet all sight distance criteria:
 - Re-construct the existing driveway to County/City standards, to be determined during final engineering.
 - Restripe the existing buffer bike lanes to the City of San Marcos’ traffic engineer satisfaction.
- *Street “D” / San Elijo Road* – This proposed private driveway, named as Street “D”, is located at the western end of the property. It would form a side-street stop-controlled, right-in/right-out T-intersection with San Elijo Road and would be required to meet all site distance criteria. This access point includes one inbound lane and one outbound lane.

Internal to the Project site, the residential lots would be accessed from a number of private internal roads to provide adequate internal circulation and access. Site access and the internal circulation roadways would not increase hazards due to a geometric design feature.

The Project would meet City of San Marcos and County standards for roadway design and avoidance of traffic hazards, which would occur as part of standard review required as part of final engineering. Roadway and intersection geometrics of the Project were assumed in the analysis to be identical to existing geometrics because the Project would not modify any roadway or intersection geometrics, with the exception of Project access points. No adverse design features, physical configurations, or other conflicting features such as curves, slopes, walls, or other barriers that may adversely affect the movement of roadway users are proposed as part of the Project. The Project would have a less-than-significant impact in relation to traffic hazards and design features. Therefore, the Project would result in less-than-significant impacts due to incompatible uses on the Project site.

2.6.4.4 Emergency Access

Guideline for the Determination of Significance

A significant transportation impact would occur if implementation of the Project would:

- Result in inadequate emergency access.

Guideline Source

The threshold of significance is based on Appendix G of the CEQA Guidelines.

Analysis

As discussed in EIR Section 3.11, *Public Services*, and Section 3.14, *Wildfire*, emergency services and access would be assured to the Project site. As shown on Figure 1-6, *Site Access Plan*, and described above, emergency access to the Project site would be provided via two Project driveways connecting with San Elijo Road. All on-site roadways would be constructed to County and City of San Marco standards to ensure adequate emergency access and emergency turn around. Therefore, the Project would not result in inadequate emergency access and this potential impact would be less than significant. During construction, a temporary traffic control plan would be implemented as a standard condition of approval to ensure maintained vehicle flow on San Elijo Road and at the existing San Elijo Road/Street “E” intersection. The temporary traffic control plan is required to comply with the applicable requirements of the California Manual on Uniform Traffic Control Devices (CMUTD).

2.6.5 Cumulative Impact Analysis

In regard to compliance with programs, plans, ordinances, and policies that pertain to the transportation system, the Project’s contribution of vehicles to the roadway system would be inconsistent with City of San Marcos General Plan Mobility Element Policy M-1.4, which seeks to achieve LOS D or better on Mobility Element roadways. The Project’s LTA (*Appendix L2*) includes a cumulative analysis that includes land use assumptions for existing and future development projects forecasted by SANDAG, as well as anticipated development projects in the City of San Marcos. The list of the cumulative developments included in the analysis is included in Table 1-3, *Cumulative Developments*, of the EIR. LOS analyses were conducted using the methodologies described in Chapter 2.0 of the Project’s LTA.

Under the Near-Term 2024 analysis scenario, the Project would contribute vehicles to the following intersections that operate below LOS D, which would also receive additional vehicles from other cumulative development projects.

- Melrose Drive / San Elijo Road – LOS E during AM peak hour and LOS F during PM peak hour
- Street “E” / San Elijo Road – LOS F during AM and PM peak hours
- San Elijo Road (southbound) / Baker Street – LOS E during AM and PM peak hours
- Schoolhouse Way / San Elijo Road – LOS E during AM peak hour

Three of the above listed intersections would experience an increase in delay of more than 2.0 seconds as a result of the Project’s added vehicles. Therefore, based upon Mobility Element Policy M-1.4 and the standards set forth in the City of San Marcos TIA Guidelines, the Project would result in cumulatively considerable impacts at the following three intersections (**Significant Cumulatively Considerable Impact TRANS-1**):

- Melrose Drive / San Elijo Road
- Street “E” / San Elijo Road
- San Elijo Road (southbound) / Baker Street

All study area roadway segments would continue to operate at acceptable LOS D or better under Near-Term Year 2024 Base with Project conditions, with the exception of the following:

- San Elijo Road, between Street “E” and Baker Street.

The Project’s addition of vehicles to the above roadway segment would trigger the roadway segment operating at acceptable LOS D to operate at unacceptable LOS E and would increase the volume/capacity ratio by more than 0.02. Therefore, based upon Mobility Element Policy M-1.4 and the standards set forth in the City of San Marcos TIA Guidelines, the Project would result in cumulatively considerable impacts along the roadway segment (**Significant Cumulatively Considerable Impact TRANS-1**):

The Project would have a significant VMT impact and thus would make a cumulatively considerable contribution to a cumulative VMT impact in the San Diego region (**Significant Cumulatively Considerable Impact TRANS-2**).

The Project would have less than significant impacts related to hazards from design or incompatible uses during construction and operation, and with respect to emergency access. Thus, given that the Project’s impacts would be less than significant, the Project would not result in cumulatively considerable impacts to transportation hazard or emergency access.

2.6.6 Significance of Impacts Prior to Mitigation

Significant Direct and Cumulatively Considerable Impact TRANS-1: The Project would not conflict with applicable programs, plans, ordinances, or policies addressing alternative modes of travel such as pedestrian, bicycle, and transit. The Project would, however, contribute vehicles to three intersections and one roadway segment that are calculated to operate below LOS D standards, which would be inconsistent with the City of San Marcos Mobility Element Policy M-1.4. The Mobility Element states that complying with Policy M-1.4 supports other General Plan goals such as providing environmental protections and enhancing community character. Thus, the Project’s impact would be significant on a direct and cumulatively considerable basis.

Significant Direct and Cumulatively-Considerable Impact TRANS-2: The Project’s residential land use is calculated to generate a VMT per Resident of 24.1 miles, which exceeds the significance threshold of 16.07 miles. Therefore, the residential component of the Project would have a significant VMT impact on a direct and cumulatively considerable basis.

2.6.7 Mitigation

Intersection and Roadway Improvements

M-TRANS-1 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to optimize the traffic signal timing at the intersection of Melrose Drive and San Elijo Road. Signal optimization could include reoptimizing cycle lengths and/or signal splits to better accommodate future traffic demand along the corridor. It is important to note that if signal optimization is implemented, adjacent intersections within the coordinated system should be taken into consideration. Additionally, prior to issuance of the first certificate of occupancy, the north leg of the intersection (Melrose Drive) shall be restriped to accommodate southbound dual left-turn lanes and a shared through-right lane. A striping plan shall be prepared to the satisfaction of the City Engineer.

M-TRANS-2 Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to install a traffic signal at the intersection of Streete “E” and San Elijo Road. Additionally, prior to issuance of the first certificate of occupancy, the south leg of the intersection (Street “E”) shall be reconfigured to include dual left-turn lanes and an exclusive right turn lane.

VMT

M-TRANS-3 The Project Applicant shall encourage reduction in VMT by: 1) providing end of trip bicycle facilities by providing a short term bicycle rack at neighborhood park; and 2) implementing commute trip reduction marketing by requiring the HOA to provide marketing materials to residents encouraging carpooling among residents of the community. The Project’s homeowner’s association (HOA) shall be responsible for providing information to residents about the benefits of VMT reduction as the need arises. A copy of the covenants, conditions, and restrictions (CC&Rs) shall be provided to the County prior to issuance of the first certificate of occupancy.

2.6.8 Conclusion

Significant and Unavoidable Impact TRANS-1: As shown in Table 2.6-6, *Intersection Capacity Analysis for Near-Term Year 2024 Base with Project with Improvement Conditions*, and Table 2.6-7, *Roadway Segment Capacity Analysis for Near-Term Year 2024 Base with Project with Improvement Conditions*, upon implementation, the improvements identified as part of M-TRANS-1 and M-TRANS-2 would improve the LOS at the following intersections and roadway segments to acceptable levels under Near-Term 2024 conditions and would achieve consistency with Mobility Element Policy M-1.4. However, because the mitigation requires the implementation of improvements in the City of San Marcos and the County of San Diego as the Lead Agency for this EIR does not have control over the nature and timing of improvements that would occur in the City of San Marcos, the County cannot assure that the required improvements would be in place at the time of Project occupancy; therefore,

near-term impacts to the following intersections and roadway segment are determined to be significant and unavoidable under Near-Term 2024 conditions until the required improvements are in place:

Intersections

1. Melrose Drive / San Elijo Road
2. Street “E” / San Elijo Road
3. San Elijo Road (southbound) / Baker Street

Roadway Segment

- San Elijo Road, between Street “E” and Baker Street.

Significant and Unavoidable Impact TRANS-2: In regard to reducing VMT, none of the measures provided in the Project’s Transportation Impact Study (*Appendix L1*) are readily quantifiable because it is not possible to accurately predict human behavior responses to VMT reduction strategies. The California Air Pollution Control Officers Association (CAPCOA) GHG Handbook provides several mitigation measures for land use projects. The measures that apply to residential development were evaluated to determine whether they are appropriate or feasible for the Project and are shown in Table 2.6-4, *Feasibility of Project TDM Measures & VMT Reduction*. Table 2.6-5, *Feasibility of VMT Reduction Measures*, provides the comprehensive list of the TDM measures from the CAPCOA Handbook and feasibility of implementation for the Project. The comprehensive list of TDM measures from the CAPCOA GHG Handbook is provided in Appendix A of the Project’s LTA (*Appendix L2* of this EIR) for reference. As determined by the Project’s LTA, none of the measures applicable for the Project are quantifiable measures. Additionally, none of the measures applicable for the Project are feasible measures with the exception of short-term bicycle racks on site, which would be implemented on the Project site. Because none of the applicable TDM measures can be demonstrated to reduce the VMT per resident to a less than 16.07 miles, the Project is considered to have a significant and unmitigated VMT impact.

Table 2.6-1 City of San Marcos Mobility Element Consistency Analysis

Policy	Project Consistency
<p>Goal M-1 Provide a comprehensive multimodal circulation system that serves the City of San Marcos land uses and provides for the safe and effective movement of people and goods.</p>	
<p>Policy M-1.4: Utilize multi-modal level of service 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 General Plan:</p> <ul style="list-style-type: none"> • 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) • LOS D or better for Bicycles – Generally provides bicycle facilities that provide a good level of comfort for average cyclists. • LOS C or better for Pedestrians – Generally provides for wider sidewalks and ensures a pleasant and comfortable walking environment. • LOS D or better for Transit – Provides for good transit service levels along prioritized corridors with high frequency service rates. • The City shall allow for flexible LOS where warranted (e.g. accepting a lower LOS than identified above). Warranted locations include those within the Urban Core of San Marcos, or where widening is considered infeasible (financially or environmentally). The City shall continuously update a list of protected locations where flexible LOS is warranted, including Rancho Santa Fe Road (between Grand and Linda Vista, and between Grandon Ave. and Security Place), and Twin Oaks Valley Road (north Windy way). 	<p>Near Term Conflict. The Project would cause a conflict with Mobility Element Policy M-1.4 and the standards set forth in the City of San Marcos TIA Guidelines at the roadway segment of San Elijo Road, between Street “E” and Baker Street by adding vehicles to the segment and triggering the segment to operate at LOS E.</p> <p>The Project also would deteriorate traffic operations and add more than two seconds of delay to three intersections already operating at LOS E. These include:</p> <ol style="list-style-type: none"> 1. Melrose Drive / San Elijo Road 2. Street “E” / San Elijo Road 3. San Elijo Road (southbound) / Baker Street <p>The above impacts would occur in the Near Term 2024 condition only.</p>
<p>Goal M-3 Promote and encourage use of alternative transportation modes, including transit, bicycles, neighborhood electric vehicles (NEVs), and walking, within the City of San Marcos</p>	
<p>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 of San Marcos.</p>	<p>No Conflict: There is an existing soft surface trail directly adjacent to the Project site along San Elijo Road, which is consistent with the City of San Marcos Mobility Element.</p>

<p>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.</p>	<p>There are Class II Bicycle Lanes directly adjacent to the Project site along San Elijo Road, which is consistent with the City of San Marcos Bicycle and Pedestrian Master Plan (May 2015).</p>
<p>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.</p>	<p>NCTD Bus Route #304 is located in the vicinity of the Project; however, the nearest stop is located approximately one-mile from the Project site. Route #304 connects the Palomar College Transit Center to the Encinitas Station with 43 bus stops. Operation starts at 4:58 AM and ends at 8:23 PM between Monday through Friday and between 7:23 AM to 8:23 PM on Saturday. Route #304 currently does not operate on Sundays. This route operates on 40-minute headways. There are no planned transit facilities within the Project study area.</p>

Table 2.6-2 Summary of VMT Analysis Approach and Significance Thresholds

Project Type	Approach		Threshold of Significance
	Determine Average VMT by Maps	SANDAG Modeling Required	
Residential, Employment, or Mixed-Use	Less than 2,400 un-adjusted driveway trips	Greater than 2,400 un-adjusted driveway trips	15 percent (15%) below the Regional Average VMT per Resident
Non-Locally Serving Retail/Service, Public Facility, or Other	N/A	All Projects	A net change in total regional VMT

(CR Associates, 2023)

Table 2.6-3 VMT Impact Analysis – Residential

Metric	VMT per Resident (miles/person)
Regional Average	18.9 ¹
Significant Impact Threshold (85%)	16.07 ²
Proposed Project	24.1 ¹
Significant Impact?	Yes

Notes:

¹ Source = SANDAG Series 14 Year 2016 Base Model

² Regional Average (18.9) x 85% = 16.07.

(CR Associates, 2023)

Table 2.6-4 Feasibility of Project TDM Measures & VMT Reduction

Measure	Max VMT Reduction	Applicability	Project's VMT Reduction
Increase Residential Density (GHG Handbook: T-1)	30%	No – The Project design has already maximized permitted residential density on the Project site by clustering development in the northern portion of the Project site. It is not feasible for the Project to further increase number of residential units due to land use constraints and zoning restrictions.	0%
Provide Transit-Oriented Development (GHG Handbook: T-3)	31%	No - The Project is not located near a major transit stop.	0%
Implement Commute Trip Reduction Marketing (GHG Handbook: T-6)	4%	Yes – However, not quantifiable for the proposed Project as this measure is aimed at employment projects.	0%
Provide Ridesharing Program (GHG Handbook: T-7)	8%	No – Not functionally feasible or practical for the Project's HOA to host and implement a ridesharing program for 76 single-family residential homes in a suburban setting.	0%

Provide End-of-Trip Bicycle Facility (GHG Handbook: T-9)	4.4%	Yes - The Project will provide short term bicycle racks at the Neighborhood Park. Since these racks will likely be utilized by residents in nearby communities, and for a conservative analysis, VMT reduction was not assumed for these amenities. Additionally, not quantifiable for the Proposed Project as this measure is aimed at employment projects.	0%
Limit Residential Parking Supply (GHG Handbook: T-14)	13.7%	No – Not feasible to reduce parking for this residential project given the County’s parking requirements and the design of the single-family residential community.	0%
Provide Pedestrian Network Improvement (GHG Handbook T-17)	6.4%	No – Although the project is providing a new trail connection from a proposed parking lot to the Copper Creek Trail it is not feasible for the Project to provide other pedestrian network improvements off-site beyond the Project site. A soft surface trail is already provided along the Project site’s frontage with San Elijo Road.	0%
Implement Conventional Carshare Program (GHG Handbook: T-20-A)	0.15%	No – Not functionally feasible or practical for the Project’s HOA to implement a conventional carshare program for 76 single-family residential homes in a suburban setting.	0%
Implement Electric Carshare Program (GHG Handbook: T-20-B)	0.18%	No – Not functionally feasible or practical for the Project’s HOA to implement a conventional carshare program for 76 single-family residential homes in a suburban setting.	0%
Implement Pedal (Non-Electric) Bikeshare Program (GHG Handbook: T-21-A)	0.02%	No – Not functionally feasible or practical for the Project’s HOA to implement a bike share program for 76 single-family residential homes in a suburban setting.	0%
Implement Electric Bikeshare Program (GHG Handbook: T-21-B)	0.06%	No – Not functionally feasible or practical for the Project’s HOA to implement an electric bikeshare program for 76 single-family residential homes in a suburban setting.	0%
Implement Scootershare Program (GHG Handbook: T-21-C)	0.07%	No – Not functionally feasible or practical for the Project’s HOA to implement a scootershare program for 76 single-family residential homes in a suburban setting.	0%

Integrate Affordable and Below Market Rate Housing	Non-quantifiable	Yes - The Project is providing seven affordable homes on the site. However, for a conservative analysis, the potential VMT reductions were not assumed for these units.	0%
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(CR Associates, 2023)

Table 2.6-5 Feasibility of VMT Reduction Measures

Mitigation Measure (from CAPCOA Report)	Feasibility
TDM-T-7-Implement Commute Trip Reduction Marketing	Yes - However, not quantifiable for the Proposed Project due to the implementation requirements or measure description in relation to Proposed Project's land use (i.e., a residential project rather than an employment project).
TDM-T-8-Provide Ridesharing Program	No - Not financially feasible for project to host and implement a ridesharing program.
TDM-T-9-Implement Subsidized or Discounted Transit Program	No - Not financially feasible for project to implement discounted transit program.
TDM-T-10-Provide End-of-Trip Bicycle Facilities	Yes - However, not quantifiable for the Proposed Project due to the implementation requirements or measure description in relation to Proposed Project's land use (i.e., a residential project rather than an employment project).
TDM-T-14-Provide Electric Vehicle Charging Infrastructure	No - Although project is providing EV ready infrastructure as well as several EV charging ready visitor guest parking, the requirements to implement this feature are not met. Project must provide EV charging ready spaces beyond what is required per Cal Green building requirement. Additionally, EV charging infrastructure only reduces gas emissions and does not reduce VMT.
TDM-T-15-Limit Residential Parking Supply	No - Not feasible to reduce parking for this residential project.
TDM-T-18-Provide Pedestrian Network Improvement	No - Although the project is providing pedestrian improvements within project site and project frontage, it is not financially feasible to provide pedestrian network improvements beyond the project site.
TDM-T-21-A-Implement Conventional Carshare Program	No - Not financially feasible for project to implement a carshare program.
TDM-T-21-B-Implement Electric Carshare Program	No - Not financially feasible for project to implement an electric carshare program.
TDM-T-22-A-Implement Pedal (Non-Electric) Bikeshare Program	No - Not financially feasible for project to implement a pedal bikeshare program.
TDM-T-22-B-Implement Electric Bikeshare Program	No - Not financially feasible for project to implement an electric bikeshare program.
TDM-T-22-C-Implement Scootershare Program	No - Not financially feasible for project to implement a scootershare program.

(CR Associates, 2024) (CR Associates, 2023)

Table 2.6-6 Intersection Capacity Analysis for Near-Term Year 2024 Base with Project with Improvement Conditions

#	Intersection	Control Type	AM Peak Hour		PM Peak Hour		Delay w/o Project (sec) AM/PM	LOS w/o Project AM/PM	Change in Delay (sec) AM/PM
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS			
1	Melrose Drive / San Elijo Road	Signal	45.1	D	41.1	D	63.0 / 89.1	E / F	-17.9 / -48.0
2	Street "E" / San Elijo Road	Signal	13.9	B	22.6	C	22.6 / 797.1	C / F	-8.7 / -774.5

3	San Elijo Road (southbound) / Baker Street	Signal	52.4	D	33.1	C	75.7 / 51.4	E / D	-23.3 / -18.3
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Bold indicates substandard LOS E or F.
(CR Associates, 2023b)

Table 2.6-7 Roadway Segment Capacity Analysis for Near-Term Year 2024 Base with Project with Improvement Conditions

Road Segment	ADT w/Traffic Signal	V/C w/Traffic Signal	LOS w/Traffic Signal	ADT w/o Traffic Signal	V/C w/o Traffic Signal	LOS w/o Traffic Signal	$\Delta V/C$	I?
San Elijo Road Street "E" to Baker Street	34,466	0.862	D	35,014	0.875	E	-0.013	N

Bold indicates substandard LOS E or F.
(CR Associates, 2023b)

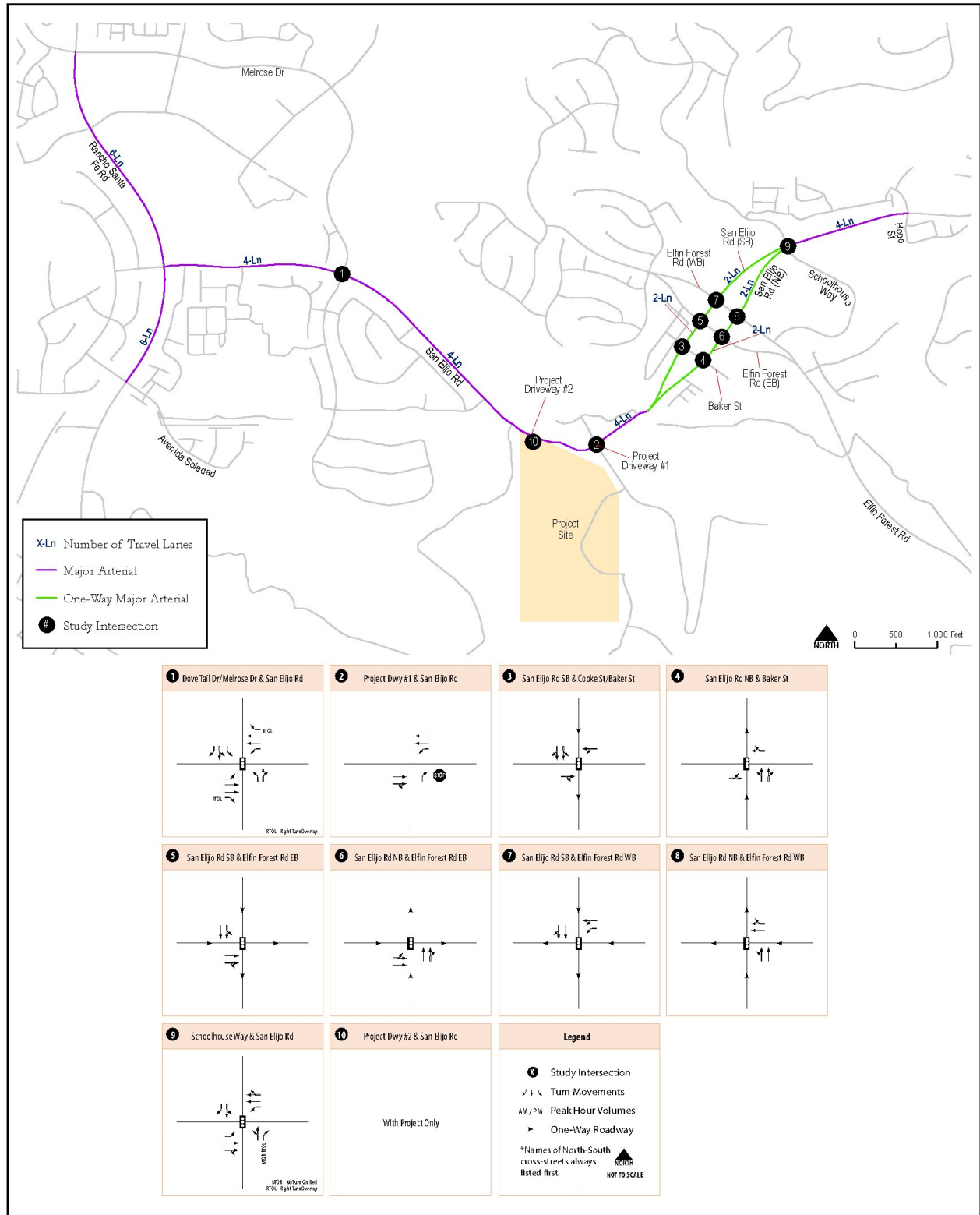
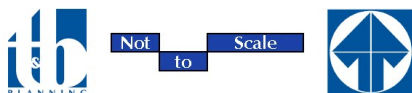
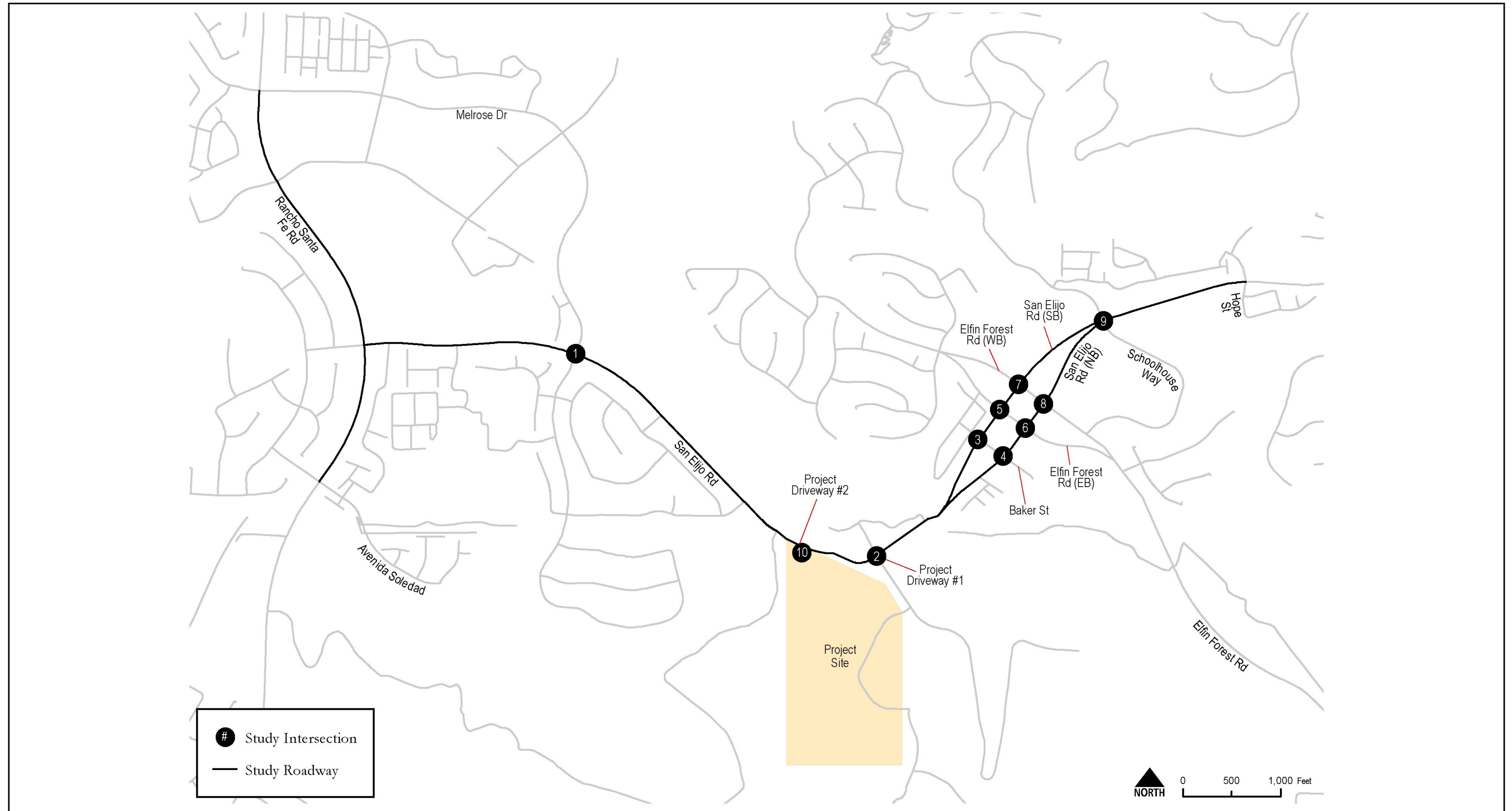


Figure 2.6-1

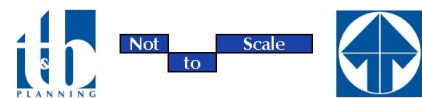


Existing Roadway Network



Source(s): Chen Ryan (05-30-2023)

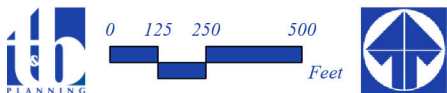
Figure 2.6-2





Source(s): Esri, Nearmap Imagery (September 2022)

Figure 2.6-3



Existing Pedestrian Conditions

2.7 Tribal Cultural Resources

This section provides a Project-specific analysis of the potential impacts to tribal cultural resources from implementation of the Project. The potential historical and archaeological resource impacts are evaluated in a report titled “Cultural Resources Study for Questhaven 64 Project” prepared by Brian F. Smith and Associates (BFSA) in February 2021 and appended to this EIR as *Appendix C1*. Tribal cultural resources are informed through a tribal consultation process undertaken by and between the County of San Diego and consulting Native American tribes. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting consistent with County of San Diego best practices was held on September 20, 2022. Six comment letters related to tribal cultural resources were received. The Campo Band of Mission Indians (received September 14, 2022), the Barona Band of Mission Indians (received September 8, 2022), The Rincon Band of Luiseño Indians (received September 27, 2024), the San Pasqual Band of Mission Indians (received September 20, 2022), and the Agua Caliente Band of Cahuilla Indians (received September 26, 2022) requested tribal consultation. The Native American Heritage Commission (received September 9, 2022) noted that the Project is subject to AB 52.

It should be noted that confidential information has been redacted from *Appendix C1* for purposes of public review. In addition, much of the written and oral communication between Native American tribes and the County of San Diego, and BFSA is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR section, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

2.7.1 Existing Conditions

The Project site is located south of San Marcos Creek and San Elijo Road and primarily includes gently sloping to steep terrain that ranges from relatively flat near the northern boundary to ridges and hillsides near the property’s southern boundary. Topographic elevations within the Project site range from a low elevation of 490 above mean sea level (amsl) in the southeastern drainage to a high of 930 amsl near the southwestern property boundary. Overall, the Project site gently slopes upward from north to southwest. The property is currently undeveloped and has been previously disturbed by the establishment of dirt roads, agricultural uses, general weed abatement activity, and the construction of roads to the north and east. The least amount of disturbance was noted in the southwestern portion of the site.

The Project site is within the Kumeyaay and Luiseño traditional use areas. The Native American perspective is that these Tribes have been in the Project area from the beginning, as described by their oral histories. Similarly, the tribes do not necessarily agree with the distinction that is made between different archaeological cultures or periods, such as “La Jolla” or “San Dieguito.” Instead, the Tribes

believe that there is a continuum of ancestry, from the first people to the present Native American populations of San Diego County.

Three resources (SDI-9847, SDI-11,442, and SDI-22924) were identified within the Project area of potential effect (APE) through the records search and the field survey. Two resources (SDI-9847 and SDI-11,442) could not be located during the survey and were determined to be no longer existent. Archaeological resources and historic resources are located in the vicinity of the Project site and include prehistoric quarries, prehistoric habitation sites, bedrock milling feature sites, lithic scatters, historic road alignment segment, historic rock retaining wall, and historic mine. For a background context of the cultural history for the Project site and surrounding area, see refer to the Project's Cultural Resource Study included in this EIR as *Appendix CI*.

Archaeological Resources Context

For the region, it is generally accepted that the earliest identifiable culture in the archaeological record is represented by the material remains of the Paleo Indian Period San Dieguito Complex. The San Dieguito Complex was thought to represent the remains of a group of people who occupied sites in this region between 10,500 and 8,000 years before present (YBP), and who were related to or contemporaneous with groups in the Great Basin. For additional information regarding the archaeological resources context, please refer to the Project's Cultural Resources Study, included in this EIR as *Appendix CI*.

2.7.1.1 Methodology

The cultural resources study appended to this EIR as *Appendix CI* includes the results of an institutional records search, an intensive historic and archaeological resource survey of the Project site, and the detailed recordation of all identified archaeological sites. This study was conducted in conformance with County of San Diego environmental guidelines, Section 21083.2 of the California Public Resources Code (PRC), and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification of each cultural resource, in addition to the County of San Diego RPO. Specific definitions for archaeological resource type(s) used in *Appendix CI* and this EIR section are those established by the State Historic Preservation Office (SHPO 1995). In addition, pursuant to Assembly Bill 52 (AB 52), government-to-government consultation was conducted with local tribes that are culturally affiliated with the Project site. The results of Native American consultation are discussed below.

Records Search

An archaeological records search for a one-mile radius around the Project site was conducted by the South Coastal Information Center (SCIC) at San Diego State University (SDSU). The SCIC reported that 20 archaeological sites were recorded within the one-mile search radius around the Project site, with two sites recorded within the Project boundaries, which are described below. The remaining 18 cultural resource locations include one historic road alignment segment, one historic rock retaining

wall, one historic mine, three prehistoric quarries, two prehistoric habitation sites, five bedrock milling feature sites, and five lithic scatters.

Field Investigation

The information below provides the pertinent field results for the evaluation of significance of the Project's potential impacts to cultural resources. A testing program was implemented for archaeological resource sites that were previously recorded and for previously unrecorded sites in accordance with County of San Diego guidelines and site evaluation protocols on June 24, 2020. Alyssa Contreras, a Kumeyaay Native American representative from Red Tail Environmental was involved in the testing program. The potential for subsurface deposits was assessed through shovel test pit (STP) excavations at SDI-9847, SDI-11,442, and SDI-22,924. No significant historical resources were identified as being located on the Project site in the records search and during field surveys.

Site SDI-9847

Site SDI-9847 is located on the Project site and was originally recorded as an artifact scatter of five flake-based tools and one piece of debitage by Craig F. Woodman in 1983. The site location was revisited by BFSa during the current survey, but the cultural materials were not relocated. To determine if cultural resources had been buried or masked within the mapped location of the resource, five STPs were excavated to 50 centimeters across the site. The diameter of each STP averaged about 30 centimeters. No prehistoric or historic artifacts were recovered, and no culturally modified soil was observed.

The native soil across Site SDI-9847 includes a compact, brown, silty clay ranging between zero and 50 centimeters in depth, which became more compacted in the lower levels. Since no artifacts were recovered and no culturally modified soil was observed, the results of the subsurface excavations indicate that there is no subsurface component to the site. The testing program provided limited information, which facilitated the evaluation of SDI-9847 as a location of limited archaeological significance, as defined by the County of San Diego Archaeological and Historic Resources Guidelines. The site does not represent the level of focused prehistoric activity that would correspond to a prehistoric occupation site. Instead, the site is classified as a previously impacted artifact scatter that no longer retains a surface component, displays no evidence of a subsurface component, exhibits reduced integrity due to use of the land, and, therefore, no residual research potential following the data collection efforts during the current testing program. Site SDI-9847 is not a significant resource as defined by CEQA.

Site SDI-11,442

Site SDI-11,442 is located on the Project site and was previously recorded as a multicomponent site that included a prehistoric temporary camp with shell, lithics, and tools, as well as a historic refuse scatter (Pignuolo and Gallegos 1990). Site SDI-11,442 was revisited by PanGIS, Inc. in 2015 (Cordova

2015), who was only able to relocate the historic refuse scatter. The site location was revisited by BFSa during the current survey, but no cultural materials were relocated. In order to determine if cultural resources had been buried or masked within the mapped location of the resource, four STPs were excavated to 50 centimeters across the site. The diameter of each STP averaged about 30 centimeters. No prehistoric or historic artifacts were recovered, and no culturally modified soil was observed.

The native soil across the site includes a compact, brown, silty clay with intermittent nodules ranging between zero and 50 centimeters in depth, which became more compacted in the lower levels. Since no artifacts were recovered and no culturally modified soil was observed, the results of the subsurface excavations indicate that there is no subsurface component to the site. The testing program provided limited information, which facilitated the evaluation of the portion of SDI-11,442 recorded within the Project site as a location of limited archaeological significance, as defined by the County of San Diego Archaeological and Historic Resources Guidelines. The site does not represent the level of focused prehistoric activity that would correspond to a prehistoric occupation site. Instead, the site is classified as a previously impacted habitation site that no longer retains a surface component, displays no evidence of a subsurface component, exhibits reduced integrity due to use of the land, and, therefore, no residual research potential following the data collection efforts during the current testing program. Site SDI-11,442 is not a significant resource as defined by CEQA.

Site SDI-22,924

Site SDI-22,924 was identified by BFSa as part of the field survey conducted in 2020/21. The site consists of two pieces of debitage and a lithic adze. In order to test the presence or absence of a subsurface component, five STPs were excavated to 50 centimeters across the site. The diameter of each STP averaged about 30 centimeters. No prehistoric or historic artifacts were recovered, and no culturally modified soil was observed.

The native soil across the site includes a compact, pale brown, silty clay with intermittent, sub-angular nodules ranging between zero and 50 centimeters in depth, which became more compacted in the lower levels. Since no artifacts were recovered and no culturally modified soil was observed, the results of the subsurface excavations indicate that there is no subsurface component to the site. The testing program has provided limited information, which facilitated the evaluation of SDI-22,924 as a location of limited archaeological significance, as defined by the County of San Diego Archaeological and Historic Resources Guidelines. The site does not represent the level of focused prehistoric activity that would correspond to a prehistoric occupation site. Instead, the site is classified as a limited artifact scatter that retains a limited surface component, displays no evidence of a subsurface component, exhibits reduced integrity due to use of the land, and, therefore, no residual research potential following the data collection efforts during the current testing program. Site SDI-22,924 is not a significant resource as defined by CEQA.

Field Survey Results

The survey methodology employed during the BFA field investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the Project site. The survey process was limited in some areas by ground cover, particularly in the southern portion of the Project site where heavy vegetation obscured the ground surface and prevented the observation of any artifacts that might be otherwise visible.

In general, the property follows a gradual downward slope from the southwestern reaches of the property to the northeastern terminus. The archaeological survey of the property was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately five-meter intervals. All potentially sensitive areas where cultural resources might be located were closely inspected. During the archaeological survey, one previously unrecorded archaeological site (SDI-22,924) was identified and the recorded locations of sites SDI-9847 and SDI-11,442 were visited. However, no surface evidence of previously recorded sites SDI-9847 and SDI-11,442 could be relocated. Despite this, the recorded locations of the sites identified by the SCIC were tested to search for buried evidence of these sites.

In summary, archaeological investigations at SDI-9847 and SDI-11,442 did not identify any archaeological materials at the recorded site locations within the Project site. The resources previously reported at these sites have likely been moved, buried, or destroyed as a result of previous agricultural activities and/or development to the north and east of the property. Site SDI-22,924 contained a limited surface artifact scatter. However, subsurface testing at the site did not identify any additional archaeological materials associated with the surface scatter.

Native American Consultation

California AB 52 (2014) Chapter 532 amended and added sections to the California Public Resources Code relating to Native Americans and tribal cultural resources. By considering tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available early in the project planning process to identify and address potential adverse impacts to Tribal Cultural Resources (TCRs).

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

Based upon the Sacred Lands File search conducted in 2020 by the NAHC, no sacred sites, TCRs, or Traditional Cultural Landscapes (TCLs) are known to exist within the Project site boundaries and the NAHC returned negative results in the larger Rancho Santa Fe Quadrangle. During the archaeological evaluation conducted by BFSA in 2020/21, no artifacts or remains were identified or recovered that could be reasonably associated with such practices.

For the proposed Project, the County of San Diego invited tribes to consult on the Project. Fourteen tribes (Barona, Campo, Jamul, Kwaaymii, Manzanita, Pala, Pechanga, Rincon, San Luis Rey, San Pasqual, Santa Ysabel, Soboba, Sycuan, and Viejas) were contacted on October 5, 2022. Three tribes (Campo, Rincon, and Viejas) requested consultation. The County requested meeting dates with Viejas on multiple occasions with no response. As such, consultation with Viejas was concluded due to lack of response. The County has consulted with Campo and Rincon.

Campo requested to be the Native American monitor for the survey; however, it was already completed at the time of the request. A Native American monitor from Redtail Environmental was involved in the field survey. They requested that the Project be redesigned to avoid the resources or that artifacts be relocated onsite. The Project would be required to implement mitigation measure M-CR-1, which requires implementation of an Archaeological and Tribal monitoring program that would establish protocol for the treatment of any artifacts found during Project grading.

Rincon had concerns about site testing and mapping of SDI-4495/SDI-4499, an existing cluster of resources mapped off-site approximately 800 feet northeast of the Project site. Consultation is ongoing with Campo and Rincon.

No TCRs were identified on the Project site during consultation. During consultation, Rincon identified TCRs outside of the Project boundary, with the nearest mapped resource located approximately 800 feet northeast of the Project site on an off-site property.

2.7.1.2 Regulatory Setting

Federal

National Historic Preservation Act (NHPA)

The National Historic Preservation Act (NHPA) was passed in 1966 and set the foundation for much of the more specific legislation that guides cultural resource protection and management in local jurisdictions such as the County of San Diego. The Act established an Advisory Council on Historic Preservation to help implement and monitor it. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties (both prehistoric and historic resources) and allow the Advisory Council a reasonable opportunity to comment on such undertakings. The goal of the Section 106 process is to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

National Register of Historic Places (NRHP)

Developed in 1981, the National Register of Historic Places (NRHP) is an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. Listing in the NRHP provides formal recognition of a property's historical, architectural, or archaeological significance based on national standards. Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association. The criteria for determining eligibility are essentially the same in content and order as those outlined in CEQA. National Register listing places no obligation on private property owners. There are no restrictions on the use, treatment, transfer, or disposition of private property.

State

Section 15064.5 of the CEQA Guidelines, as amended, and the County guidelines, state that a cultural resource would be considered significant if it is:

1. A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in, the California Register (PRC §5024.1; Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
2. A resource included in the local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, 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 (PRC Section 5024.1, Title 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.

4. The fact that a resource is not listed in the California Register, determined not to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), and not identified in an historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(i) or 5024.1.

In accordance with CEQA, cultural resources must be assessed for project-related actions that could directly or indirectly impact them. Under this scenario, impacts to cultural resources not deemed important according to the above criteria would be considered less than significant. A summary of on-site and off-site cultural resources is provided in Section 2.4.2, along with a determination as to the significance of the impact pursuant to Section 15064.5 of the CEQA Guidelines.

California Register of Historical Resources (CRHR)

The California Register of Historical Resources (CRHR) is an authoritative guide for use by State and local agencies, private groups, and citizens to identify the State's historical resources. An historical resource can include any object, building, structure, site, area, or place that is determined to be historically or archaeologically significant. The CRHR also identifies historical resources for State and local planning purposes, determines eligibility for State historic preservation grant funding, and provides a certain measure of protection under CEQA, including Traditional Cultural Properties.

California Assembly Bill 52

California AB 52 states that current California law provides a limited measure of protection for sites, features, places, objects, and landscapes with cultural value to California Native American tribes; including sacred places, including, but not limited to, places of worship, religious or ceremonial sites, and sacred shrines. In recognition of their governmental status, AB 52 requires a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.

Local

San Diego County General Plan

The General Plan (2011a) contains a series of policies in the Conservation and Open Space Element relevant to archaeological and historical resources, human remains, and paleontological resources.

Grading, Clearing, and Watercourses Ordinance

Section 87.429 of the County’s Grading and Clearing Ordinance requires that grading operations cease if human remains or Native American artifacts are found; and Section 87.216(a)(7) requires changes to grading plans/operations if it is determined that previously unknown historical resources or unique archaeological resources may be located on the site, and a modification is necessary to prohibit grading in the area of the resources so as to preserve the resources, or to redirect proposed grading so as to avoid the location of such resources until they can be retrieved, or potential impacts to them have been appropriately mitigated.

Section 87.430 of the Ordinance provides that the County official (e.g., permit compliance coordinator) may require a paleontological monitor during all or selected grading operations, to monitor for the presence of paleontological resources. If fossils greater than 12 inches in any dimension are encountered, then all grading operations in the area of discovery must be suspended immediately and not resumed until authorized by the County official. The Grading Ordinance also requires immediate notification of the County official regarding the discovery. The County official must determine the appropriate resource recovery operation, which the permittee must carry out prior to the County official’s authorization to resume normal grading operations.

Resource Protection Ordinance

The County of San Diego’s Resource Protection Ordinance (RPO) protects significant cultural resources. The RPO defines “Significant Prehistoric or Historic Sites” as follows:

Sites that provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State, or federal importance. Such locations shall include, but not be limited to:

1. Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
 - a. Formally determined eligible or listed in the NRHP by the Keeper of the National Register; or
 - b. To which the Historic Resource (“H” Designator) Special Area Regulations have been applied; or
2. One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and
3. Any location of past or current sacred religious or ceremonial observances, which is either:
 - a. Protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, or
 - b. Other formally designated and recognized sites, which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

The RPO does not allow non-exempt activities or uses damaging to significant prehistoric or historic lands on properties under County of San Diego jurisdiction. The only exempt activity is scientific investigation authorized by the County. All discretionary projects are required to be in conformance with applicable County of San Diego standards related to cultural resources, including the noted RPO criteria for prehistoric and historic sites. Non-compliance would result in a project that is inconsistent with the County's standards.

2.7.2 Analysis of Project Effects and Determinations as to Significance

2.7.2.1 Tribal Cultural Resources

Guideline for the Determination of Significance

For the purposes of this EIR, a significant impact to tribal cultural resources would occur if the Project would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as a site, feature, place, [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:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Guidelines Source

This guideline is derived from CEQA Guidelines Appendix G. A project that would have a substantial adverse impact (direct, indirect, cumulative) on the significance of tribal cultural resources as defined by this guideline would be considered to result in a significant impact.

Analysis

No evidence of TCRs was discovered during the records search, literature review, field survey, or testing program. Although concerns were raised during AB 52 consultation, the Tribes did not classify the identified archaeological resources as TCRs. However, there is a potential for the Project site to contain unidentified subsurface TCRs. Therefore, ground-disturbing activities resulting from the Project's construction have the potential to impact previously undiscovered TCRs. If such resources

are encountered during construction and are considered important TCRs according to the consulting tribe(s), impacts would be significant prior to mitigation (**Significant Direct Impact TCR-1**).

2.7.3 Cumulative Impact Analysis

Tribal Cultural Resources

TCRs were not identified by the consulting tribes during AB 52 consultation. As such, the Project would not result in any cumulatively considerable impacts to known TCRs and would not cause a substantial adverse change in the significance of a known TCR pursuant to California Code of Regulation, Section 21074. However, there is a possibility that previously undiscovered subsurface TCRs may be impacted by Project-related ground disturbing construction activities. Other cumulative developments resulting from buildout of the San Diego County General Plan and the general plans of cities within the County also have the potential to result in impacts to TCRs, including resources that may be buried beneath the ground surface. As such, the Project's potential impacts to previously undiscovered TCRs would be cumulatively considerable prior to mitigation (**Significant Cumulatively Considerable Impact TCR-1**).

2.7.4 Significance of Impacts Prior to Mitigation

Significant Direct and Cumulatively Considerable Impact TCR-1: Project-related grading activities have the potential to encounter and impact previously undiscovered TCRs that could be determined to be important TCRs according to the criteria listed in PRC Section 21074.

2.7.5 Mitigation

Section 2.2, *Cultural Resources*, provides the following Mitigation Measure:

M-CR-1: Prior to issuance of grading permits, the Project applicant shall enter into a Treatment Agreement and Preservation Plan with consulting tribe(s) and implement an Archaeological and Tribal Monitoring Program during earth disturbing activities. The Treatment Agreement and Preservation Plan and Archeological and Tribal Monitoring Program shall be provided to the County Archeologist for review and approval prior to issuance of the grading permit.

2.7.6 Conclusion

Less-than-Significant Impact CR-1 with Mitigation: If Project-related grading activities encounter TCRs that are determined to be important to consulting tribes according to the criteria listed in PRC Section 21074, implementation of Mitigation Measure M-CR-1 would ensure that the resources are appropriately identified and treated to reduce impacts to less-than-significant.

3.0 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

Effects found not to be significant during the EIR preparation process are Aesthetics and Visual Resources, Agricultural Resources, Air Quality, Energy Use, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, Population and Housing, Public Services, Recreation, Utilities and Service Systems. These topics are analyzed in this Chapter.

3.1 Aesthetics and Visual Resources

This section describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity and evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based, in part, on site photographs included as part of the Project's application materials and taken by T&B Planning, Inc. in 2022, analysis of aerial and street view photography (Google Earth, 2023), and Project application materials related to the proposed development that were submitted to the County of San Diego and described in Section 1.0 of this EIR. The analysis in this section also is based in part on information and policies contained in the San Diego County General Plan and San Dieguito Community Plan. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. No comment letters related to aesthetics were received.

3.1.1 Existing Conditions

Visual Character

The Project site is located in the western portion of unincorporated San Diego County within the San Dieguito Community Plan Area. The Project site is currently undeveloped; no buildings exist on-site. Thus, the visual character of the Project site is undisturbed open space crossed by several unimproved dirt roads and trails, and overhead SDG&E powerlines supported by steel structures.

The Project site's landform is characterized by a topographic saddle in the northerly/northeasterly portion of the property with relatively broad low-relief drainages flowing to the northwest and southeast. Gently to moderately sloping hillsides flank the saddle to the south and north. Elevations within the Project site range from a low elevation of 490 above mean sea level (amsl) in the southeastern portion of the site where there is a drainage to a high of 930 amsl near the southwestern property boundary. Natural slopes on the Project site range from a 9% to 23% grade. The existing topography of the Project site is depicted on Figure 1-11, *Topographic Map*, in Chapter 1.0 of this EIR.

Surrounding the Project site, the character of the area is a mixture of developed residential communities with other supportive uses, and open space. To the west and south of the Project site is open space associated with the Ranch La Costa Habitat Conservation Area, beyond which is residential development. North of the Project site is land designated for open space, beyond which are residential community uses. East of the Project site is a former recycling facility that is currently used as an indoor sports complex, Loma San Marcos, and the former location of the San Marcos Landfill. The residential community of Old Creek Ranch is located west of the Project site and is visible from San Elijo Road stepping up the hillside on the south side of San Elijo Road.

Scenic Highways

The nearest Designated Scenic Highway to the Project site is State Route (SR) 78 located 15 miles to the north of the Project site. No direct views to the Project site are available from the Scenic Highway portion of SR-78 due to intervening topography and distance.

The nearest Scenic Highway identified in the County of San Diego General Plan is the Elfin Forest/Harmony Grove Road segment between the limits of San Marcos to Escondido. No direct views to the Project site are available from the Elfin Forest/Harmony Grove Road segment due to intervening topography and distance.

Scenic Vistas

Scenic vistas are singular vantage points that offer unobstructed views of valued viewsheds, including County-designated visual resources and areas designated as official scenic vistas along major highways. Neither the County's General Plan nor the San Dieguito Community Plan identify designated scenic vistas. The San Marcos General Plan Conservation and Open Space Element, Figure 4-5, depicts scenic resources in and around the City and the Project site is not identified as a scenic resource. The San Marcos General Plan describes the prominent landforms of Mount Whitney, Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas as enhancing the visual and scenic aesthetics of the City. None of these landforms or canyons are located on or adjacent to the Project site, although the Project site and many other properties around the Project site are in foreground views of Double Peak, San Marcos Mountains, Cerro de Las Posas, and Franks Peak. The Project site is abutted to the west and south by open space preserves and the topographic landforms in these preserve areas offer scenic views but are not considered to be designated scenic vistas.

The primary public view of the Project site is experienced from drivers, pedestrians, and bicyclists using San Elijo Road and approaching the Project site from the westbound or eastbound directions. From westbound San Elijo Road, views of the Project site are limited to hillside topography that blocks views of the site's interior but views are partially obscured due to landscaping in the center median of San Elijo Road that blocks full view of the site from the eastbound travel lanes as the road rises in elevation toward the Project site. From eastbound San Elijo Road, views of the Project site come into view past the Old Creek Ranch community as the road descends in elevation, but views of the site's interior are blocked by hillside topography that is adjacent to the road. SDG&E overhead powerlines supported on steel poles mark the approximate central location of the Project along San Elijo Road from the eastbound view.

The County of San Diego General Plan does not formally identify Scenic Vistas. However, the County of San Diego General Plan and Community Plans identify Resource Conservation Areas (RCAs) which are typically biological, cultural, or visual resources within a community. The nearest RCA to the Project site is approximately one mile east of the site and is identified as the Escondido Creek RCA. The RCA is not visible from the Project site due to distance and intervening topography.

Visual Character Representative Photographs

To illustrate the existing visual conditions of the Project site as seen from public viewing areas, a photographic inventory was prepared. Figure 3.1-1, *Site Photographs Key Map*, depicts the locations of six vantage photographs taken of the Project site in 2022 by T&B Planning, Inc. or by Google Street View, and provide a representative visual inventory of the visual characteristics of the Project site and potential off site infrastructure alignments as seen from surrounding public viewing areas.

View 1

Figure 3.1-2, *Site Photographs 1 and 2*, shows View 1, which is a representative view from the northeast of the Project site looking towards the Project site when approaching the intersection of San Elijo Road and the driveway that serves Loma San Marcos and that would become the access location for the proposed Project's Street "E". Cars parked along this driveway are likely visitors to the trail system that can be accessed from this location. From View 1, the Project site is viewed as a topographically varied property crossed by overhead SDG&E power lines located in the lower elevation foreground of a higher topographic landform that is located in the Rancho La Costa Reserve that surrounds the site to the west and south. A portion of the Old Creek Ranch residential community is visible in the distance, which climbs the hillside located west of the Project site and is accessed from San Elijo Road.

View 2

Figure 3.1-2, also shows View 2, which represents the view experienced from the westbound travel lanes of San Elijo Road passing the Project site. As shown, landscaping in the center median of San Elijo Road obscures views of the Project site. Beyond the trees in the landscaped center median, the Project site can be intermittently seen as an undeveloped property with a sloping hillside adjacent to San Elijo Road blocking views to the site's interior. Above the trees in the center median, a steel SDG&E tower can be seen supporting overhead lines, that run off-site to the north and also to the south across the approximate center of the Project site. Due to the trees in the landscaped center median and foreground hillside topography, distant views from this location are either blocked or substantially obscured. As drivers pass the Project site and continue traveling north, views of residential homes in the Old Creek Ranch community become visible on the hillside west of and past the Project site.

View 3

Figure 3.1-3, *Site Photographs 3 and 4*, shows View 3, which is a representative view of from the perspective of a pedestrian walking westbound along the soft surface trail that fronts the Project site along San Elijo Road. From this location, the view of the Project site is of hillside vegetated with trees, shrubs, and scrub and containing a SDG&E steel structure supporting overhead utility lines. In the foreground along San Elijo Road is the soft surface trail, utility equipment, fencing, signage, chain link fencing, and telephone poles and overhead wires. Beyond the Project site in the distance on the hillside, homes located in the Old Creek Ranch community are visible.

View 4

Figure 3.1-3 also shows View 4, which represents the view of a pedestrian or motorist traveling eastbound on San Elijo Road approaching the Project site. As seen from this perspective, the Project site is viewed as a vegetated hillside landform adjacent to San Elijo Road that blocks views to the interior of the Project site. No distant views are possible beyond the Project site from this location. In the foreground is San Elijo Road, a soft surface trail that fronts the Project site, a concrete drainage ditch, and an access gate for the trail system that traverses the Rancho La Costa Reserve.

View 5

Figure 3.1-4, *Site Photographs 5 and 6*, shows View 5, which is a representative view looking toward the Project site from the Copper Creek recreational trail system located to the west in the Rancho La Costa Reserve. From this location, trail users looking in this direction would be looking down into the topographic saddle of the Project site. SDG&E steel towers supporting overhead lines are visible, which mark the approximate center of the Project site where the site adjoins San Elijo Road. Prominently visible is the Loma San Marcos recreation center located east of the Project site, in the right of the photograph. Topographic landforms associated with the Elfin Forest Recreational Reserve are visible in the distance, along with various residential neighborhoods with supporting uses that are built into the hillsides and are visible in the background. The community of San Elijo Hills located northeast of the Project site is prominently seen including the Estates of San Elijo Hills that is visually prominent on top of the distant landform.

View 6

Figure 3.1-4 also shows View 6, which is a representative view looking toward the Project site from the Quarry Trail recreational trail system located to the north of the Project site and north of San Elijo Road. From this location, trail users looking in a southerly direction towards the Project site would be looking down onto the Project site and view the site in the lower elevation foreground of the higher a higher topographic landform that is located in the Rancho La Costa Reserve that surrounds the site to the west and south. A portion of the Old Creek Ranch residential community is visible in the distance west of the Project site, which climbs the hillside. SDG&E steel towers supporting overhead lines are visible, which mark the approximate center of the Project site where the site adjoins San Elijo Road. Also prominently visible is the Loma San Marcos recreation center located east of the Project site, in the left of the photograph.

3.1.2 Analysis of Project Effects and Determinations as to Significance

Guideline for the Determination of Significance

A significant aesthetics and visual quality impact would occur if the Project would:

- Introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing,

coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.

Guideline Source

The significance guideline is based on the Guidelines for Determining Significance and Report and Content Requirements for Visual Resources approved by PDS on July 30, 2007.

Analysis

The Project entails a proposed Tentative Map (TM) and other associated entitlement approvals to allow for the development of 76 single-family homes, consistent with the General Plan land use designation for the site. As described in Section 1.0 of this EIR, residential development would occur on 18.27 acres, a recreation park would occur on 0.31-acre, and water bioretention basins would occur on 2.4 acres. Approximately 63.9 acres of the Project site would not be developed. Of the 63.9 acres, 53.13 acres (TM Lot S) is designated as biological open space, while the other lots accommodate SDG&E easements, fire management buffers, manufactured slopes, and one lot (TM Lot G) would be used as recreational open space that is designed to accommodate a public parking lot and a 10-foot-wide decomposed granite trail segment that would connect to the existing, off-site Copper Creek Trail. Each of the proposed residential lots would contain one single-family one, on lot sizes ranging from $\pm 7,899$ square feet (s.f.) to $\pm 21,440$ s.f.

The Project would not introduce any features that would detract from or contrast with the visual character of the surrounding community. The surrounding community is comprised of a mixture of residential neighborhoods with supportive uses, and open space. Much of the residential development in the area is constructed in hillside topography, with homesites and roads that climb and descend the topography as shown on Figure 3.1-5, *Surrounding Community Context Aerial Photograph*.

The Project's proposed single-family homes would be designed in a character that is consistent with the surrounding single-family neighborhood developments. The 76 homes to be developed on the Project site would be required to comply with the setbacks, density, size, massing, coverage, and scale specified for Rural Residential zoning in the County's Zoning Ordinance, with the exception of lot size. An Administrative Permit (PDS2020-AD-20-011) is proposed as part of the Project to allow for residential lot size averaging. This will allow the proposed residential lots to be clustered in the northernmost portion of the Project site, while reserving other portions of the RR zoned area that contain sensitive habitats for open space preservation.

The Project's conceptual landscaping plan is shown in EIR Section 1.0 on Figure 1-3. Landscaping would occur along San Elijo Road and on site within rights-of-way along street frontages, on manufactured slopes, and in and around the bioretention basins. Landscaping would be ornamental in nature, except on manufactured slopes, vegetated swales, and bioretention basins where plant materials would be selected to serve environmental functions (e.g., water quality). The landscaping character would be similar and complementary to the landscaping found in the surrounding community.

The Project is not subject to any design guidelines and would not be inconsistent with established visual elements and the aesthetic quality of the surrounding area. Based on the Project's design, there is no reasonable possibility of the Project conflicting with important visual elements or the quality of the area. Residential development proposed as part of the Project would be partially visible from San Elijo Road and from public viewpoints available on the recreational trail systems in the surrounding community. The development would be perceived as stepping up the hillside from San Elijo Road, as do existing homes established in the Old Creek Ranch residential community to the west. The Project's homes would appear in the foreground lower elevations of the surrounding topography, behind which the higher topographic elevations found in the Rancho La Costa Reserve would remain visible in the distance on the horizon. The SDG&E steel support towers and overhead lines would remain in their existing location and traverse through the center of the Project site, undisturbed by the Project. For these reasons, the Project would have a less-than-significant impact on visual character.

Guideline for the Determination of Significance

A significant aesthetics and visual quality impact would occur if the Project would:

- Result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.

Guideline Source

The significance guideline is based on the Guidelines for Determining Significance and Report and Content Requirements for Visual Resources approved by PDS on July 30, 2007.

Analysis

No designated landmarks, historic resources, rock outcroppings, or unique visual features such as prominent stands of trees, are located on the Project site. Trees that are removed in the Project's development footprint would be replaced by additional trees, as shown on the Project's conceptual landscaping plan depicted in EIR Section 1.0 on Figure 1-3. Landscaping would occur along San Elijo Road and on site within rights-of-way along street frontages, in the park, on manufactured slopes, and in and around the bioretention basins.

Furthermore, the Project site is not located such that Project features would block views toward, isolate, or cause the loss or degradation of any community features that contribute to the visual character of the neighborhood. The Project is located adjacent to slopes and open space preserve areas; however, the Project is designed to preserve the steep slopes and retain views of the slopes and landforms located south and west of the Project site. As a result, the Project would not remove or cause a substantial change to any community feature that substantially contributes to visual character. The Project would have a less-than-significant impact.

Guideline for the Determination of Significance

A significant aesthetics and visual quality impact would occur if the Project would:

- Substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:
 - a public road,
 - a trail within an adopted County or state trail system,
 - a scenic vista or highway, or
 - a recreational area.

Guideline Source

The significance guideline is based on the Guidelines for Determining Significance and Report and Content Requirements for Visual Resources approved by PDS on July 30, 2007.

Analysis

The 89.23-acre Project site is located south of San Elijo Road and east of Denning Drive in the western portion of unincorporated San Diego County within the San Dieguito Community Plan Area. To the west and south of the Project site is open space associated with the Rancho La Costa Habitat Conservation. While there are views of the Project site, including the proposed development area, from San Elijo Road, none of these are considered scenic roadways with sensitive viewsheds that include the Project site. There are no Designated Scenic Highways in proximity to the Project site. The nearest Designated Scenic Highway to the Project site is State Route (SR) 78 located 15 miles to the north of the Project site. No direct views to the Project site are available from the Scenic Highway portion of SR-78 due to intervening topography and distance.

Primary viewer groups to the Project's proposed development area would include vehicular travelers along San Elijo Road and pedestrian residents and visitors hiking in the adjacent conservation areas. The Project's proposed design includes open space uses on 63.9 acres that would provide for biological and other types of open space and a wildlife corridor that would connect to the adjacent open space lands south and west of the Project site. The proposed residential development area would be clustered in the northern portion of the Project site. As noted above under the discussion of existing conditions, there are no designated focal or panoramic vistas designated by the County General Plan, the San Dieguito Community Plan, or the City of San Marcos General Plan on the site or in the immediate vicinity of the Project site. Using the representative site photos presented earlier in this section, below are descriptions from each representative location demonstrating that the Project would not substantially obstruct, interrupt, or detract from a valued focal and/or panoramic view visible from a public road. Although representative views from trails also are described below, the trails are not part of an adopted County or state trail system, so the Project has no potential to substantially impact views from an adopted trail system.

Analysis of View 1

View 1 is a representative view from San Elijo Road approaching the Project site westbound from east of the site. From this location, the Project's residential development would be visible in the foreground and a new traffic signal would be visible at the intersection of San Elijo Road and the existing driveway that accesses Loma San Marcos, which would serve as the Project's proposed Street "E". The SDG&E steel tower and power lines would remain visible in their existing location, with residential homes proposed by the Project located in front of and behind the utility corridor. The development would step up from San Elijo Road but would remain in the lower elevation foreground of the higher topographic landform that is located beyond the Project site in the Rancho La Costa Reserve. Although the distant landform is not a designated vista, the Project would nonetheless not substantially obstruct, interrupt, or detract from the distant hillside view. The Project would preserve part of the distant view by designating the southern portion of the Project site as permanent open space.

Analysis of View 2

View 2, which represents the view experienced from the westbound travel lanes of San Elijo Road passing the Project site. Upon implementation of the Project, the landscaping in the center median of San Elijo Road would continue to obscure views of the Project site including of the proposed development. The Project's design includes the installation of additional landscaping along the Project site frontage with San Elijo Road. Although some portions of the Project's residential development may be visible from this location, the obscure nature of the views and lack of focal and panoramic vistas beyond the landscaping preclude any reasonable possibility of the Project obstructing, interrupting, or detracting vista views.

Analysis of View 3

View 3 is a representative view from the perspective of a pedestrian walking westbound along the soft surface trail that fronts the Project site along San Elijo Road. From this location, the view of the Project site is of a vegetated hillside interrupted by an SDG&E steel tower. Upon implementation of the Project, the hillside would be replaced with a terraced manufactured slope that would rise up from the road and block near-ground views of the proposed development. A few rear yards of proposed residential lots may be visible but given the perspective of the viewer and lack of distance views due south from this location, there is no reasonable possibility of the Project obstructing, interrupting, or detracting vista views from this location.

Analysis of View 4

View 4 represents the view of a pedestrian or motorist traveling eastbound on San Elijo Road approaching the Project site. Under existing conditions, the Project site is viewed as a vegetated hillside landform that blocks views to the interior of the Project site. No distant views are possible beyond the Project site from this location and a terraced manufactured slope that is part of the Project's design would continue to block interior views of the site from this vantage point. As such, there is no reasonable possibility of the Project obstructing, interrupting, or detracting vista views from this location.

Analysis of Views 5 and 6

Views 5 and 6 are representative views looking toward the Project site from the Copper Creek recreational trail system (View 5) and the Quarry Trail recreational trail system (View 6). Both of these locations are at a higher elevation than the Project site. Upon implementation of the Project, trail users would look down onto the Project's permanently preserved open space areas and the 76-home community that is proposed in the northern portion of the site near San Elijo Road. The SDG&E steel towers supporting overhead lines, which mark the approximate center of the Project site, would remain visible in their existing location. Because the residential development area would occur at a lower topographic elevation than surrounding landforms, the Project's development would not obstruct, interrupt, or detract from the distant hillside view. Further, these trails are not part of an adopted County or state trail system.

Guideline for the Determination of Significance

A significant aesthetics and visual quality impact would occur if the Project would:

- Not comply with applicable goals, policies, or requirements of an applicable County Community Plan, Subregional Plan, or Historic District Zoning.

Guideline Source

The significance guideline is based on the Guidelines for Determining Significance and Report and Content Requirements for Visual Resources approved by PDS on July 30, 2007.

Analysis

Table 3.1-1, *Summary of Visual Resources Applicable Community Plan Goals and Policies*, summarizes the applicable San Dieguito Community Plan goals and policies related to visual resources and analyzes the Project's consistency. As discussed in Table 3.1-1, the Project would comply with the applicable goals, policies, and requirements of the San Dieguito Community Plan. Impacts would be less than significant.

3.1.3 Cumulative Impact Analysis

The geographic scope for the land use cumulative analysis includes the San Dieguito Community Plan area and nearby areas in the City of San Marcos, primarily focused on areas within the same viewshed as the Project. The Project site is located in a visual context of hillside topography in which residential development and supportive uses are built into the landforms and terrace up and down slopes as depicted in Figure 3.1-5. Known cumulative projects are listed in Table 1-3, *List of Cumulative Development Projects*. The Project site is surrounded by undeveloped open space west and south protected in an open space preserve and characterized by steep slopes. Implementation of the Project and identified cumulative projects would continue to add to the developed community context, but based on proposed design is determined to be visually compatible with the surrounding neighborhood character with utilization of appropriate architecture, materials, and development patterns as necessary to ensure consistency with the aesthetic goals, principles, and objectives of the County's General Plan.

There is not a consistent architectural theme in the Project area, which includes single-family neighborhoods with supported uses and commercial development. Future implementing cumulative development would be required to comply with applicable development standards of the City of San Marcos and County of San Diego zoning ordinances, which would ensure that the height and bulk of development is compatible with existing development patterns within the San Dieguito Community and City of San Marcos and would provide architectural features and treatments that would not contrast with existing development. The cumulative projects located in the same viewshed as the Project site would also be required to comply with the same development standards as the Project, or those applied by the City of San Marcos. Therefore, the Project would not combine with other cumulative projects or existing developments to result in significant aesthetic impacts. The Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to scenic quality.

No designated landmarks, historic resources, rock outcroppings, or unique visual features such as prominent stands of trees, are located on the Project site. As such, the Project has no potential to cumulatively contribute to a loss of these visual resources. Trees that are removed in the Project's development footprint would be replaced by additional trees, as shown on the Project's conceptual landscaping plan depicted in EIR Section 1.0 on Figure 1-3.

The Project's development also has no reasonable potential of opening up a new area for development, so there is no reasonable potential that the Project would trigger other development to occur in the area or resulting extensive view blockage, especially from designated public view corridors and of public resources. The Project site is surrounded by San Elijo Road, a developed recreational center, and permanently preserved open space. Further, the southern portion of the Project site would be permanently preserved as open space as part of the Project's design. There are no improvements being made by the Project that would be growth inducing. Therefore, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact to scenic views.

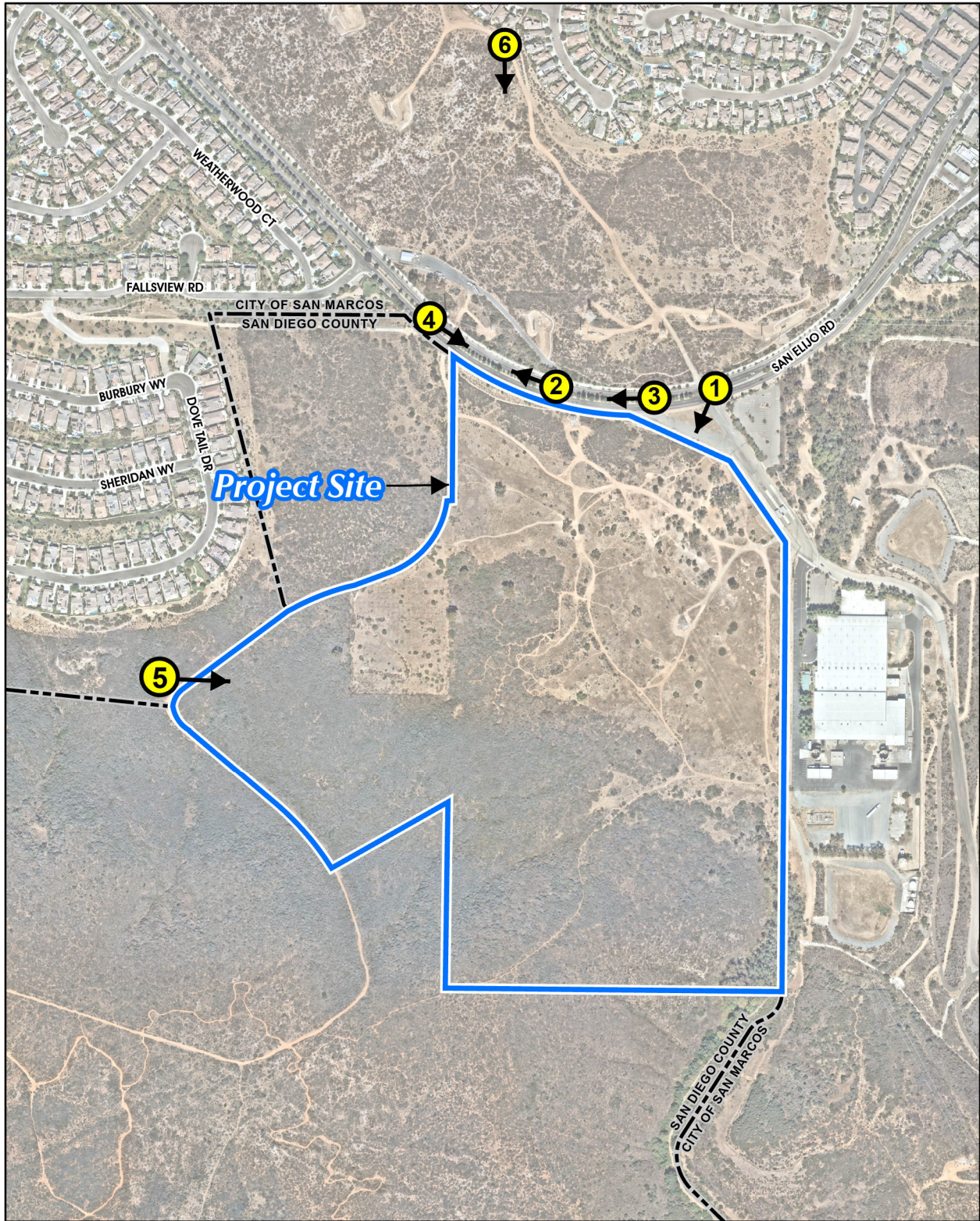
For the above stated reasons, the Project's impacts on aesthetics and visual resources would be less than significant and less than cumulatively considerable.

3.1.4 Significance of Impacts Prior to Mitigation

Based on the analysis provided above, the Project would have less-than-significant impacts related to aesthetics and visual resources.

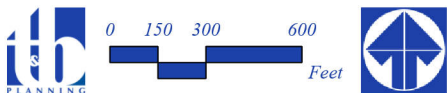
3.1.5 Conclusion

Based on the analysis provided above, no significant Project-specific or cumulatively considerable impacts related to aesthetics and visual resources would result from implementation of the Project.



Source(s): Esri, Nearmap Imagery (September 2022)

Figure 3.1-1



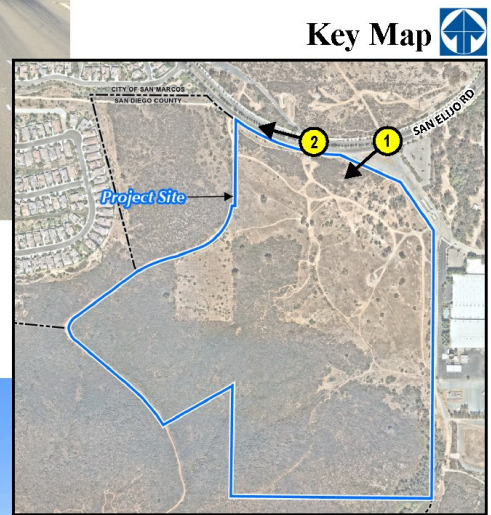
Site Photographs Key Map



View 1 - East of the Project Site looking Southwest.

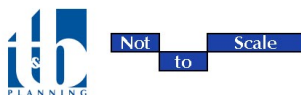


View 2 - East of the Project Site looking Northwest.



Key Map 

Figure 3.1-2



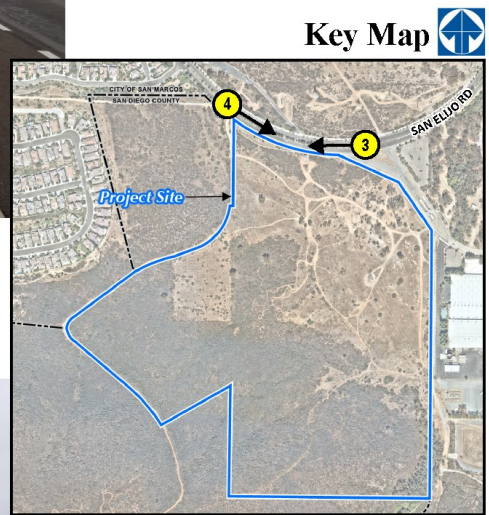
Site Photographs 1 and 2



View 3 - North of the Project Site along San Elijo Rd. looking West.

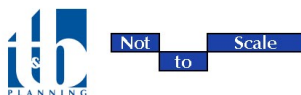


View 4 - West of the Project Site looking Northeast.



Key Map 

Figure 3.1-3



Site Photographs 3 and 4

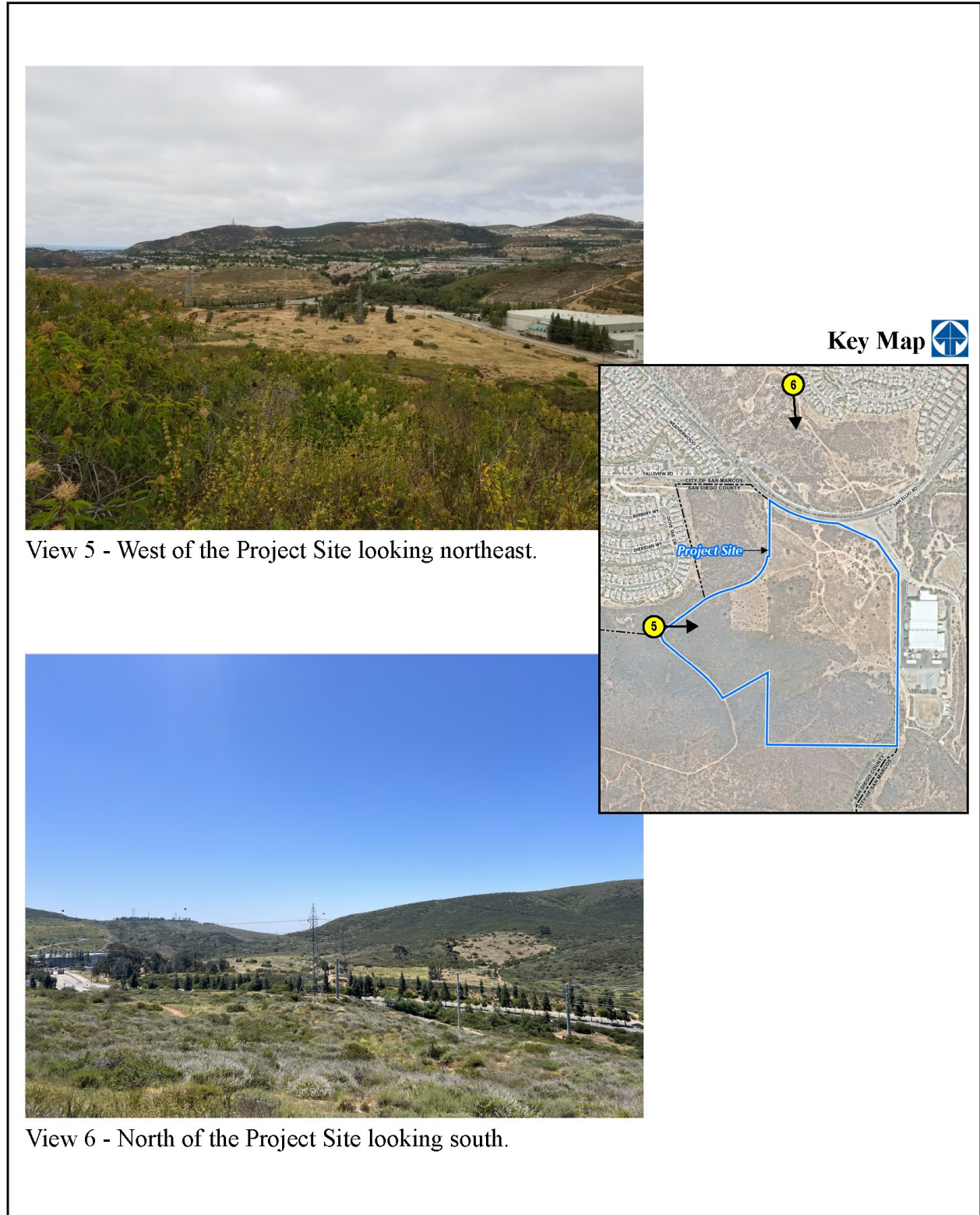
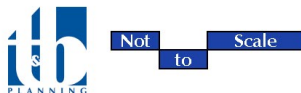


Figure 3.1-4



Site Photographs 5 and 6



Source(s): Google Earth (2022)

Figure 3.1-5

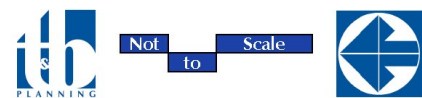


Table 3.1-1 Summary of Visual Resources Applicable Community Plan Goals and Policies

Policy	Project Consistency
<p>Community Character General Policy 3 - Establish and maintain San Dieguito as an economically and socially balanced community while ensuring that development is gradual, orderly and in harmony with the existing environment.</p>	<p>Consistent. The Project is compliant with the General Plan designation for the site and would create an orderly development. Residential development of the Project site is proposed to be clustered in the northeastern portion of the Project site to allow preservation of open space and steep hillsides. The clustering allows harmony with the existing topography and open space areas surrounding the Project site.</p>
<p>Community Character General Policy 5 - Encourage the preservation and enhancement of the natural features located within the San Dieguito Plan Area.</p>	<p>Consistent. Development of the Project site is designed to cluster development in the northeastern portion of the Project site to allow preservation of on-site natural features within the San Dieguito Plan Area.</p>
<p>Community Character General Policy 9 - In reviewing proposed development the County shall consider such criteria as:</p> <ul style="list-style-type: none"> a. Site topography and protection of steep slopes; b. View orientation and view protection of adjacent properties; c. Natural site amenities such as trees, bluff, rocks and natural drainage channels; d. Access to the proposed residence; e. Protection of ridgelines, and f. Preservation of dark skies 	<p>Consistent. Development of the Project site is designed to cluster development in the northeastern portion of the Project site to allow preservation of steep slopes and cluster development away from the natural topographic features. The height of Project buildings and the existing topography would not impact the views of adjacent properties. Access to the proposed residences would be via an existing driveway and internal private roadway system. The Project would be required to comply with the County’s Dark Sky Ordinance (Section 59.101), which requires lighting to be directed downward and screened to maintain preservation of dark skies.</p>
<p>Conservation General Policy 3 - Preserve the best natural features of the area in their natural state and avoid the creation of an urbanized landscape. (See General Plan Policy LU-6.6)</p>	<p>Consistent. Development of the Project site is designed to cluster development in the northeastern portion of the Project site to allow preservation of on-site natural features within the San Dieguito Plan Area.</p>
<p>Conservation - Dark Sky Policy 1 - In general, outdoor lighting must be directed downward and screened so as not to be visible from any adjoining property or street.</p>	<p>Consistent. Outdoor lighting would be required to comply with County’s Dark Sky Ordinance (Section 59.101). All lighting would be required to be fully shielded and directed downward to minimize opportunities for unnecessary sky glow and light trespass.</p>
<p>Scenic Highways General Policy 1 - It shall be appropriate to add Scenic (S) Special Area Regulations to the zoning of all properties adjacent to any Mobility Element Road. Land within the Scenic Viewshed of a Mobility</p>	<p>Consistent. The Project site is not located adjacent to any Mobility Element Road; thus, the Project would not be inconsistent with this policy.</p>

Element Road shall also be subject to the standards and criteria of the "S" Designator.	
Open Space General Policy 4 - During review of large scale developments, permit the use of planned residential developments to cluster structures and leave areas of natural open space.	Consistent. The Project is designed to cluster development in the northeastern portion of the Project site to allow preservation of natural open space in the southern portions of the Project site.

3.2 Agricultural Resources

The following section provides an analysis of the potential significant impacts to agricultural resources that may result from implementation of the Project. A Soils of Statewide Significance Memorandum, dated April 18th, 2024, was prepared for the Project by Advanced Geotechnical Solutions, Inc, and is included as *Appendix F3* to this EIR. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. No comment letters regarding agricultural resources were received.

3.2.1 Existing Conditions

3.2.1.1 On-Site Agriculture Uses

Much of the information in this section regarding past uses of the Project site is based on the Questhaven Project Site Phase I Environmental Site Assessment (Phase I), included as *Appendix H* to this EIR. Historically, the Project site has remained undeveloped and vacant, with a brief period of agricultural uses taking place in the western area of the site between the years 1990 and 2005 to produce figs. Dry farming of this area is estimated to have been terminated by 2005.

3.2.1.2 Farmland Mapping and Monitoring Program

The California Department of Conservation (CDC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to carry on the “Important Farmland” mapping efforts initiated in 1975 by the U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS). The intent of the USDA was to map and categorize the nation’s farmlands. The FMMP is a nonregulatory program providing a consistent and impartial analysis of agricultural land use and land use changes throughout California. Pursuant to the FMMP, agricultural resources are separated into the following categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. The FMMP also includes Grazing Land, Urban and Built-up Land, Other Land, and Water, which are not considered agricultural resources. As noted in *Appendix F3* of this EIR, the Project site does not contain Huerhero loam soil or other Soils of Statewide Significance. The Project site contains no land that has been designated Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Urban or Built-up Land, or Water.

Figure 3.2-1, *FMMP Farmland Map*, depicts the 2018 FMMP mapping data for the Project site and surrounding area using the categories described above. As shown, the Project site consists entirely of land designated as “Other Land”. The Other Land designation is not considered agricultural resources by the FMMP.

Other Land

Other Land is land which is not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. The entire Project site is designated as Other Land.

3.2.1.3 Surrounding Agricultural Resources

The Project site is surrounded primarily by open space areas to the south or areas recently developed with urban uses. Agricultural operations do not occur in the area immediately surrounding the Project site. The area surrounding the Project site are designated as Urban and Built-Up Land and Other Land by the FMMP. Land designated Unique Farmland exists approximately 1.1 miles to the southeast of the Project site.

3.2.1.4 Regulatory Setting

The California Land Conservation Act of 1965, also known as the Williamson Act (Government Code section 51200 et seq.), was adopted as an incentive program to encourage the preservation of the state's agricultural lands. The Williamson Act allows local governments to contract with private landowners to limit the use of agricultural land for agricultural purposes. Pursuant to the Williamson Act, the parties may enter into a land conservation contract whereby a county or city agrees to stabilize the property taxes on qualifying lands in return for the landowner's guarantee to use the land for agricultural purposes or related open space use for a 10-year period. Unless a notice of nonrenewal is filed, the 10-year period of the contract is automatically renewed each year. The Project site is not subject to any Williamson Act contracts.

3.2.2 Analysis of Project Effects and Determinations as to Significance

Guidelines for the Determination of Significance

A significant impact to agricultural resources would occur from the Project due to the following:

- The Project site has important agricultural resources as defined by the County's Local Agricultural Resource Assessment (LARA) Model; and the Project would result in the conversion of agricultural resources that meet the soil quality criteria for Prime Farmland or Farmland of Statewide Importance, as defined by the FMMP; and, as a result, the Project would substantially impair the ongoing viability of the site for agricultural use.

Guidelines Source

The significance threshold for important on-site agricultural resources is based on the County of San Diego Guidelines for Determining Significance, Agricultural Resources (County of San Diego 2007).

Analysis

As described above and noted in *Appendix F3* to this EIR, the soil types found on the Project site do not meet the soil-quality criteria for Prime Farmland or Farmland of Statewide Importance as defined by the FMMP. As such, a LARA analysis is not required.

While the Project would preclude site from future agricultural use, the site is not considered an important agricultural resource per County Guidelines, and the site does not contain soils of high agricultural quality. Thus, pursuant to the above guidelines for the determination of significance, the Project impact to important agricultural resources is considered less than significant.

Guidelines for the Determination of Significance

A significant impact to agricultural resources would occur from the Project:

- The Project proposes a non-agricultural land use within one-quarter mile of an active agricultural operation or land under a Williamson Act contract and, as a result of the Project, land use conflicts between the agricultural operation or Williamson Act contract land and the proposed Project would likely occur and could result in conversion of agricultural resources to a non-agricultural use.
- The Project proposes a school, church, day care, or other use that involves a concentration of people at certain times within 1 mile of an agricultural operation or land under a Williamson Act contract and, as a result of the proposed Project, land use conflicts between the agricultural operation or a Williamson Act contract land and the proposed Project would likely occur and could result in conversion of agricultural resources to a nonagricultural use.
- The Project would involve other changes to the existing environment, which, due to their location or nature, could result in the conversion of off-site agricultural resources to a non-agricultural use or could adversely impact the viability of agriculture on land under a Williamson Act Contract.

Guidelines Source

The significance thresholds for indirect impacts to agricultural resources are based on the County of San Diego Guidelines for Determining Significance, Agricultural Resources (County of San Diego 2007).

Analysis

The Project site is not bounded by active agricultural operations. There are no Williamson Act contract lands within one-quarter (1/4) mile of the Project site. Land uses surrounding the site generally include urban residential development to the north, large open space area to the west and south, and previously developed land to the east where the San Marcos Landfill was previously located. Because the Project site is surrounded with developed areas or open space not used for farming, the development of non-agricultural uses on the Project site as proposed by the Project's design would not result in land use conflicts with agricultural operations or the conversion of agricultural resources to non-agricultural uses, and no significant impact would result.

The Project entails proposed residential uses that involve a concentration of people, however, these residential uses would not be located within one mile of an active agricultural operation or Williamson Act contract land, as there are no such lands located within the immediate Project vicinity. Therefore, no land use conflicts or resulting conversion of agricultural uses to non-agricultural uses would result due to the Project's proposed facilities, and no significant impact would result.

The Project proposes the development of urban uses on the Project site. The Project site is generally surrounded by large areas of natural open space, with existing residential development to the north of the Project site. Previously, a portion of the western area of the site was used for agriculture uses to produce figs; however, there are no active agricultural operations in the immediate vicinity of the Project that could be impacted by development of the Project site or that would be influenced to convert to a non-agricultural use. Due to the lack of active agricultural operations on the Project site or in its immediate vicinity, the potential to cause the conversion of off-site agricultural resources to a non-agricultural use or adversely impact the viability of agriculture on land under a Williamson Act contract is considered less than significant.

Guidelines for the Determination of Significance

A significant impact to agricultural resources would occur if the Project would:

- Conflict with a Williamson Act contract or the provisions of the California Land Conservation Act of 1965 (Williamson Act).

Guidelines Source

The significance threshold for zoning and Williamson Act contract lands is based on the County of San Diego Guidelines for Determining Significance, Agricultural Resources (County of San Diego 2007).

Analysis

No existing agricultural use exists on-site or in the immediate proximity of the Project site. Historically, a portion of the western area of the site was previously used for agriculture uses to produce figs; however, the agricultural operations in this area have ceased, and this area will be placed within a biological open space easement in addition to the biological open space easement located along the southwestern portion of the development. The nearest agricultural preserve is located approximately 2.5 miles southeast of the Project site. The nearest lands under Williamson Act Contract are located approximately 6.3 miles northeast of the Project site. Due to distance, no land-use interface conflicts would occur. Additionally, the Project provides for development of 76 single-family residential homes, recreation uses, and open space uses, which is compatible with the surrounding land uses. Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act Contract

3.2.3 Cumulative Impact Analysis

The Project site and vicinity are within a coastal area climate zone, which is one of the few areas in California and the United States where off-season crops are grown. This climate zone has been subject to continued conversion of agricultural lands to urban development, and will continue to be subject to such pressures in the foreseeable future.

However, as discussed in the agricultural analysis above, implementation of the proposed Project would not result in impacts to agricultural resources. There are no significant agricultural soils on the Project site, the Project site is not subject to any Williamson Act contracts nor is the site adjacent to

lands under a Williamson Act contract. In addition, the Project site is not currently in agricultural production, nor is any of the land immediately surrounding the site. Because the proposed Project would not result in any significant impacts to agricultural resources or convert other land currently in agricultural use, it would not have a considerable contribution to cumulative agricultural resources impacts that may accrue from other projects in the region. Therefore, implementation of the Project would not result in a significant cumulative impact to agricultural resources.

3.2.4 Significance of Impacts Prior to Mitigation

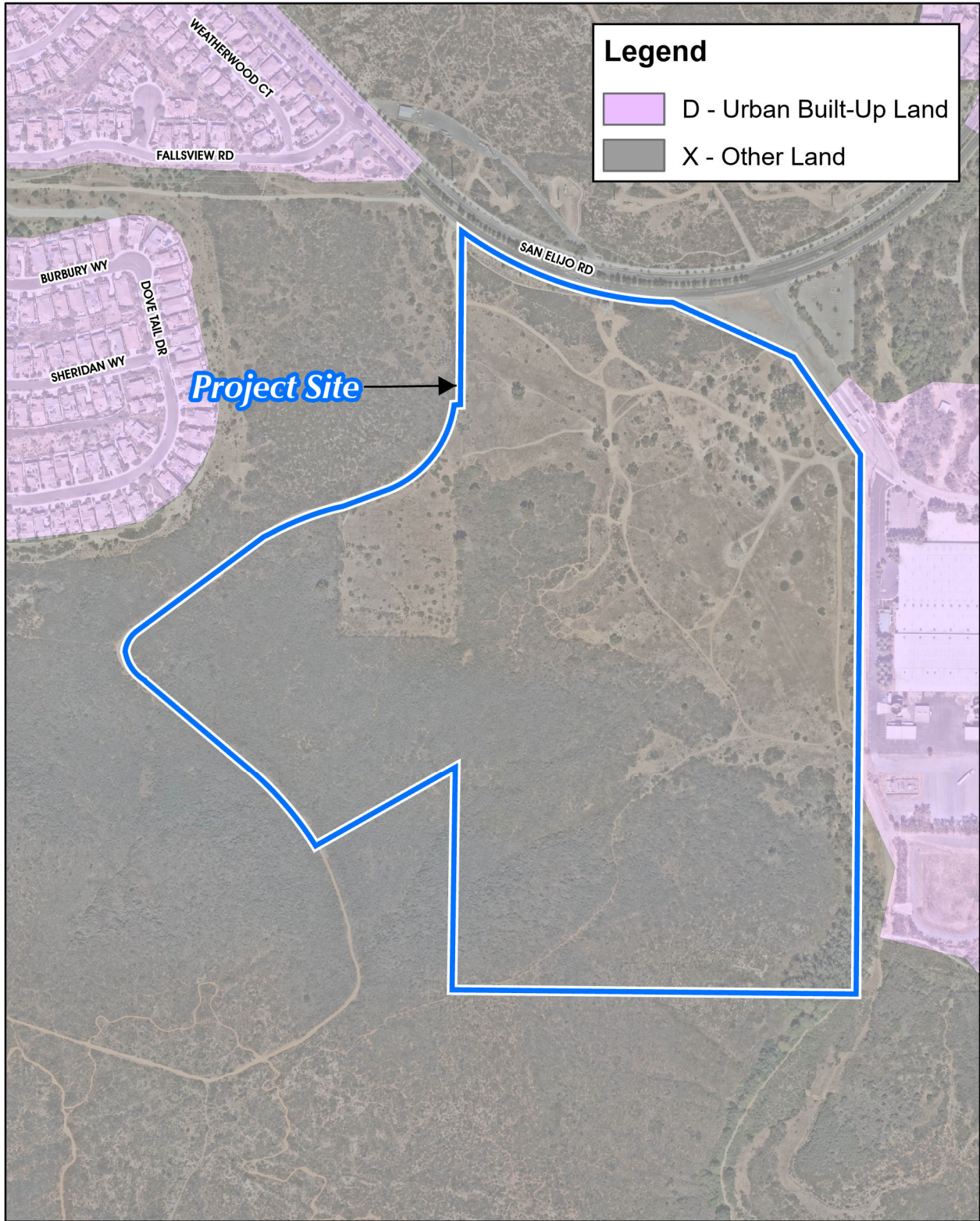
Based on the above analysis, implementation of the Project would not result in any significant direct, indirect, or cumulative impacts to agricultural resources.

3.2.5 Mitigation

As discussed above, implementation of the Project would result in less-than-significant impacts to agricultural resources.

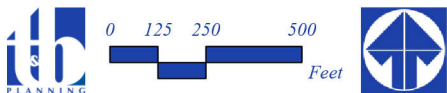
3.2.6 Conclusion

As described above, the Project site was found not to be a significant agricultural resource pursuant to County Guidelines. There are no on-site soils that meet the designation for Prime Farmland or Statewide Importance soils. The Project site and immediate surrounding vicinity are not subject to any Williamson Act contracts. In addition, the Project site is not zoned for agricultural uses. No agricultural operations currently occur on-site or in the immediate vicinity of the Project site. Therefore, implementation of the proposed Project would result in less-than-significant impacts to agricultural resources.



Source(s): Esri, Nearmap Imagery (September 2022), FMMP (2018)

Figure 3.2-1



FMMP Farmland Map

3.3 Air Quality

This section summarizes potential air quality impacts resulting from implementation of the Project. This air quality analysis includes a description of existing air quality conditions, an evaluation of potential air quality impacts associated with Project construction and operation, identification of feasible mitigation measures, and discussion of the potential air quality-related cumulative impacts of the Project. The analysis presented in this section is primarily based on the results of an Air Quality Technical Report provided as *Appendix C* to this EIR (Helix, 2023a). An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Two comment letters regarding air quality were received. The San Dieguito Community Planning Group (received September 30, 2022) requested that the EIR include mitigation measures for potential impacts to air quality due to the Project. Earthjustice noted that the electrification of the proposed Project would reduce air quality impacts.

3.3.1 Existing Conditions

3.3.1.1 *Climate and Meteorology*

Air quality is affected by the rate and location of pollutant emissions and by meteorological conditions, which influence the movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

Regional Climate

The Project site is located in the San Diego Air Basin (SDAB), which is contiguous with San Diego County. The climate of San Diego County is characterized by warm, dry summers and mild winters. One of the main determinants of the climatology is a semi-permanent high-pressure area (the Pacific High) in the eastern Pacific Ocean. In the summer, this pressure center is located well to the north, causing storm tracks to be directed north of California. This high-pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low-pressure storms are brought into the region, causing widespread precipitation. In San Diego County, the months of heaviest precipitation are November through April, averaging about 9 to 14 inches annually. The mean temperature is 62.2 degrees Fahrenheit (°F), and the mean maximum and mean minimum temperatures are 75.7°F and 48.5°F, respectively.

A common atmospheric condition known as a temperature inversion affects air quality in San Diego. During an inversion, air temperatures get warmer rather than cooler with increasing height. Subsidence inversions occur during the warmer months (May through October) as descending air associated with the Pacific high-pressure cell comes into contact with cool marine air. The boundary between the layers of air represents a temperature inversion, which is located approximately 2,000 feet above mean sea level (amsl) during the months of May through October and approximately 3,000 feet amsl during the winter months (November through April). Inversion layers are important determinants of local air quality because they inhibit the dispersion of pollutants, thus resulting in a temporary degradation of air quality.

Local Microclimate

Typically, areas within 30 miles of the coast, including the project site, experience moderate temperatures and comfortable humidity. The average high temperature in the project area is approximately 76° Fahrenheit and the average low temperature is 57° Fahrenheit. Annual precipitation is approximately 16.2 inches, which typically occurs between November and March.

3.3.1.2 Regulatory Setting

Federal and State Air Quality Standards

The Federal Clean Air Act (CAA) requires the adoption of National Ambient Air Quality Standards (NAAQS) to protect the public health, safety, and welfare from the known or anticipated effects of air pollution. The NAAQS are revised when scientific evidence indicates a need. Current primary and secondary standards are set for sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead (Pb), which are collectively referred to as criteria pollutants. Primary standards are designed to protect human health with an adequate margin of safety, while secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. Areas that do not meet the NAAQS or the California Ambient Air Quality Standards (CAAQS) for a particular pollutant are considered to be “nonattainment areas” for that pollutant.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. The California Air Resources Board (CARB), the state regulatory agency of air pollution standards, also established standards for these criteria pollutants and additional pollutants, which are generally more restrictive than the NAAQS. Federal and state standards are shown in Table 3.3-1, *California and National Ambient Air Quality Standards*.

Regional Air Quality Standards

In San Diego County, the San Diego Air Pollution Control District (SDAPCD) is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. SDAPCD is responsible for monitoring air pollution, preparing the San Diego County portion of the State Implementation Plan (SIP), and publicizing rules and regulations. The SIP includes strategies and tactics to attain and maintain acceptable air quality in the County. SDAPCD’s Regional Air Quality Strategy (RAQS) address State requirements for attainment while the San Diego portion of the California SIP includes strategies to achieve attainment of federal standards. The RAQS rules and regulations include procedures and requirements to control the emission of pollutants and prevent significant adverse impacts.

The SDAPCD rules and regulations that are applicable to the Project are:

- Rule 10 (Permits Required)
- Rule 50 (Visible Emissions)
- Rule 51 (Nuisance)

- Rule 52 (Particulate Matter)
- Rule 54 (Dust and Fumes)
- Rule 55 (Fugitive Dust Control)
- Rule 66.1 (Miscellaneous Surface Coating Operations and Other Processes Emitting VOCs)
- Rule 67.0.1 (Architectural Coatings)
- Rule 67.7 (Cutback and Emulsified Asphalts)
- Rule 69.5 (Natural Gas Fired Water Heaters)

3.3.1.3 Existing Air Quality Conditions

Specific geographic areas are classified as either “attainment” or “nonattainment” areas for each pollutant based on the comparison of measured data with federal and state standards. If an area is redesignated from nonattainment to attainment, the CAA requires a revision to the SIP, called a maintenance plan, to demonstrate how the air quality standard will be maintained for at least 10 years.

The SDAB is currently classified as a moderate nonattainment area for the 8-hour NAAQS for ozone and the CAAQS for ozone, PM10, and PM2.5. For all other criteria pollutants under the NAAQS and CAAQS, the SDAB is considered an attainment area or is unclassified.

Ambient air pollutant concentrations in the SDAB are measured at 10 air quality monitoring stations operated by SDAPCD. The closest SDAPCD air quality monitoring station to the Project site is the Kearny Villa Road monitoring station, located at 6125 Kearny Villa Road, approximately 17.5 miles south of the Project site. The Kearny Villa Road station largely represents the existing conditions at the Project site, due to its similar surrounding land uses and meteorological conditions.

Table 3.3-2, *Air Quality Monitoring Data*, presents the most recent available data from the Kearny Villa Road monitoring station as summaries of the exceedances of standards and the highest pollutant levels recorded for years 2018 through 2020. As shown, ambient air concentrations of NO₂, PM₁₀, and PM_{2.5} at the Kearny Villa Road monitoring station have either not exceeded the CAAQS in the past 4 years or there is insufficient data for concentrations. Concentrations of O₃ registered at the monitoring station exceeded the 1-hour CAAQS once, in 2018, and twice in 2020. Concentrations of O₃ registered at the monitoring station exceeded the 8-hour NAAQS and CAAQS once in 2019 and multiple times in 2018 and 2020.

3.3.1.4 Toxic Air Contaminants

The public’s exposure to toxic air contaminants (TACs) is a significant public health issue in California. The California Environmental Protection Agency (CalEPA) is authorized to identify a substance as a TAC if it “determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health”. In 1998, ARB identified diesel particulate matter (DPM) as a TAC, and it is estimated that approximately 70 percent of total known toxic air-related cancer risks in California is attributable to DPM.

Diesel engines emit a mixture of air pollutants, including solid material known as DPM, and gaseous matter. Sources of DPM emissions include off- road diesel-powered construction equipment for site grading and earthmoving, trenching, asphalt paving, and other construction activities; and from area sources such as industrial parks, warehousing districts, and shipping terminals where there are heavy volumes of diesel-powered trucks on local roads. Most DPM are no larger than 10 microns in diameter, and nearly 90 percent of DPM is less than 2.5 microns in diameter, which can eventually become trapped in various regions of the lung when inhaled.

3.3.2 Analysis of Project Effects and Determinations as to Significance

The Guidelines for the Determination of Significance presented in this section are based on the Final Thresholds of Significance and Analysis Methods document prepared specifically for the Project by the County and subsequent modifications to that document, included as *Appendix N*. In San Diego County, a project would be considered to have a significant adverse effect on air quality if any of the following would occur as a result of a project-related component:

1. Conflict with or obstruct the implementation of the RAQS and/or applicable portions of the SIP; or
2. Result in emissions that would violate any federal or state ambient air quality standards or contribute substantially to an existing or projected air quality violation.
3. Result in a cumulatively considerable increase of emissions of any criteria pollutant for which the project region is in nonattainment under applicable federal or state ambient air quality standards; or
4. Expose sensitive receptors, including, but not limited to, schools, hospitals, residential care facilities, or day care centers, to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people.

SDAPCD has not established screening level thresholds (SLT) of significance for regional pollutant emissions from development projects. To provide guidance for project analysis under CEQA, the County has established SLT of significance as shown in Table 3.3-3, *Screening-Level Thresholds for Air Quality Impact Analysis*, which are based on the thresholds for requiring an Air Quality Impact Analysis for stationary source permitting. A project with emission rates below these thresholds is considered to have a less-than-significant effect on regional and local air quality throughout the SDAB.

In the event that project emissions exceed these SLT, specific modeling is required for NO₂, SO₂, CO, and Pb to demonstrate that a project's ground-level concentrations, including appropriate background levels, do not exceed the NAAQS and CAAQS. For O₃ precursors (volatile organic compounds [VOC] and NO_x), PM₁₀ and PM_{2.5}, exceedance of the applicable SLT results in a significant impact due to the nonattainment status of the SDAB for these pollutants. The pounds per day standards apply to the Project since daily SLT are most applicable for construction and operational emissions (County of San Diego 2007c).

3.3.2.1 Project Conformity with the San Diego Regional Air Quality Strategy

Guidelines for the Determination of Significance

A significant air quality impact would occur if implementation of the Project would do the following:

- Conflict with or obstructs implementation of the San Diego RAQS and/or applicable portions of the SIP, which would lead to increases in the frequency or severity of existing air quality violations.

Guideline Source

The RAQS outlines SDAPCD's plans, and control measures designed to attain state air quality standards for ozone. In addition, SDAPCD relies on the SIP, which includes SDAPCD's plans and control measures for attaining the ozone NAAQS. The RAQS relies on information from CARB and San Diego Association of Governments (SANDAG), including projected growth in the County, to project future emissions and identify the strategies necessary for the reduction of stationary source emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County. As such, projects that propose development that is consistent with the growth anticipated by general plans would be consistent with the RAQS.

Analysis

The RAQS was developed pursuant to California CAA requirements and identifies feasible emission control measures to provide expeditious progress in San Diego County toward attaining the state O₃ standard. The pollutants addressed are VOCs and NO_x, precursors to the photochemical formation of O₃, the primary component of smog. The RAQS do not address emissions of CO or particulate matters (SDAPCD 2009); however, the 2007 SIP includes a CO maintenance plan for the region. The RAQS control measures focus on emission sources under the authority of SDAPCD, specifically, stationary emission sources and some areawide sources. The RAQS indicates that areawide sources mostly derive from residences, including from water heaters, furnaces, architectural coatings, and consumer products, but not including fireplaces. Assumptions for land use development used in the RAQS are taken from local and regional planning documents, including general plan land use designations and zoning.

Consistency with the RAQS is determined by analyzing a project with the assumptions in the RAQS. Thus, the emphasis of this criterion is to evaluate if a project's land uses would be consistent with or less than the emission forecasts for the project site contained in the RAQS. Forecasts used in the RAQS are developed by SANDAG and are based on local general plans and other related documents that are used to develop population projections and traffic projections.

The County General Plan includes the San Dieguito Community Plan, which encompasses the Project site and allows for the development of up to 64 residences. The Project includes a proposed Density Bonus Permit and Administrative Permit to allow for the development of 76 single-family residences, a park, open space, and water quality detention basins. The Project would increase the maximum allowable dwelling units from 64 dwelling units to 76 dwelling units and designate seven of these units

as Low-Income Affordable Housing, with the approval of a Density Bonus Permit. The Project would require an Administrative Permit to allow for clustering of development in the northern portion of Project site to protect sensitive habitat in the southwestern portion of the Project site. The proposed unit increase would be consistent with the County's population increase forecast, which predicts an increase of 1,379 single-family dwelling units from 2020 to 2035 and an additional 504 dwelling units from 2035 to 2050. Therefore, the emissions associated with implementation of the Project have been accounted for in the emissions modeling for the current RAQS and will be accounted for in the future RAQS. Accordingly, implementation of the Project would not exceed the assumptions used to develop the current RAQS and SIP and would not obstruct or conflict with SDAPCD's attainment plans; this impact would be less than significant.

3.3.2.2 Conformance to Federal and State Ambient Air Quality Standards

Guideline for the Determination of Significance

A significant air quality impact would occur if a project exceeded the SLT established by the County.

Guideline Source

The County of San Diego Planning and Development Services Department (PDS) has established quantitative CEQA screening-level significance thresholds to evaluate the potential significance of air quality impacts. Table 3.3-3 presents the quantitative thresholds for air emissions. For CEQA purposes, these trigger levels can be used to demonstrate that a project's construction and operational emissions would not result in a significant impact to air quality.

Analysis

Construction Impacts

Construction emissions associated with development of the Project were quantified using the California Emissions Estimator Model (CalEEMod), Version 2022.1. Construction emissions were modeled using Project-specific information when available. When Project-specific information was not available, default assumptions contained in the CalEEMod were used to estimate construction emissions. The construction emissions analysis assumes a Project development start date in January 2026, and a construction completion date in March 2028.

The CalEEMod analysis assessed maximum daily emissions from five construction activities: site preparation, grading, building construction, paving, and architectural coating. Modeling took into account equipment assumptions based on anticipated construction activities. Additionally, modeling took into account conservative assumptions of best management practices (BMPs), including water application a minimum of twice per day, to reduce emissions.

Emissions related to the construction of the Project would be temporary. As shown in Table 3.3-4, *Estimated Construction Emissions*, with implementation of construction BMPs, emissions of all criteria pollutants and precursors would be below the daily thresholds during construction. Therefore, because the Project's construction emissions (including NO_x, VOCs, PM₁₀, and PM_{2.5}) would be below

SLT, which were designed to be protective of human health and welfare (as shown in Table 3.3-4), the Project would not result in a net increase in pollutant concentrations for any criteria pollutant for which the Project region is in non-attainment, and the impact would be less than significant.

Operational Impacts

The operation of the Project would result in emissions from mobile and area sources. The assumptions used to estimate the operational emissions are presented below.

Regional pollutant emissions were quantified using the CalEEMod Model, Version 2022.1. Daily vehicle miles traveled (VMT) was estimated to be 5,129 miles per day for the Project's buildout development in the Project's Traffic Impact Study (*Technical Appendix LI*). Area sources associated with the Project would include landscaping equipment, the use of consumer products, the reapplication of architectural coatings for maintenance, and hearths. Emissions associated with area sources were estimated using the CalEEMod default values with the exception of hearths because the Project would only include electric fireplaces. Land-use types and amounts were obtained from the Project Description. From these assumptions, area- and mobile-source emissions were estimated using CalEEMod.

As shown in Table 3.3-5, *Estimated Daily Operational Emissions*, Project emissions of criteria pollutants and ozone precursors during operation would not exceed the daily screening thresholds. Therefore, the Project's operational emissions would not result in a violation of the NAAQS or CAAQS and the impact would be less than significant.

3.3.2.3 Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Guidelines for the Determination of Significance

A significant air quality impact would occur if implementation of a project would do the following:

- Projects that would site sensitive receptors near potential CO hotspots (i.e., exceedance of CO CAAQS or NAAQS) or would contribute vehicle traffic to local intersections where a CO hotspot could occur would be considered as having a potentially significant impact; or
- Projects that would result in exposure to TAC resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of Toxics Best Available Control Technology (T-BACT) or a health hazard index greater than 1 would be considered as having a potentially significant impact.

Guideline Source

Air quality regulators typically define sensitive receptors as schools (preschool to 12th grade), hospitals, residential care facilities, day care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. However, for the purposes of CEQA analysis for County projects, the definition of a sensitive receptor also includes residents. The two primary emissions of concern regarding health effects for land development projects are diesel particulate matter (DPM) and CO.

SDAPCD Rule 1200 establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1200, permits to operate may not be issued when emissions of TACs result in an incremental cancer risk greater than 1 in 1 million without application of T-BACT, or an incremental cancer risk greater than 10 in 1 million with application of T-BACT, or a health hazard index (chronic and acute) greater than one. The County uses these risk limits to assess human health risk impacts under CEQA. Given the Project's residential land uses, the Project will be evaluated using the threshold of an incremental cancer risk greater than 1 in 1 million without application of T-BACT.

Analysis

Carbon Monoxide

Roadway segments and intersections are rated by a level of service (LOS) standard ranging from LOS A to F depending on the amount of typical traffic flow measured in average daily trips (ADT). The Local Transportation Analysis (*Technical Appendix L2*) evaluated whether there would be a change in the LOS at the intersections affected by the Project. In accordance with the Transportation Project-Level Carbon Monoxide Protocol, CO hot spots are typically evaluated when: (a) the LOS of an intersection decreases to a LOS E or worse because of the project; (b) signalization and/or channelization is added to an intersection; and (c) sensitive receptors such as residences, schools, hospitals, etc., are located in the vicinity of the affected intersection or roadway segment (California Department of Transportation [Caltrans] 1998).

According to the LTA, implementation of the Project would not result in the LOS of any of the analyzed intersections degrading to LOS E or F (CR Associates, 2023b). Therefore, consistent with the CO Protocol, construction and operation of the Project would not result in exposure of sensitive receptors to substantial localized CO concentrations. Therefore, impacts would be less than significant.

Toxic Air Contaminants

Construction of the Project would result in short-term diesel exhaust emissions from on-site heavy-duty equipment, delivery trucks, and construction worker vehicles. Generation of DPM from construction projects typically occurs in a localized area (e.g., near locations with multiple pieces of heavy construction equipment working in close proximity) for a short period of time. Because construction activities and subsequent emissions vary depending on the phase of construction, the construction-related emissions to which nearby receptors are exposed to would also vary throughout the construction period. Concentrations of DPM emissions are typically reduced by 70 percent at approximately 500 feet.

The Project does not generate uses that would result in significant quantities of DPM (i.e., industrial uses or uses that include the use of heavy trucks). Additionally, the nearest sensitive receptors to the site are more than 800 feet (approximately 820 feet) from proposed construction activities on-site. Thus, a Health Risk Assessment was not prepared for the Project. However, information and analysis related to the Project's DPM emissions is included herein.

The dose of TACs to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a source of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods [typically 30 years for individual residents based on guidance from the California Office of Environmental Health Hazard Assessment (OEHHA)] and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHA, 2015). Considering this information, the fact that concentrated use of heavy construction equipment would occur at various locations throughout the Project site only for short durations, and the distance from the nearest sensitive receptors (approximately 820 feet) to heavy equipment use, construction of the Project would not expose sensitive receptors to substantial DPM concentrations, and the impact would be less than significant.

Long-term operation of the Project would result in some emissions of DPM from vehicles traveling to and from the Project site. However, the Project would not require the regular use of heavy or medium diesel-powered trucks (other than for occasional deliveries and waste collection) and the mix of vehicles traveling to and from the Project site would primarily be light duty autos and trucks typical of the region. Therefore, the Project would not result in significant localized concentrations of DPM. As a residential development, the Project is not anticipated to generate other long-term operational TACs. Therefore, operation of the Project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

3.3.2.4 Odors

Guidelines for the Determination of Significance

A significant air quality impact would occur if implementation of a project would do the following:

- Either generate objectionable odors or place sensitive receptors next to existing objectionable odors, which would affect a considerable number of persons or the public.

Guideline Source

SDAPCD Rule 51 (Public Nuisance) and California Health & Safety Code Section 41700 prohibit the emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. Odor issues are subjective since, by the nature of odors themselves, their measurements are difficult to quantify. As a result, this guideline is qualitative, and evaluation of impact would focus on the existing and potential surrounding uses and locations of sensitive receptors.

Analysis

The Project could produce other odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings; however, standard construction practices such as the five-minute diesel idling limit and use of low-VOC coatings would minimize odors. Any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of each respective phase of construction. Furthermore, because of distance from the nearest sensitive receptors (approximately 820 feet) to Project construction activity, and because typical construction odor emissions disperse rapidly with distance, Project construction odors would not affect a substantial number of people. Therefore, the Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and the impact would be less than significant.

According to the CARB Air Quality and Land Use Handbook, land uses associated with odor complaints include sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations (CARB, 2005). The Project, involving a residential development, would not include any of these uses nor are there any of these land uses in the Project vicinity. Therefore, operation of the Project would not produce odors that would adversely affect a substantial number of people, and the impact would be less than significant.

3.3.3 Cumulative Impact Analysis

3.3.3.1 Cumulatively Considerable Net Increase of Criteria Pollutants

Guidelines for the Determination of Significance

A significant air quality impact would occur if implementation of a project would do the following:

- Result in a cumulatively considerable increase of emissions of any criteria pollutant for which the project region is in nonattainment under applicable federal or state ambient air quality standards.

Guideline Source

In analyzing cumulative impacts from a project, the analysis must specifically look at the project's contribution to the cumulative increase in pollutants for which the SDAB is listed as "non-attainment" for the NAAQS and CAAQS. Of the seven federal criteria pollutants, only O₃ occurs in concentrations high enough to violate federal standards in San Diego County. Of the seven criteria pollutants for California that have a federal counterpart, O₃, PM₁₀, and PM_{2.5} occur in concentrations high enough to violate state standards in the County.

Analysis

Construction Impacts

As shown in Table 3.3-4, construction-related emissions of NO_x, PM₁₀, VOCs, and PM_{2.5} would be lower than the County's daily SLT for construction. Therefore, cumulatively considerable primary

pollutant emissions (i.e., PM₁₀ and PM_{2.5}) from construction activities may occur if construction of the Project and other projects in the surrounding area were to occur simultaneously and in proximity to the same sensitive receptors, resulting in localized concentrations in excess of the relevant NAAQS and CAAQS. NO_x and VOCs are precursors which combine to form O₃ through a complex photochemical reaction typically after significant distance and time from the emission source. Therefore, emissions of NO_x and VOCs only have potential cumulative air quality impacts (and resulting potential adverse human health effects) on a regional scale. With respect to local concentrations of PM₁₀ and PM_{2.5}, there are no current or future projects in the vicinity of the Project where major construction involving demolition activities, cut-and-fill operations, or soil import/export, would occur concurrently with the Project construction activities. In addition, all construction activities in the SDAB are required to implement fugitive dust control measures to comply with the SDAPCD's regulations that limit particulate matter dispersion from any project site. Therefore, the Project would not result in a cumulatively considerable net increase for any criteria pollutant. Thus, cumulative impacts would be less than significant.

Operational Impacts

As shown in Table 3.3-5, operation-related emissions of CO, SO₂, NO_x, PM₁₀, VOCs, and PM_{2.5} would be lower than the County's daily SLT for operations. Therefore, the Project's operational emissions would not violate the NAAQS or CAAQS and would not contribute to a cumulatively considerable increase in operational emissions. Thus, cumulative impacts would be less than significant.

3.3.3.2 Cumulative Impacts of Local Pollutants (CO and TACs) and Odors on Sensitive Receptors

Localized pollutant impacts (i.e., CO and TAC emissions) and odors are described in Sections 2.1.2.3 and 2.1.2.4. Because there is no local CO and TAC guidance within the RAQS, guidance from CARB was used to evaluate cumulative impacts to sensitive receptors.

Analysis

Carbon Monoxide

The Project's traffic volumes would not result in exposure of sensitive receptors to substantial localized CO concentrations. Construction and operation of the Project, when considered with construction and operation of all other anticipated projects within the Project area (refer to Table 1.3, *Cumulative Projects*, in Section 1.0 of this EIR), would not result in the LOS of any of the analyzed intersections degrading to LOS E or F (CR Associates, 2023b). Therefore, the cumulative impact of construction and operation of the Project would not expose sensitive receptors to substantially high concentrations of CO or contribute traffic volumes to intersections that would exceed the CO ambient air quality standards (NAAQS or CAAQS); and this impact would be less than cumulatively considerable.

TACs

Construction Impacts

As detailed above in Subsection 3.3.2.3, *Exposure of Sensitive Receptors to Substantial Pollutant Concentrations*, construction of the Project would result in less than significant TAC exposures. Due to the size of the Project and the lack of large construction projects anticipated in the Project's cumulative study area, it is unlikely that combined emissions would result in an impact from TACs that would exceed 1 in 1 million excess cancer risk. Therefore, this impact would be less than cumulatively considerable.

Operational Impacts

Operation of the Project would result in less than significant TAC emissions. No land uses exist or are planned in the Project's cumulative study area that would generate high levels of TAC emissions, such as would occur from distribution centers or roadways with high proportions of diesel vehicles. Therefore, TAC exposure to on- and off-site sensitive receptors would be less than cumulatively considerable.

Odors

Construction Impacts

As discussed in Section 3.3.2.4, it is not anticipated that the Project's construction operations would cause significant direct odor impacts. Construction emissions would cease following completion of the Project and therefore would not be long-term and would not contribute to the local long-term odor profile. In addition, there are no large odor sources in proximity of the Project that in combination with construction odor emissions would cause a cumulative odor impact. Therefore, the Project would result in a less than cumulatively considerable impact from odors during construction.

Operational Impacts

As discussed above in Section 3.3.2.4, operation of the Project does not include any significant odor-generating land uses such as landfills, wastewater treatment plants, agricultural or confined animal feeding operations, rendering plants, or commercial grills or smokers. Therefore, the Project would not result in significant cumulatively considerable operational impacts from odor emissions.

3.3.4 Significance of Impacts Prior to Mitigation

As discussed above, implementation of the Project would not result in any significant Project or cumulative air quality impacts.

3.3.5 Mitigation

Because less-than-significant impacts have been identified with respect to air quality, no mitigation is required.

3.3.6 Conclusion

As discussed above, implementation of the Project would not result in a net increase of criteria pollutants and would be in conformance with Federal and State ambient air quality standards. Thus, impacts related to air quality are considered less than significant.

Table 3.3-1 California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	Federal Standards Primary^a	Federal Standards Secondary^b
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (147 µg/m ³)	Same as Primary
PM ₁₀	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM	20 µg/m ³	–	Same as Primary
PM _{2.5}	24 Hour	–	35 µg/m ³	Same as Primary
	AAM	12 µg/m ³	12.0 µg/m ³	Same as Primary
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	–
SO ₂	24 Hour	0.04 ppm (105 µg/m ³)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	–
Lead	30-day Avg.	1.5 µg/m ³	–	–
	Calendar Quarter	–	1.5 µg/m ³	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m ³	Same as Primary
Visibility Reducing Particles	8 hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	No Federal Standards
Sulfates	24 Hour	25 µg/m ³	No Federal Standards	No Federal Standards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	No Federal Standards	No Federal Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)	No Federal Standards	No Federal Standards

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

^a National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

^b National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

O₃: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM₁₀: large particulate matter; AAM: Annual Arithmetic Mean; PM_{2.5}: fine particulate matter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer; –: No Standard. (Helix, 2023a)

Table 3.3-2 Air Quality Monitoring Data

Air Pollutant	2018	2019	2020
Ozone (O₃)			
Max 1-hour (ppm)	0.102	0.083	0.123
Days > CAAQS (0.09 ppm)	1	0	2
Max 8-hour (ppm)	0.77	0.075	0.102
Days > NAAQS (0.070 ppm)	5	1	10
Days > CAAQS (0.070 ppm)	5	1	12
Particulate Matter (PM₁₀)			
Max Daily (µg/m ³)	38.0	*	*
Days > NAAQS (150 µg/m ³)	0	-	-
Days > CAAQS (50 µg/m ³)	0	-	-
Annual Average (µg/m ³)	18.4	*	*
Exceed CAAQS (20 µg/m ³)	No	-	-
Particulate Matter (PM_{2.5})			
Max Daily (µg/m ³)	32.2	16.2	47.5
Days > NAAQS (35 µg/m ³)	0	0	2
Annual Average (µg/m ³)	8.3	7.0	8.7
Exceed NAAQS (15 µg/m ³)	No	No	No
Exceed CAAQS (12 µg/m ³)	No	No	No
Nitrogen Dioxide (NO₂)			
Max 1-hour (ppm)	0.045	0.046	0.052
Days > NAAQS (0.10 ppm)	0	0	0
Days > CAAQS (0.18 ppm)	0	0	0

Data collected at the San Diego-Kearny Villa Road Monitoring Station.

> = exceeding; ppm = parts per million; µg/m³ = micrograms per cubic meter;

* = Insufficient data available to determine the value.

(Helix, 2023a)

Table 3.3-3 Screening-Level Thresholds for Air Quality Impact Analysis

Pollutant	Total Emissions		
Construction Emissions (pounds per day)			
Respirable Particulate Matter (PM ₁₀)	100		
Fine Particulate Matter (PM _{2.5})	55		
Oxides of Nitrogen (NO _x)	250		
Oxides of Sulfur (SO _x)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	75		
Operational Emissions			
	Pounds per Hour	Pounds per Day	Tons per Year
Respirable Particulate Matter (PM ₁₀)	---	100	15
Fine Particulate Matter (PM _{2.5})	---	55	10
Oxides of Nitrogen (NO _x)	25	250	40
Oxides of Sulfur (SO _x)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOCs)	---	75	13.7
Toxic Air Contaminant Emissions			
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT		
Non-Cancer Hazard	1.0		
T-BACT = Toxics Best Available Control Technology			

(Helix, 2023a)

Table 3.3-4 Estimated Construction Emissions

Year	VOC (lbs/day)	NO _x (lbs/day)	CO (lbs/day)	SO ₂ (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
2026	4	54	120	3	19	6
2027	1	10	14	<0.5	1	<0.5
2028	29	9	14	<0.5	1	<0.5
MAXIMUM DAILY EMISSIONS¹	29	54	120	3	19	6
<i>Screening-Level Thresholds</i>	<i>75</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
<i>Exceedance?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Note: The total presented is the sum of the unrounded values; as such, totals may not add up exactly due to rounding. The CalEEMod model outputs are presented in Appendix A and the blasting emissions calculation sheets are presented in Appendix B.

¹ Fugitive dust measures (watering twice daily and limiting vehicle speeds to 25 mph on unpaved roads) were applied to control PM₁₀ and PM_{2.5} dust emissions. Low VOC architectural coatings were included.

² Maximum daily emissions from Grading and Blasting Emissions could occur on the same day and are summed in this table.

VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide; SO₂ = sulfur dioxide;

PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

lbs/day = pounds per day

(Helix, 2023a)

Table 3.3-5 Estimated Daily Operational Emissions

Source	VOC (lbs/day)	NO _x (lbs/day)	CO (lbs/day)	SO ₂ (lbs/day)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
Area	3.8	<0.1	4.3	<0.1	0.1	<0.1
Energy	<0.1	0.6	0.2	<0.1	0.04	<0.1
Mobile	3.0	1.6	16.9	<0.1	1.4	0.3
TOTAL DAILY EMISSIONS¹	6.8	2.1	21.5	<0.1	1.5	0.3
<i>Screening-Level Thresholds</i>	<i>75</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
<i>Exceedance?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Note: The total presented is the sum of the unrounded values; as such, totals may not add up exactly due to rounding. The CalEEMod model outputs are presented in Appendix A.

VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide; SO₂ = sulfur dioxide;

PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

lbs/day = pounds per day

(Helix, 2023a)

3.4 Energy Use and Conservation

CEQA Guidelines Appendix G includes the topic of Energy as a required analysis topic. As such, this discussion considers the Project's consumption of energy resources, particularly electricity, natural gas and transportation fuels, during both the Project's construction and operational phases.

This section presents a summary of the potential energy-related impacts of the Project. The analysis presented herein is based on the Energy Impact Assessment (EIA) for the Construction and Operation of the Questhaven Project authored by Helix Environmental Planning (herein, "Helix"), dated June 12, 2023, and included as *Appendix E* to this EIR. NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. One comment letter was received related to energy use and conservation. Earthjustice (received September 7, 2022) encouraged the Project to be designed to be all-electric.

3.4.1 Existing Conditions

3.4.1.1 Units of Measure

The units of energy used in this section are the British thermal units (BTU), kilowatt hours (kWh), therms, and gallons. A BTU is the quantity of heat required to raise the temperature of one pound of water one °F at sea level. Because the other units of energy can all be converted into equivalent BTU, the BTU is used as the basis for comparing energy consumption associated with different resources and is often expressed in millions of BTUs (MMBTU). A kWh is a unit of electrical energy, and one kWh is equivalent to approximately 3,413 BTUs, taking into account initial conversion losses (i.e., from one type of energy, such as chemical, to another type of energy, such as mechanical) and transmission losses. Natural gas consumption is described typically in terms of cubic feet or therms; one cubic foot of natural gas is equivalent to approximately 1.05 MMBTU, and one therm represents 0.1 MMBTU. One gallon of gasoline/diesel is equivalent to approximately 0.125/0.139 MMBTU, respectively, taking into account energy consumed in the refining process.

3.4.1.2 State Energy Supply

Electricity

California's electricity needs are satisfied by a variety of entities, including investor-owned utilities, publicly-owned utilities, and electric service providers. As of 2021, California electricity demand totaled 277,764 gigawatt (GWh) hours. In-state generating facilities accounted for about 194,127 GWh, or 70 percent of the total electric power used in the State, with the remaining electricity coming from out-of-State imports.

Natural Gas

Natural gas continues to play an important and varied role in California. In 2012, nearly 45 percent of the natural gas burned in California was used for electricity generation, and much of the remainder was consumed in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors. Natural gas supplies are currently plentiful and relatively inexpensive because of technological

advances that allow recovery of natural gas from formations such as shale reservoirs that were previously inaccessible. However, potential environmental concerns are causing decision makers to reexamine the development of shale resources and consider tighter regulations, which could affect future natural gas supplies and prices.

Transportation Fuels

Automobiles and trucks consume gasoline and diesel fuel, which are nonrenewable energy products derived from crude oil. In addition to energy consumption associated with on-road vehicle use, energy is consumed in connection with construction and maintenance of transportation infrastructure. Passenger cars and light-duty trucks are by far the largest consumers of transportation fuel. Retail sales of transportation fuel in California totaled 13.8 billion gallons of gasoline and 1.6 billion gallons of diesel in 2021, as well as 13.6 billion gallons of gasoline and 1.6 billion gallons of diesel in 2022.

3.4.1.3 Regional Energy Supply

The primary provider of electricity and natural gas in San Diego County is the San Diego Gas and Electric Company (SDG&E). SDG&E is a regulated public utility that provides energy service to 3.6 million people in San Diego and southern Orange counties. In 2022, SDG&E delivered 6,065 GWh of electricity and 340 million therms of natural gas to residential, commercial, industrial and agricultural customers.

3.4.2 Existing Regulatory Setting

Federal

Energy Independence and Security Act of 2007

House of Representatives Bill 6 (HR 6), the federal Energy Independence and Security Act of 2007, established new standards for a few energy-consuming equipment types not already subject to a standard, and updated some existing standards. The most substantial new standard that HR 6 established was for general service lighting that is being deployed in two phases. First, phased in between 2012 through 2014, common light bulbs were required to use about 20 to 30 percent less energy than previous incandescent bulbs. Second, by 2020, light bulbs were required to consume 60 percent less energy than previous incandescent bulbs; this requirement effectively phased out the incandescent light bulb.

State

Renewable Energy Programs and Mandates (SB 1078, SB 107, SB 2 X1, SB 350, and SB 100)

A series of substantive legislative initiatives have been advanced at the State level in the last two decades. These initiatives focused on increasing the generation of electricity via renewable energy sources and promoting a shift away from fossil- or carbon-based fuels as a key strategy to reduce GHG emissions, air pollution, and water use associated with the energy sector.

In 2002, California established the Renewables Portfolio Standard (RPS) with Senate Bill (SB) 1078, requiring electric utilities in the State to increase procurement of eligible renewable energy resources to achieve a target of 20 percent of their annual retail sales by the year 2010. In 2011, Governor Jerry Brown approved the California Renewable Energy Resources Act, SB 2 X1. SB 2 X1 legislatively broadened the scope of the State RPS to include retail electricity sellers; investor- and publicly owned utilities; municipal utilities; and community choice aggregators under the mandate to obtain 33 percent of their retail electrical energy sales from renewable sources by 2020.

Approved by Governor Brown on October 7, 2015, SB 350 increased California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

Approved by Governor Brown on September 10, 2018, SB 100 extended the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sale of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and/or zero-carbon resources by the end of 2045.

California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. To further this policy, the plan identifies a number of strategies, including providing assistance to public agencies and fleet operators.

California Energy Code

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2022 and went into effect on January 1, 2023. The Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting, and the requirement for on-site photovoltaic (solar) energy generation for new residential buildings three or

fewer stories high. The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR. The current 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2023.

CALGreen is intended to (1) cause a reduction in greenhouse gas (GHG) emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, adherence to CALGreen reduces construction waste; makes buildings more efficient in the use of materials and energy; and reduces environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing architects, engineers, and other designers to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Regional

San Diego Association of Governments Regional Energy Strategy

The San Diego Association of Governments' (SANDAG's) 2009 Regional Energy Strategy (RES) serves as the energy policy blueprint for the San Diego region through 2050. The RES identifies priority early implementation actions, essential to meeting the region's energy goals:

- Pursue a comprehensive building retrofit program to improve efficiency and install renewable energy systems;
- Create financing programs to pay for projects and improvements that save energy;

- Utilize the SANDAG-SDG&E Local Government Partnership to help local governments identify opportunities and implement energy savings at government facilities and throughout their communities;
- Support land use and transportation planning strategies that reduce energy use and GHG emissions;
- Support planning of electric charging and alternative fueling infrastructure; and
- Support use of existing unused reclaimed water to decrease the amount of energy needed to meet the water needs of the San Diego region.

The RES identified the main drivers of the strategy, including the state’s preferred loading order for meeting new energy needs and global climate change and its policy implications. The California Public Utilities Commission (CPUC) and CEC adopted a preferred loading order to meet the goals for satisfying the state’s growing demand for electricity, which would place top priority on increasing energy efficiency and demand response (i.e., temporary reduction or shift in energy use during peak hours), generating new energy from renewable and distributed generation resources, and improvements to clean fossil-fueled generation and infrastructure.

County of San Diego General Plan

The Conservation and Open Space Element of the County of San Diego General Plan contains goals and policies for energy conservation and sustainable development. Goals and policies relevant to the Project involve air pollutant and/or GHG reduction, which in turn would reduce energy consumption. Such policies include the following:

- COS-14.4, Sustainable Technology and Projects: Require technologies and projects that contribute to the conservation of resources in a sustainable manner, which are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.
- COS-14.10, Low-Emission Construction Vehicles and Equipment: Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.

3.4.3 Analysis of Project Effects and Determinations as to Significance

Guideline for the Determination of Significance

The Project would result in a significant impact to energy conservation if it would:

- Result in the wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Guideline Source

The identified guideline is based on Appendix G of the CEQA Guidelines.

Analysis

Construction Energy

Energy consumed for Project construction would primarily consist of fuels in the form of diesel and gasoline. Fuel consumption would result from: the use of on-road trucks for the transportation of construction materials and water; construction worker vehicles traveling to and from the Project site; and from the use of off-road construction equipment. A complete description of the Project construction equipment use and vehicle trips, as well as the full construction energy consumption calculation sheets, are included in *Appendix E*. The estimated fuel and total energy consumed during Project construction is shown in Table 3.4-1, *Total Construction Energy Use*.

While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. The petroleum consumed during Project construction would be typical of similar residential projects constructed in San Diego and across the southwestern United States, as there are no unique construction practices or energy-intensive construction characteristics proposed. The Project would not require the use of new petroleum resources beyond those typically consumed in California annually for construction activities. Based on these considerations, construction of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and the impact would be less than significant.

Operational Energy

During long-term operation of the Project, energy would be consumed in the form of diesel and gasoline used by vehicles traveling to and from the Project site; electricity required to source and treat water used by the Project; and electricity used directly by the Project. The Project's estimated annual operational energy use (for the first full year of operation—2029) in gallons of fuel, electricity, and equivalent MMBTU is shown in Table 3.4-2, *Annual Operational Energy Use*. Energy calculation sheets can be found in *Appendix E*.

The Project is calculated to consume approximately 11,922 MMBTU annually. While the Project would result in the consumption of gasoline, diesel, and electricity, the amount of energy consumed to operate the Project would be consistent overall with the energy projections for the State and the region to meet the demands of anticipated future residential growth in the State and region. Further, because the Project would be constructed in accordance with CALGreen, energy efficient features are required to be incorporated into the Project's design including the design of residential homes, resulting in energy efficiencies and lowered consumption of energy associated with Project operation. The 2022 Title 24 Part 6, Building Energy Efficiency Standards, and 2022 Title 24 Part 11, CALGreen, include provisions applicable to all buildings, which are mandatory requirements for efficiency and design.

The Project would be consistent with the requirements of Title 24 through implementation of energy-reduction measures, such as energy efficient lighting and appliances, water efficient appliances and plumbing fixtures, water efficient landscaping and irrigation, and the onsite generation of renewable solar energy. Implementation of the Project would not require the construction of new regional facilities and sources of energy. Therefore, operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and the impact would be less than significant.

Guideline for the Determination of Significance

The Project would result in a significant impact to energy conservation if it would:

- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Guideline Source

The identified guideline is based on Appendix G of the CEQA Guidelines.

Analysis

The 2022 Title 24 Part 6, Building Energy Efficiency Standards, and 2022 Title 24 Part 11, CALGreen, include provisions applicable to all buildings, which are mandatory requirements for efficiency and design. The Project would be consistent with the mandatory requirements of Title 24 as described above.

The RES is a regional measure that supports planning and financing programs that save energy and support local governments to implement energy saving measures at government facilities and throughout their jurisdictions. No feature of the Project would interfere with implementation of the RES.

The County of San Diego General Plan include several energy efficiency policies. However, many of these policies are not applicable to a single development and are intended to focus County efforts in reducing energy consumption in the larger San Diego County community. Table 3.4-3, *County of San Diego General Plan Consistency*, provides a summary of the Project's consistency with the General Plan policies.

Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and the impact would be less than significant.

3.4.4 Cumulative Impact Analysis

The geographic scope for energy conservation analysis is the County of San Diego. Short-term and long-term cumulative development is expected to result in an increase in the demand for energy resources throughout the County. Several County programs and policies and SDG&E initiatives would

serve to reduce total energy demand among cumulative projects. Additionally, minimum standards for energy efficiency are outlined in California's Title 24 energy efficiency standards for residential and nonresidential buildings. SDG&E as well as state and federal agencies offer incentive programs, such as the California Advanced Homes Partnership and California Electric Homes Program, to encourage developers to exceed Title 24 standards.

The Project's construction and operational energy usage would not be carried out in a wasteful, inefficient, or unnecessary manner. In addition, the predominant consumer of energy for the Project would be on-road vehicle travel. On-road vehicle efficiency is regulated at the State and federal level, with a progression away from fossil fuels and towards electric-powered vehicles. Although it is out of the County's jurisdictional authority to regulate on-road vehicle efficiencies, it supports the progression of consumer choice towards renewable energies including electric vehicles through various policies and programs such as the Electric Vehicle Roadmap. Therefore, the Project's cumulative impacts related to energy usage would be less than cumulatively considerable.

3.4.5 Significance of Impacts Prior to Mitigation

Based on the analysis provided above, all potential Project-specific and cumulative energy-related impacts would be less than significant.

3.4.6 Mitigation

Based on the above analysis, all energy-related impacts would be less than significant and no mitigation would be required.

3.4.7 Conclusion

Based on the analysis above, no significant Project-specific or cumulatively considerable impacts related to energy would result from implementation of the Project.

Table 3.4-1 Total Construction Energy Use

Source	Gallons Diesel	Gallons Gasoline	MMBtu
Off-Road Construction Equipment	24,155	-	3,357
On-Road Construction Traffic	9,533	6,746	2,162
Total¹	33,688	6,746	5,519

Source: CalEEMod; CARB 2023

¹ Totals may not sum due to rounding.

MMBtu = million British thermal units

(Helix, 2023b)

Table 3.4-2 Annual Operational Energy Use

Source	Diesel (gallons)	Gasoline (gallons)	Electricity (kWh)	Total Energy (MMBtu)
Mobile	65,580	12,359	-	10,648
Water/Wastewater	-	-	241,372	824
Direct Electricity Use	-	-	131,943	450
Total¹	65,580	12,359	373,315	11,922

Source: CalEEMod; CARB 2023

¹ Totals may not sum due to rounding.

kWhr = kilowatt-hours; MMBtu = million British thermal units

(Helix, 2023b)

Table 3.4-3 County of San Diego General Plan Consistency

General Plan Policy	Project Consistency
COS-14.3 Sustainable Development. Require design of residential subdivisions and nonresidential development through “green” and sustainable land development practices to conserve energy, water, open space, and natural resources.	Consistent. The Project is designed to conserve open space and natural resources by clustering development in the northern portion of the Project site.
COS-14.4, Sustainable Technology and Projects: Require technologies and projects that contribute to the conservation of resources in a sustainable manner, which are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.	Not applicable. This measure is aimed at government agencies to encourage the construction of alternative energy projects.
COS-14.7 Alternative Energy Sources for Development Projects. Encourage development projects that use energy recovery, photovoltaic, and wind energy .	Consistent. The Project would comply with Title 24 standards which require photovoltaic panels for energy generation.
COS-15.1 Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with “green building” programs that incorporate	Consistent. The Project would comply with the Title 24 energy standards and CALGreen standards as discussed in the analysis section above.

techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.	
COS-15.4 Title 24 Energy Standards. Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.	Consistent. The Project would comply with the Title 24 energy standards as discussed in the analysis section above.
COS-15.5 Energy Efficiency Audits. Encourage energy conservation and efficiency in existing development through energy efficiency audits and adoption of energy saving measures resulting from the audits	Not applicable. This measure is aimed at energy conservation in existing development. Thus, this policy is not applicable to the Project.

3.5 Geology, Soils, and Paleontological Resources

This section describes the existing geologic, soils, and paleontological conditions within the Project site and vicinity, identifies regulatory requirements and industry standards associated with geologic and soils issues, and evaluates potential impacts and attenuation measures (as applicable) related to implementation of the Project. A geotechnical investigation was prepared for the Project site in 2016 (AGS, 2016) and an addendum to the geotechnical investigation was prepared in 2020 (AGS, 2020) by AGS. Relevant portions of the Project geotechnical investigations are summarized below along with other pertinent information, with the complete geotechnical report and addendum included in Appendices F1 and F2, respectively, of this EIR. Refer to *Appendix F1* for a map showing the location of test pits, which are locations on the Project site where geotechnical boring samples were taken during geotechnical investigations of the site. The potential impacts of the Project related to paleontological resources are evaluated in a report titled “Paleontological Resource Assessment for the Questhaven 64 Project” prepared by Brian F. Smith and Associates in February 2021, and appended to this EIR as *Appendix F4*. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. No comment letters regarding geology, soils, and paleontological resources were received.

3.5.1 Existing Conditions

3.5.1.1 Regional Geology/Topography

The Project site is situated within the western portion of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges province occupies the southwestern portion of California, extending southward from the Transverse Ranges and Los Angeles Basin to the southern tip of Baja California. In general, the province consists of young, steeply sloped, northwest trending mountain ranges underlain by Late Jurassic to Early Cretaceous-age metavolcanic and metasedimentary rock and Cretaceous-age igneous plutonic rock of the Peninsular Ranges Batholith. The westernmost portion of the province is predominantly underlain by younger marine and non-marine sedimentary rocks. The Peninsular Ranges ‘dominant structural feature is northwest-southeast trending crustal blocks bounded by active faults of the San Andreas transform system.

3.5.1.2 Site Geology/Topography

Published regional geologic maps indicate that the Project site is underlain by metamorphic Santiago Peak Volcanics. However, based on information gathered during previous and recent subsurface explorations, AGS determined that the Project site is underlain by metamorphic Santiago Peak Volcanics, and a sedimentary unit likely associated with the Santiago Formation. These units are mantled by relatively thin veneers of surficial soils including undocumented artificial fill, colluvium and residual soil. The following section contains a summary of the soil and bedrock units encountered on the site. Description of these geologic units, as observed during the geotechnical investigation, are presented below. Test pit logs are presented in Appendix B of *Appendix F1*.

- Artificial Fill-undocumented (afu)

Undocumented artificial fill soils were locally encountered in test pit TP-6 to a depth of eight (8) feet. As encountered these materials can generally be described as brown to gray, silty clay in a dry to moist and loose/soft to stiff condition. Based on a review of historical satellite imagery of the Project site, it appears that minor grading/mining operations were conducted during the mid-1990's in the lower, central and southeasterly portions of the site.

- Alluvium

Alluvium was encountered in several test pits at the southeasterly boundary of the site. As encountered, these materials can generally be described as brown, silty to clayey sand with gravel in a moist and loose condition. The alluvium ranged from 3 to 9 feet in thickness. Alluvium is also anticipated to exist within the northwesterly drainage onsite. Subsurface exploration within this area was precluded to avoid testing in the drainage.

- Colluvium (Qcol)

A relatively thin veneer colluvium mantles a majority of the Project site and was encountered the majority of the test pits. The colluvium can generally be described as grayish brown/brown to reddish brown, silty to sandy clay in a dry to moist and loose to stiff condition. The colluvium ranged from 3 to 8 feet in thickness.

- Santiago Formation (Map Symbol Tsa)

Sedimentary bedrock materials which appear to be related to the Tertiary-aged Santiago Formation were encountered across the site below the surficial units and were observed to non-conformably overlie the Santiago Peak Volcanics. These materials ranged from 3 to 23 feet in thickness. As encountered, these materials can generally be described as gray to greenish gray to light brown, soft to hard, clayey sandstone and claystone.

- Santiago Peak Volcanics (Map Symbol Jsp)

Santiago Peak Volcanics were encountered at depth in many of the test pits across the site and are anticipated to underlie the remaining portions of the site beneath the Santiago Formation. The Santiago Peak Volcanics are generally comprised of meta volcaniclastic and metasedimentary bedrock. As encountered, these materials are completely to slightly weathered and moderately hard to very hard, generally reducing to 8-inch minus rock fragments in the highly weathered zones and 12-inch minus in the moderately weathered zones. Some rock fragments greater than 12-inches were encountered. A residual soil horizon on the order of two (2) feet thick locally mantled the intact bedrock in several test pits. Jointing observed within the unit typically ranged from tight to blocky and widened with depth. The excavator encountered refusal in the Santiago Peak Volcanics at depths between 6.5 feet and 19 feet during the due diligence investigation.

Paleontological Resource Context

The Project site contains two geologic units, Santiago Peak Volcanics and Quaternary young alluvial deposits. Section 5 of the County’s guidelines for paleontology, igneous rocks, which, by definition, include volcanic rocks, are indicated as having “no potential” for significant fossils. Quaternary (Holocene and late Pleistocene-aged) young alluvial deposits have been assigned a “Low” paleontological sensitivity by the County of San Diego (Stephenson et al. 2009).

Definitions of the sensitivity ratings related to the Project site are below.

- No Sensitivity – This designation is assigned to geologic formations that are composed entirely of volcanic or plutonic igneous rocks formed from molten material, such as basalt or granite, and therefore do not have any potential for producing fossil remains.
- Low Sensitivity – Low resource sensitivity is assigned to geologic formations that, based on their relatively young age and/or high-energy depositional history, are judged unlikely to produce unique fossil remains (although important paleontological resources have occurred infrequently in local low sensitivity deposits). When fossils are found in these formations, however, they are often very significant additions to the geologic understanding of the area.

Groundwater

Groundwater was not encountered in exploratory excavations. No natural groundwater condition is known to exist at the site that would impact the proposed site development. Intermittent surface water within the onsite drainages is anticipated during heavy and/or prolonged rain events. It should be noted that localized perched groundwater may develop at a later date, most likely at or near fill/bedrock contacts, due to fluctuations in precipitation, irrigation practices, or factors not evident at the time of the field explorations conducted for the Project.

3.5.1.3 Geologic Hazards

Landslides

No landslides have been mapped at the site. No topographic features were observed at the site that would indicate existing landslides. In addition, given the hard, relatively massive nature of the metavolcanic rock, the potential for land sliding is considered very low.

Flooding

According to available Federal Emergency Management Agency (FEMA) maps, the Project site is not in a FEMA identified flood hazard area.

Subsidence/Ground Fissuring

Due to the presence of the hard underlying metavolcanic rock, the potential for subsidence and ground fissuring due to settlement is very low.

3.5.1.4 Seismic Hazards

The site is located in the tectonically active Southern California area and will therefore 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. The seismic hazard may be primary, such as surface rupture and/or ground shaking, or secondary, such as liquefaction or dynamic settlement. The following is a site-specific discussion of ground motion parameters, earthquake induced landslide hazards, settlement, and liquefaction. The purpose of this analysis is to identify potential seismic hazards present at the Project site.

Surface Fault Rupture

No faults have been mapped within the Project site. The nearest known active fault to the site is the Newport-Inglewood-Rose Canyon fault zone which is approximately 9 miles west of the Project site. Accordingly, the potential for fault surface rupture on the subject site is very low. This conclusion is based on literature review and aerial photographic analysis.

Seismicity

As noted, the site is within the tectonically active southern California area and is approximately 9 miles from the Newport-Inglewood-Rose Canyon fault zone. The potential exists for strong ground motion that may affect future improvements.

Liquefaction

Due to the hard metavolcanic rock that underlies the site, and given the lack of shallow groundwater at the site, the potential for liquefaction at the site is very low.

Dynamic Settlement

Dynamic settlement occurs in response to an earthquake event in loose sandy earth materials. Given the fact that hard metavolcanic rock underlies the site, the potential for dynamic settlement is considered to be remote.

Seismically Induced Land sliding

Evidence of land sliding at the site was not observed during the site-specific field explorations, nor were any geomorphic features indicative of landslides noted during review of aerial photos and

published geologic maps. metavolcanic rock at the site is not usually susceptible to seismically induced land sliding. Therefore, the potential for landslides to impact the Project site is low.

3.5.1.5 Regulatory Setting

Development of the Project is subject to a number of regulatory requirements and industry standards related to potential geologic hazards. These requirements and standards typically involve measures to evaluate risk and mitigate potential hazards through design and construction techniques. Specific guidelines encompassing geologic criteria that may be applicable to the design and construction of the Project include: (1) the San Diego County General Plan Safety Element (2011a); (2) the County Guidelines for Determining Significance – Geologic Hazards (County of San Diego, 2007d); (3) Title 8, Division 4 (Design Standards and Performance Requirements) and Division 7 (Excavation and Grading), and Title 5, Division 1 (Amendments to the State Building Standards Code) of the County Code of Regulatory Ordinances; and (4) the International Code Council, Inc. (ICC) IBC (2021 or most recent update), and the related CBC (California Code of Regulations, Title 24, Part 2, Volumes 1 and 2, 2022 or most recent update). Regulatory requirements related to potential erosion and sedimentation effects (e.g., under the NPDES Construction General Permit) are discussed in Section 3.7, *Hydrology/Water Quality*, of this EIR, due to their relationship to water quality issues. Summary descriptions of the listed geologic standards are provided below.

Local

The San Diego County General Plan Safety Element is intended to identify and evaluate seismic hazards in the County, and to provide policies to reduce the loss of life and property damage related to seismic hazards. Associated policies in the Safety Element applicable to the Project include requirements to minimize risk resulting from seismic hazards and to minimize personal injury and property damage by mudslides, landslides, or rockfalls. The Safety Element requires conformance with applicable laws and standards such as the referenced County Guidelines for Determining Significance – Geologic Hazards, the Alquist-Priolo Act (for Fault Rupture Hazard Zones), the CBC/IBC, and the Greenbook.

The County Guidelines for Determining Significance – Geologic Hazards provide direction for evaluating environmental effects related to geologic hazards. Specifically, these guidelines address potential adverse effects to life and property (pursuant to applicable CEQA standards) from hazards including fault rupture, ground shaking, liquefaction, landslides, rockfalls, and expansive soils. Significance guidelines are identified for the noted issues, as well as related regulatory standards, impact analysis methodologies, potential attenuation/design strategies, and reporting requirements.

The County Excavation and Grading requirements are implemented through issuance of grading permits, which apply to most projects involving more than 200 cubic yards of material movement (e.g., grading and excavation). Specific requirements for such “Major Grading” efforts include, among other criteria, use of qualified engineering and geotechnical consultants to design and implement grading plans, implementation of appropriate measures related to issues such as manufactured slope design and

construction, and conformance with requirements related to issues including erosion and storm water controls.

County Building Code standards related to geotechnical concerns include applicable portions of the CBC and IBC, along with specific County amendments. The County Building Code is implemented through the issuance of building permits, which may encompass requirements related to preparation of soils reports and implementation of structural loading and drainage criteria.

Industry Standards

The IBC (which encompasses the former Uniform Building Code [UBC]) is produced by the ICC (formerly the International Conference of Building Officials) to provide standard specifications for engineering and construction activities. Publication of the Greenbook, the Standard Plans for Public Works Construction, is under the oversight of Public Works Standards, Inc. (PWSI), a nonprofit mutual benefit corporation whose members include the American Public Works Association, Associated General Contractors of California, and Engineering Contractors Association. The IBC and Greenbook provide standard specifications for engineering and construction activities, including measures to address geologic and soil concerns. Specifically, these measures encompass issues such as seismic loading (e.g., classifying seismic zones and faults), ground motion, engineered fill specifications (e.g., compaction and moisture content), expansive soil characteristics, and pavement design. The referenced guidelines, while not comprising formal regulatory requirements per se, are widely accepted by regulatory authorities and are routinely included in related standards such as municipal grading codes. The IBC and Greenbook guidelines are regularly updated to reflect current industry standards and practices, including criteria such as the American Society of Civil Engineers (ASCE) and ASTM International.

The CBC standards encompass a number of requirements related to geologic issues. Specifically, these include general provisions (Chapter 1); structural design, including soil and seismic loading (Chapters 16/16A); structural tests and special inspections, including seismic resistance (Chapters 17/17A); soils and foundations (Chapters 18/18A); concrete (Chapters 19/19A); masonry (Chapters 21/21A); steel (Chapters 22/22A), wood, including consideration of seismic design categories (Chapter 23); construction safeguards (Chapter 33); and grading, including excavation, fill, drainage, and erosion control criteria (Appendix J of the CBC). The CBC encompasses standards from other applicable sources, including the IBC and ASTM International, with appropriate amendments and modifications to reflect site-specific conditions and requirements in California.

3.5.2 Analysis of Project Effects and Determinations as to Significance

Guideline for the Determination of Significance

The Project would result in a significant impact to geology and soils if it would:

- Propose any building or structure to be used for human occupancy to be within 50 feet of the trace of an Alquist-Priolo fault or County Special Study Zone fault.

- Propose the following uses within an Alquist-Priolo Zone, which are prohibited by the County:
 - Uses containing structures with a capacity of 300 people or more. Any use having the capacity to serve, house, entertain, or otherwise accommodate 300 or more persons at any one time.
 - Uses with the potential to severely damage the environment or cause major loss of life. Any use having the potential to severely damage the environment or cause major loss of life if destroyed, such as dams, reservoirs, petroleum storage facilities, and electrical power plants powered by nuclear reactors.
 - Specific civic uses. Police and fire stations, schools, hospitals, rest homes, nursing homes, and emergency communication facilities.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Geologic Hazards (County of San Diego, 2007d).

Analysis

Seismic fault (or ground) rupture is the physical surface or near surface displacement resulting from earthquake-induced movement (typically along a fault structure). No known active or potentially active faults, or associated Alquist-Priolo/County Special Study Zones, are mapped or known to occur within or adjacent to the Project site. The nearest known active fault to the Project site is the Newport-Inglewood-Rose Canyon fault zone which is approximately nine miles west of the Project site. Accordingly, Project-related impacts associated with seismic ground rupture or the placement of prohibited uses within an Alquist-Priolo Earthquake Fault Zone or County Special Study Zone would be less than significant.

3.5.2.1 Ground Shaking

Guideline for the Determination of Significance

A significant geology and soils impact would occur if the Project would do the following:

- Be located within a County Near-Source Shaking Zone or within Seismic Zone 4 and the Project does not conform to the UBC.

Guidelines Source

This guideline is based on the County Guidelines for Determining Significance – Geologic Hazards (County of San Diego, 2007d).

Analysis

The Project site is not located within any areas identified as a County Near-Source Shaking Zone, which are predominately located along the Elsinore and San Jacinto fault zones in the eastern portions of the County, approximately 25 miles east of the Project site. The entire San Diego County geographic region, including the Project site, is within Seismic Zone 4 and is subject to ground shaking. Construction in conformance to the UBC (which was replaced by the International Building Code, most recently updated in 2021) and compliance with the additional site-specific requirements described in the Project's Geotechnical Report (Appendices F1 and F2), and summarized in Table 3.5-1, *Seismic Design Criteria*, would result in less than significant impacts due to ground shaking. Compliance with the site-specific requirements in the Project's Geotechnical Reports (Appendices F1 and F2) are required as a standard County condition of approval.

3.5.2.2 Liquefaction

Guideline for the Determination of Significance

A significant geology and soils impact would occur if the Project would do the following:

- Have the potential to expose people or structures to substantial adverse effects because:
 - The Project site has potentially liquefiable soils; and
 - the potentially liquefiable soils are saturated or have the potential to become saturated; and
 - in-situ soil densities are not sufficiently high to preclude liquefaction.

Guideline Source

The guideline is based on the County Guidelines for Determining Significance – Geologic Hazards (County of San Diego, 2007d).

Analysis

Liquefaction and related effects such as dynamic settlement can be caused by strong vibratory motion and are most commonly associated with seismic ground shaking. Loose (cohesionless), saturated, and granular (low clay/silt content) soils with relative densities of less than approximately 70 percent are the most susceptible to these effects. Liquefaction results in a rapid pore-water pressure increase and a corresponding loss of shear strength, with affected soils behaving as a viscous liquid. Surface and near-surface manifestations from these events can include loss of support for structures/foundations, excessive (dynamic) settlement, the occurrence of sand boils (i.e., sand and water ejected at the surface), and other related effects such as lateral spreading (horizontal displacement on sloped surfaces as a result of underlying liquefaction).

The Project site is not located within or adjacent to a County Potential Liquefaction Area (County of San Diego, 2007d). Liquefaction potential for the site is characterized as low due to the high density

and grain-size distribution of local fill and formational materials, as well as the absence of a permanent water table in most development areas. Implementation of standard engineering and construction practices would avoid or reduce potential Project-related impacts associated with seismically induced liquefaction and related hazards to less than significant levels.

3.5.2.3 Landslides

Guidelines for the Determination of Significance

A significant geology and soils impact would occur if the Project would do the following:

- Expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving landslides.
- Be located on a geologic unit or soil that is unstable or would become unstable as a result of the Project, potentially resulting in an on- or off-site landslide.
- Be located directly below or on a known area subject to rock fall that could result in collapse of structures.

Guidelines Source

These guidelines are based on the County Guidelines for Determining the Significance – Geologic Hazards (County of San Diego, 2007d).

Analysis

The Project site is not located within or adjacent to any County Landslide Susceptibility Areas (County of San Diego, 2007d), and as stated in the Project geotechnical report (*Appendix F1*), evidence of land sliding was not observed during field exploration, nor were any geomorphic features indicative of landslides noted during review of aerial photos and published geologic maps. Metavolcanic rock at the site is not usually susceptible to seismically induced land sliding. Therefore, the potential for landslides to impact the proposed development is low and not reasonably foreseeable.

Additionally, geotechnical investigations conducted on the Project site included a stability analysis for manufactured fill slopes, which concludes that the highest proposed cut slope is approximately 80 feet high, designed at a slope ratio of 2:1 (horizontal: vertical). Slope stability analyses for proposed cut slopes are presented in Appendix D of *Appendix F1*. Surficial Stability calculations for the 2:1 cut slopes are presented in Appendix D of *Appendix F1*. Based upon this analysis, AGS determined that proposed cut slopes graded at slope ratios of 2:1 in Santiago Peak Volcanics would be grossly stable as designed.

A number of additional design and construction measures related to cut and fill slope stability are also identified in the geotechnical report (*Appendix F1*), including standard requirements for proper compaction and surface treatment of fill slopes, height limitations, over-excavation or -blasting for cut slopes in granitic rock (to reach unweathered and stable rock exposures), field observation and

design/construction modification where applicable, and use of drought-tolerant landscaping and irrigation controls. Implementation of standard engineering and construction practices, as well as conformance with County guidelines and other applicable regulatory/industry standards, would avoid or reduce potential Project-related impacts associated with landslides and slope stability to less than significant levels.

3.5.2.4 Expansive Soils

Guideline for the Determination of Significance

A significant geology and soils impact would occur if the Project would do the following:

- Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994) and does not conform with the UBC.

Guidelines Source

This guideline is based on the County Guidelines for Determining the Significance – Geologic Hazards (County of San Diego, 2007d).

Analysis

Expansive (or shrink-swell) behavior in soils is attributable to the water-holding capacity of clay minerals and can adversely affect the integrity of facilities such as foundations, pavement, and underground utilities. As part of the Project’s geotechnical investigation, representative bulk samples of near surface soils were collected and tested to evaluate their potential for expansion. Testing was performed in general accordance with ASTM D 4829. Test results by AGS indicate that the soils tested possess an expansion index (EI) within the range of 3 to 187, which corresponds to a “Very Low” to “Very High” expansion potential. As required by the 2021 IBC Section 1803.6, post-grading testing of soils is required to be conducted to define as-graded expansive soil characteristics. The results of those tests and the final as-graded conditions will govern design of building foundations and street pavement sections, overseen by a licensed geotechnical engineer.

Accordingly, a number of standard measures are required to address the potential for soil expansion. Specifically, expansive soils encountered during grading would be removed and replaced with engineered fill exhibiting very low or low expansion potential (per IBC/CBC or other applicable regulatory/industry criteria). In addition, appropriate foundation design is required, including post-tensioned slabs and reinforcement and footing depths as detailed in Appendix I of *Appendix F1*. During grading and construction, the geotechnical engineer would direct the implementation of appropriate concrete placement methodology and design, including proper installation/curing and moisture conditioning, doweling (anchoring) of exterior flatwork and driveways to building foundations, and use of crack-control joints. Also, subdrains will be installed in appropriate areas also directed by the geotechnical engineer to avoid near-surface saturation. All requirements to ensure that soil expansion potential is properly attenuated would be verified through plan review and site-specific geotechnical

observations and testing during Project excavation, grading, and construction activities. Implementation of such design and construction characteristics, as well as conformance with applicable County, IBC/CBC, Greenbook or other pertinent guidelines, would avoid or reduce impacts from expansive soils to a less than significant level.

3.5.2.5 Paleontological Resources

Guideline for the Determination of Significance

For the purposes of this EIR, a significant impact to paleontological resources would occur if the Project would:

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or
- Include activities, such as project-related grading or excavation, that disturbs the substratum or parent material below the major soil horizons in any paleontologically sensitive area of the County, as shown on the San Diego County Paleontological Resources Potential and Sensitivity Map.

Guideline Source

This guideline is based on the County’s Guidelines for Determining Significance– Paleontological Resources (County 2009c). Per County Guidelines, a unique paleontological resource is any fossil or assemblage of fossils, or paleontological resource site or formation that meets any one of the following criteria:

- The best example of its kind locally or regionally;
- Illustrates a paleontological or evolutionary principle (e.g., faunal succession; plant or animal relationships);
- Provides a critical piece of paleobiological data (illustrates a portion of geologic history or provides evolutionary, paleoclimatic, paleoecological, paleoenvironmental or biochronological data);
- Encompasses any part of a “type locality” of a fossil or formation;
- Contains a unique or particularly unusual assemblage of fossils;
- Occupies a unique position stratigraphically within a formation; or
- Occupies a unique position, proximally, distally, or laterally within a formation’s extent or distribution.

Analysis

Grading associated with the Project’s construction would result in physical disturbance to 31.35 acres of the Project site and an additional 1.0 acre of off-site disturbance would occur to implement Project-related infrastructure, outside of the Project site boundary. In the areas that would be physically

disturbed by the Project's grading, approximately 167,100 cubic yards (c.y.) of cut and fill would occur, with no net import or export of earthwork materials. Also, as part of the Project's grading operation, blasting would be required in several areas of the Project site consisting of shallow blasting (<30 feet below existing grade) and moderate depth blasting (30–40 feet below existing grade).

Grading and blasting activities associated with the Project's construction would encounter the on-site surficial and geologic units, which are younger Santiago Peak Volcanics and Quaternary (Holocene and late Pleistocene-aged) young alluvial deposits. There is no potential for discovery of fossils in Santiago Peak Volcanics. There is a low potential for discovery of fossils in the Quaternary young alluvial deposits. based on the described "low" sensitivity rating for Quaternary alluvial deposits, implementation of the Project could potentially result in impacts to paleontological resources from grading and blasting activities in previously undisturbed deposits. However, with conformance with the San Diego Grading Ordinance Section 87.430, Project impacts would be reduced to less than significant levels.

3.5.3 Cumulative Impact Analysis

As noted above, all potential Project-specific geotechnical impacts would be avoided or reduced below identified significance guidelines through implementation of geotechnical recommendations and conformance with established regulatory requirements as part of the Project design and/or construction efforts. Most potential geologic and soils effects are site specific (inherently restricted to the areas proposed for development) and would not contribute to cumulative impacts associated with other planned or proposed development. That is, issues including seismic ground acceleration and liquefaction, as well as landslide/slope stability, expansive soils and construction-related hazards would involve effects to (and not from) the proposed development and/or are specific to on-site conditions.

Addressing these potential hazards for the proposed development would involve using standard geotechnical measures to comply with regulatory requirements, and/or implementing site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Based on the described nature of potential geologic hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. Accordingly, the Project's contribution to potential cumulative geologic hazard impacts would be less than considerable and therefore less than significant.

The Quaternary young alluvial deposits that underlie a portion of the Project site and have a low potential for containing paleontological resources also are present in many other areas of the San Diego region, as are other deposits with low, marginal, moderate, high potential to contain fossils. Development across San Diego County and the cities therein has disturbed fossil bearing geologic units and the fossils that they contain. Development has also, however, led to the discovery of many fossil sites that have been documented and which have added to the natural history record of the region. As described above, the Project's construction activities in Quaternary young alluvial deposits have the potential to significantly impact paleontological resources if such resources are encountered during grading, but would be mitigated through conformance with applicable regulatory requirements that are

part of the Section 87.430 of the County's Grading Ordinance, which requires that if fossils greater than 12 inches in any dimension are encountered, then all grading operations in the area of discovery must be suspended immediately and not resumed until authorized by the County official. The County official must determine the appropriate resource recovery operation, which the permittee must carry out prior to the County official's authorization to resume normal grading operations. Other development projects in the San Diego region would be subject to similar requirements for paleontological resources, pursuant to CEQA and County requirements. Regardless, the Project's potential impact is considered cumulatively considerable when considered in context with the potential impacts to paleontological resources that could occur from other development projects in the region.

3.5.4 Significance of Impacts

Based on the analysis provided above, the Project would have less-than-significant impacts related to geologic and soils hazards as well as paleontological resources. Accordingly, no additional attenuation measures are required or proposed.

3.5.5 Conclusion

Based on the analysis provided above, no significant Project-specific or cumulative impacts related to geology, soils, and paleontological resources would result from implementation of the Project.

Table 3.5-1 Seismic Design Criteria

Seismic Design Criteria	
Mapped Spectral Acceleration (0.2 sec Period), S_s	1.002g
Mapped Spectral Acceleration (1.0 sec Period), S_1	0.391g
Site Coefficient, F_a (CBC, 2013, Table 1613.3.3(1))	1.099
Site Coefficient, F_v (CBC, 2013, Table 1613.3.3(2))	1.618
MCE_R Spectral Response Acceleration (0.2 sec Period), S_{MS}	1.102g
MCE_R Spectral Response Acceleration (1.0 sec Period), S_{M1}	0.632g
Design Spectral Response Acceleration (0.2 sec Period), S_{DS}	0.734g
Design Spectral Response Acceleration (1.0 sec Period), S_{D1}	0.426g

(AGS, 2016)

3.6 Hazards and Hazardous Materials

This section describes the existing hazards and hazardous materials conditions within the Project site and vicinity, identifies regulatory requirements associated with hazards and hazardous materials issues, and evaluates potential impacts related to implementation of the Project. The analysis presented herein pertaining to hazardous materials is based on a Phase I Environmental Site Assessment (ESA) authored by CY Associates dated June 9, 2020, and included as *Appendix H* to this EIR. The analysis herein pertaining to the wildfire hazard is based on a Fire Protection Plan (FPP), authored by Dudek, dated February 2022, included as *Appendix MI* to this EIR. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Four comment letters related to hazards and hazardous materials were received. Camille Perkins (received October 3, 2022) expressed concern regarding Project impacts on downstream parcels historically used for mining activities. Jerry Block (received September 27, 2022) noted the Project adjacency to power lines and a dump site. Ed Philbrick (received September 27, 2022) stated that the Project site is impacted by the adjacent dump site and environmental concerns. Rebecca Barker (received September 7, 2022) requested the Project use building electrification in order to reduce impacts to public health.

3.6.1 Existing Conditions

3.6.1.1 Hazardous Materials

The ESA encompassed the entire Project site. The primary objective of the ESA was to identify “recognized environmental conditions,” which are defined by the American Society for Testing Materials (ASTM) Standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment, or; 3) under conditions that pose a material threat of a future release to the environment.” The term “recognized environmental condition” includes hazardous substances or petroleum products even under conditions in compliance with laws. In addition, the term also includes historical recognized environmental conditions and controlled recognized environmental conditions.

Specifically, the ESA involved the following components: site reconnaissance, review of the Project site and vicinity physical setting, review of the Project site and vicinity history, and records review. The nature and results of these efforts are outlined below.

3.6.1.2 Site Reconnaissance

The Project site reconnaissance consisted of inspecting the Project site and walking accessible trails and unimproved roads on-site, as well as surrounding roads and pedestrian walkways. Full access to the Project site was provided. However, much of the surface area of the Project site was not visible due to the presence of dense vegetation. This limiting condition is not considered to be significant relative to the Project’s ESA consultant’s ability to render conclusions and recommendations regarding the Project site. Photographs of the Project site were taken to document existing site conditions and several are included and described in Appendix C of the ESA.

The Project site is vacant and undeveloped land consisting of some relatively level areas and also moderate to steep, vegetated hillside terrain. A fenced habitat conservation area is present in the northwestern portion of the Project site.

3.6.1.3 Site and Vicinity Physical Setting

The Project site and its adjacent/nearby properties are situated within the County and near an area of the City of San Marcos consisting primarily of public roadways, open space, and residential properties. A commercial building (former recycling facility) is present on the adjacent property to the east (1601 San Elijo Road) and the former San Marcos Landfill is located beyond the recycling facility.

3.6.1.4 Site and Vicinity History

The ESA assessment of historical uses at the Project site and adjacent/nearby properties was based on a review of historic aerial photographs and topographic maps, as well as an interview with a property owner representative, and an evaluation of previous environmental documents. A summary of this information is provided below.

3.6.1.5 Historic Aerial Photo/Topographic Map Review

CYA reviewed several historical sources to develop a history of the previous uses of the Project site, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the Project site.

Historical aerial photographs from the years 1947, 1953, 1964, 1967, 1980, 1981, 1989, 1990, 1994, 1996, 1999, 2002, 2003, 2005, 2009, 2010, 2012, 2014, and 2016 were reviewed and topographic maps from the years 1893, 1897, 1901, 1907, 1913, 1929, 1937, 1946, 1949, 1955, 1961, 1970, 1979, 1983, 2001, 2012, 2015, and 2018 were located online. In all of the aerial photographs reviewed, San Elijo Road is depicted to the north of the Project site. In the aerial photographs from 1947 to the 1989, the Project site appears to be vacant and undeveloped land with several trails traversing the property. In aerial photographs from 1980 to 2005, what appears to be soil disturbance and staging for construction is visible in the northeastern portion of the Project site. The nature of these activities is unknown but is anticipated to be associated with the construction of the current improvements at the adjacent 1601 San Elijo Road property. A few structures and agricultural activity appear on the APN 223-070-08-00 portion of the Project site in the aerial photographs from 1990 to the 2005. In the aerial photographs from 2009 to the 2016, the Project site appears in its current configuration. On the topographic maps from 1893 to 2018, the Project site appears to be vacant and undeveloped land with San Elijo Road depicted to the north of the Project site. No significant environmental concerns in connection with the Project site were noted during CYA's review of the historic aerial photographs and topographic maps.

The ESA also included review of several historical sources (as described in the following sections) to develop a history of the previous uses of adjoining properties and the surrounding area, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the Project site.

In the 1947 to 1967 aerial photographs, the surrounding properties appear to be vacant and undeveloped. The former San Marcos Landfill is visible to the east in photographs from 1980 to 2016. Improvements at 1601 San Elijo Road are visible in photographs from 1994 to 2016. In the 2009 to 2016 aerial photographs, other adjacent properties are depicted similar to their current configurations. The adjacent and surrounding properties appear to be predominately vacant and undeveloped on the topographic maps from 1893 to 1983. Streams/waterways are mapped in the area. On the 2001 topographic map, the structure at 1601 San Elijo Road and the San Marcos Landfill are depicted to the east. No significant environmental concerns to the Project site relative to adjacent and nearby properties were noted during the historical aerial photograph and topographic map review.

3.6.1.6 Records Review

Federal and State environmental databases provided by Environmental Risk Information Services (ERIS) were reviewed for information pertaining to documented and/or suspected releases of regulated hazardous substances and/or petroleum products within specified search distances. A copy of the ERIS report is included in Appendix D of the ESA.

A review of unmappable sites listed in the environmental database report was conducted by cross-referencing addresses and site names. Unmappable sites are sites that cannot be plotted with confidence but can be located by zip code or city name. In general, a site cannot be mapped because of inaccurate or missing location information in the record provided by the regulatory agency. Any unmappable sites identified within the specified search radii were evaluated as part of the preparation of the ESA.

3.6.1.7 Regulatory Database Listings

The Project site is not listed on Federal and State/local regulatory databases. In addition, no records pertaining to hazardous substances and/or petroleum products in connection with the Project site were found during public records requests completed with various regulatory entities. Several properties in the near and general site vicinity appear on regulatory databases but are not considered to be significant environmental concerns to the Project site. This opinion is based on several factors including the type and nature of the facility listings, regulatory case status, distance of the off-site-listed properties from the Project site, orientation of the listed properties relative to the Project site, and interpreted direction of groundwater flow.

3.6.2 Airport Hazards

The closest airport facilities to the Project site are the McClellan-Palomar Airport, located approximately 4.75 miles to the northwest, and the Oceanside Municipal Airport located approximately 12 miles to the northwest. Based on these distances, the Project site is not located within the Airport Influence Areas of any local airport or airstrip facilities.

3.6.3 Wildland Fire Hazards

The Project lies within an area statutorily designated a State Responsibility Area (SRA) “Very High Fire Hazard Severity Zone (VHFHSZ). Additionally, the Project site is within a Wildland Urban Interface (WUI), as mapped by CALFIRE (2023).

The Project's topography in its current condition is characterized by a large area of steep hills in the southwest that transition into a relatively flat area in the northern and central portions of the Project site, with terrain sloping up and away from the Project. Areas outside this Project site include similar terrain. The Project site is bordered by the Rancho La Costa Reserve to the west and south. Additionally, a portion of Copper Creek crosses the southeast corner of the Project site.

The vicinity of the Project site includes both developed areas, to the north, northeast, east, and west, and open space areas to the north, south and east. The Project site is undeveloped and is composed of a variety of vegetation types that were mapped by Alden Environmental (Alden, 2023). As shown in Table 2 of the FPP, the Project site's vegetative fuels are primarily Diegan coastal sage scrub/chaparral ecotone, non-native grassland, Diegan coastal sage scrub, and chamise chaparral, although smaller pockets of native grassland, riparian scrub, eucalyptus woodland, and southern mixed chaparral vegetation types are present. This vegetation is adapted to periodic wildfire events. Fire history data indicates that the vegetation last burned in 1996, over the entirety of the Project site. Small areas of disturbed habitat and urban/developed land cover types are also present within the Project site.

Based on fire history data for the vicinity, fire return intervals range between 0 and 27 years, indicating the wildfire potential in the region and the potential for the Project area to be subject to occasional wildfire encroachment, most likely from the large expanses of open space to the south and east.

3.6.4 Regulatory Setting

Hazardous Materials Resource Conservation and Recovery Act of 1976

Federal hazardous waste laws are largely promulgated under the Resource Conservation and Recovery Act (RCRA) [40 Code of Federal Regulations (CFR), Part 260], as amended by the Hazardous and Solid Waste Amendments of 1984 (which are primarily intended to prevent releases from leaking underground storage tanks [LUSTs]). These laws provide for the "cradle to grave" regulation of hazardous wastes. Specifically, under RCRA any business, institution or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused or disposed of. The U.S. Environmental Protection Agency (EPA) has the primary responsibility for implementing RCRA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions (with California an authorized RCRA state as outlined below under State Standards).

Comprehensive Environmental Response, Compensation, and Liability Act

The 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Federal actions related to CERCLA are limited to sites on the National Priority List (NPL) for cleanup activities, with NPL listings based on the USEPA Hazard Ranking System (HRS). The HRS is a numerical ranking system used to screen potential sites based on criteria such as the likelihood and nature of hazardous material release, and the potential to affect people or environmental resources. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 as outlined below.

Superfund Amendments and Reauthorization Act

Superfund Amendments and Reauthorization Act (SARA) is intended primarily to address the emergency management of accidental releases, and to establish State and local emergency planning committees responsible for collecting hazardous material inventory, handling and transportation data. Specifically, under Title III of SARA, a nationwide emergency planning and response program established reporting requirements for businesses that store, handle or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. Title III of SARA also requires each state to implement a comprehensive system to inform federal authorities, local agencies and the public when significant quantities of hazardous or acutely toxic substances are stored or handled at a facility. These data are made available to the community at large under the “right-to-know” provision, with SARA also requiring annual reporting of continuous emissions and accidental releases of specified compounds.

Title 22 of the California Code of Regulations & Hazardous Waste Control Law, Chapter 6.5

The Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program as well as California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, California EPA has in turn delegated enforcement authority of State law to the County for regulating hazardous waste producers or generators. The DTSC regulates the generation, transportation, treatment, storage and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Like RCRA, Title 22 imposes “cradle to grave” regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other CUPAs, including the DEH.

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs) are concentration thresholds established by CalEPA for 54 hazardous chemicals in soil or soil gas of concern for risks to human health. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the Project site. There are separate CHHSLs for residential and commercial/industrial sites.

Waste Discharge Requirements

The Regional Water Quality Control Boards (RWQCBs) issue and/or enforce Waste Discharge Orders for numerous discharge categories pursuant to the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Section 13000, et seq.). For the Project, the on-site wastewater treatment plant is the only such discharge anticipated to be subject to RWQCB regulation (other than

storm water related requirements, as outlined in Section 3.7, *Hydrology and Water Quality*, of this EIR. Depending on the facility design and nature of associated discharge, the proposed treatment plant would likely be regulated under one or more existing orders of the San Diego RWQCB, or through a site-specific Waste Discharge Order. Specific requirements associated with such orders may include effluent testing and surface and/or groundwater monitoring to ensure conformance with applicable water quality standards.

Investigation and Cleanup of Contaminated Sites

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary State agencies responsible for issues pertaining to hazardous material release sites. Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, State and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. These regulations would be applied during grading activities if, for example, previously unknown underground tanks or other potential contaminant sources were uncovered.

County of San Diego General Plan

The County General Plan Safety Element includes a number of policies related to hazards/hazardous materials such as emergency services availability and access, storage and transfer of the hazardous materials, and assessment of potentially contaminated lands. These policies and the Project's compliance with them are addressed in Section 2.4, *Land Use and Planning*, of this EIR.

Wildfire

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the California Code of Regulations (CCR). It was created by the California Building Standards Commission and is based on the International Fire Code created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. Specifically, CBC Chapter 7 (Fire and Smoke Protection Features) includes standards related to building materials, systems and assembly methods to provide fire resistance and prevent the internal and external spreading of fire and smoke (such as the use of non-combustible materials and fire/ember/smoke barriers). CBC Chapter 9 (Fire Protection Systems) provides standards regarding when fire protection systems (such as alarms and automatic sprinklers) are required, as well as their design, installation and operation. Section R327 of the CRC includes measures to identify Fire Hazard

Severity Zones and assign agency responsibility (i.e., Federal, State and Local Responsibility Areas), and provides fire-related standards for building design, materials and treatments. The CFC establishes minimum standards to safeguard public health and safety from hazards including fire in new and existing structures. Specifically, this includes requirements related to fire hazards from building use/occupancy (e.g., access for fire-fighting equipment/personnel and provision of water supplies), the installation or alteration/removal of fire suppression or alarm systems, and the management of vegetative fuels and provision of defensible space. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years.

Division 12 (Fires and Fire Protection) of the California Health and Safety Code provides a number of standards related to fire protection methods, including requirements for management of vegetation comprising a potential fire hazard under Part 5, Chapters 1 through 3.

California Department of Forestry and Fire Protection (CalFire)

State Responsibility Areas System – Legislative mandates passed in 1981 (Senate Bill 81) and 1982 (Senate Bill 1916) required CalFire to develop and implement a system to rank fire hazards in California. Areas are rated as moderate, high or very high based primarily on the assessment of different fuel types. Non-federal lands outside cities that are covered wholly or in part by timber, brush, undergrowth or grass (for which the State has the primary financial responsibility of preventing and suppressing fires, per PRC Section 4125) are referred to as State Responsibility Areas (SRAs).

Rancho Santa Fe Fire Protection District (RSFFPD) Ordinance No. 2015-01, Vegetation Management

This ordinance addresses the accumulation of weeds, rubbish, and other materials on a private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public. Specifically, the presence of such weeds, rubbish, and other materials is identified as a public nuisance, which must be abated in accordance with applicable provisions of the ordinance.

RSFFPD Fire Code – Ordinance No. 2020-01, Fire Code

This ordinance adopts the 2020 CFC with certain amendments. Ordinance 2020-01 addresses fire-related requirements including building ignition resistance, fire apparatus access, water supply and fire flow, and blasting requirements, as well as requirements for building in wildland-urban interface areas. The RSFFPD is responsible for the enforcement of defensible space inspections within the District. Inspectors from RSFFPD are responsible for the initial review of landscape plans and ongoing inspection of properties to ensure an adequate defensible space has been created and maintained around structures. If violations of the program requirements are noted, inspectors provide a list of required corrective measures and provide a time frame to complete the task. If the violations still exist upon re-inspection, the local fire inspector will pursue enforcement through forced abatement procedures.

County of San Diego Consolidated Fire Code

Section 13869.7(a) of the California Health and Safety Code provides that a fire protection district organized pursuant to Division 12 of the Code may adopt building standards relating to fire safety that are more stringent than the building standard adopted by the State Fire Marshal and contained in the California Building Standards Code. The County of San Diego, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001. The County of San Diego 2023 Consolidated Fire Code (CoFC) contains the County and fire protection districts amendments to the CoFC. The purpose of consolidation of the County and local fire districts adoptive ordinances is to promote consistency in the interpretation and enforcement of the fire code for the protection of the public health and safety, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The CoFC provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the CoFC regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases.

County Required Fire Prevention in Project Design Standards

Following the October 2003 wildfires, the County incorporated a number of fire prevention strategies into the discretionary project review process for CEQA projects. One of the key changes was the requirement for most discretionary permits (e.g., subdivision and use permits) in WUI areas to prepare a FPP for review and approval. A FPP is a technical report that considers the topography, geology, combustible vegetation (fuel types), climatic conditions and fire history of a project location. The plan addresses the following items for compliance with applicable codes and regulations: (1) water supply; (2) primary and secondary access; (3) travel time to the nearest fire station; (4) structure setback from property lines; (5) ignition-resistant building features; (6) fire protection systems and equipment; (7) impacts to existing emergency services; (8) defensible space; and (9) vegetation management.

County of San Diego General Plan

The County General Plan Safety element, as well as the Elfin Forest and Harmony Grove Community Plan, include a number of policies related to fire relative to site defensibility (including structure requirements, fuel management, minimization of flammable vegetation, service availability and ensured emergency access, etc. The Project's compliance with these policies is addressed in Section 3.8 of this EIR.

Overall Emergency Response and Evacuation

Emergency response plans are maintained at the federal, state, and local level for all types of disasters, including human-made and natural disasters. Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization, and application of resources, mutual aid, and public information. The Unified San Diego County Emergency Services Organization has the primary responsibility for preparedness and response

activities, and addresses disasters and emergency situations within the unincorporated area of San Diego County. The County of San Diego Office of Emergency Services (OES) serves as staff to the Unified Disaster Council (UDC), the governing body of the Unified San Diego County Emergency Services Organization.

Emergency response and preparedness plans include the Operational Area Emergency Response Plan and the San Diego County Multi-Jurisdictional Hazard Mitigation Plan. Both of these plans develop goals and objectives for OES in regard to large-scale natural or man-made disasters.

The Operational Area Emergency Plan provides guidance for emergency planning and requires subsequent plans to be established by each jurisdiction that has responsibilities in a disaster situation. The Multi-Jurisdictional Hazard Mitigation Plan provides the framework for emergency response throughout the County, including at the Project site. It includes an overview of the risk assessment process, identifies hazards present in the jurisdiction, hazard profiles, and vulnerability assessments. The plan also identifies goals, objectives, and actions for each jurisdiction in the County of San Diego, including all cities and the County unincorporated areas. Hazards specifically relevant to the Project that are profiled in the plan include hazardous materials, structure fire and wildfires, each of which is addressed below.

3.6.5 Analysis of Project Effects and Determinations as to Significance

The following significance guidelines are based on the Guidelines for Determining Significance for Hazardous Materials approved by PDS on July 30, 2007. A significant hazards or hazardous materials impact would occur if the Project:

- Is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the California Health and Safety Code (H&SC), generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC, and the Project will not be able to comply with applicable hazardous substance regulations.
- Is a business, operation, or facility that would handle regulated substances subject to CalARP Risk Management Plan requirements that, in the event of a release, could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.
- Is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5 or is otherwise known to have been the subject of a release of hazardous substances, and, as a result the Project, may result in a significant hazard to the public or the environment.
- Proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and, as a result, the Project would create a significant hazard to the public or the environment.

- Is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash) and, as a result, the Project would create a significant hazard to the public or the environment.
- Is proposed on or within 1,000 feet of a Formerly Used Defense site (FUDS) and it has been determined that it is probable that munitions or other hazards are located on-site that could represent a significant hazard to the public or the environment.
- Could result in human or environmental exposure to soils or groundwater that exceed USEPA Region 9 Preliminary Remediation Goals (PRG), CalEPA CHHSL, or Primary State or Federal Maximum Contaminant Levels (MCL) for applicable contaminants, and the exposure would represent a hazard to the public or the environment.
- Will involve the demolition of commercial, industrial, or residential structures that may contain asbestos, lead-based paints, and/or other hazardous materials and, as a result, the Project would represent a significant hazard to the public or the environment.
- Is located within 2 miles of a public or public use airport or within 1 mile of a private airport and proposes residential densities inconsistent with the *California Airport Land Use Planning Handbook's* Safety Compatibility Criteria Guidelines for Maximum Residential Density and, as a result, the Project may result in a significant airport hazard.
- Proposes one of the following unique institutions in a dam inundation zone as identified on the inundation map prepared by the dam owner: hospital, school, skilled nursing facility, retirement home, mental health care facility, care facility with patients that have disabilities, adult and childcare facility, jails/detention facility, stadium, arena, amphitheater, any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure.
- Proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and, as a result, the Project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.
- The Project cannot demonstrate compliance with all applicable fire codes.
- A comprehensive FPP has been accepted and the Project is inconsistent with its recommendations.
- The Project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives.
- The Project proposes a BMP for storm water management or construction of a wetland, pond, or other wet basin that could create sources of standing water for more than 72 hours, and, as a result, could substantially increase human exposure to vectors, such as mosquitoes, that are capable of transmitting significant public health diseases or creating nuisances.
- The Project proposes a use that involves the production, use, and/or storage of manure or proposes a composting operation or facility and, as a result, could substantially increase human exposure to vectors that are capable of transmitting significant public health diseases or creating nuisances.

- The Project would result in a substantial increase in the number of residents located within one-quarter mile of a significant off-site vector breeding source, including, but not limited to, standing water (e.g., agricultural ponds, reservoirs) and sources of manure generation or management activities.

3.6.5.1 Hazardous Substances Handling

Guidelines for the Determination of Significance

A significant hazards or hazardous materials impact would occur due if the Project:

- Is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC, and the Project will not be able to comply with applicable hazardous substance regulations.
- Is a business, operation, or facility that would handle regulated substances subject to CalARP Risk Management Plan requirements that, in the event of a release, could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.

Analysis

The Project does not propose any business, operation, or facility that would handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC or generate hazardous waste regulated under Chapter 6.5 of the H&SC. Both thresholds are therefore not applicable to the Project. Any household hazardous materials that may result from residential development would be subject to federal, state, and local regulations. Furthermore, there are not any schools or day cares located within one quarter mile of the Project site. Thus, implementation of the Project would not create a significant hazard to the public or the environment from on-site hazardous substance handling and impacts of the Project are less than significant.

3.6.5.2 Projects with On-site Contamination

Guidelines for the Determination of Significance

A significant hazards or hazardous materials impact would occur if the Project:

- Is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5 or is otherwise known to have been the subject of a release of hazardous substances, and, as a result the Project, may result in a significant hazard to the public or the environment.
- Proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and, as a result, the Project would create a significant hazard to the public or the environment.

- Is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash) and, as a result, the Project would create a significant hazard to the public or the environment.
- Is proposed on or within 1,000 feet of a FUDS and it has been determined that it is probable that munitions or other hazards are located on-site that could represent a significant hazard to the public or the environment.
- Could result in human or environmental exposure to soils or groundwater that exceed USEPA Region 9 PRG, CalEPA CHHSL, or Primary State or Federal MCL for applicable contaminants, and the exposure would represent a hazard to the public or the environment.
- Will involve the demolition of commercial, industrial, or residential structures that may contain asbestos, lead-based paints, and/or other hazardous materials and, as a result, the Project would represent a significant hazard to the public or the environment.

Analysis

As described under Section 3.6.1, an ESA was prepared for the Project site that included records and database searches as well as an on-site investigation for evidence of hazardous materials and waste. The Project's ESA did not identify any RECs on the Project site or adjacent properties during the Project site reconnaissance of the area. The environmental database records reviewed included those sites on the list of hazardous materials sites compiled pursuant to Government Code section 65962.5. Implementation of the Project would not cause a significant hazard to the public or the environment because it is not on the list of hazardous materials sites.

The majority of the database listings in the area surrounding the Project site pertain to the property located at 1601 San Elijo Road and the former San Marcos Landfill located further to the east. The former recycling plan located at 1601 San Elijo Road is located approximately 217 feet from the nearest proposed residential lot of the Project site. The former San Marcos Landfill is located approximately 700 feet from the nearest proposed residential lot on the Project site. The Project site is located within 1,000 feet of a former landfill, nevertheless, the ESA concluded that no apparent impacts to the Project site occur from the former San Marcos Landfill property.

Grading associated with the Project would not reach the groundwater table. Furthermore, the Project would receive water from domestic water lines and would not draw water from the groundwater table.

Based on the above findings, the proposed development of residential uses on the Project site would not create a significant hazard to the public or the environment. Impacts would be less than significant.

3.6.5.3 Airport Hazards

Guidelines for the Determination of Significance

A significant airport hazards impact would occur if the Project:

- Is located within 2 miles of a public or public private use airport or within 1 mile of a private airport and proposes residential densities inconsistent with the *California Airport Land Use Planning Handbook's* Safety Compatibility Criteria Guidelines for Maximum Residential Density and, as a result, the Project may result in a significant airport hazard.

Analysis

The Project site is not located within the Airport Influence Areas of any local airport or airstrip facilities, and Project implementation would not generate any associated safety hazards. Accordingly, no impacts related to airport hazards would result from implementation of the Project.

3.6.5.4 Emergency Response Plans

Guidelines for the Determination of Significance

A significant impact to emergency response plans would occur if the Project:

- Proposes one of the following unique institutions in a dam inundation zone as identified on the inundation map prepared by the dam owner: hospital, school, skilled nursing facility, retirement home, mental health care facility, care facility with patients that have disabilities, adult and childcare facility, jails/detention facility, stadium, arena, amphitheater, any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure.
- Proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and, as a result, the Project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.

Analysis

As described above, hazards specifically relevant to the Project that are profiled in the Operational Area Emergency Plan include wildfire, structure fire and hazardous materials. The wildfire behavior assessment completed as part of the FPP addressed the worst-case scenario for wildland fire. As a result of the fire modeling, Project design features (PDFs) were incorporated into the Project as described in the FPP and in section 3.13, *Wildfire*, of this EIR. The PDFs include fuel modification zones, use of ignition-resistant building materials, fire protection system requirements, and road requirements for access and driveways. These considerations reduce the risk of fire hazard by complying with and exceeding fire code-required measures. The Project would meet fire and building code requirements, including spacing of hydrants adjacent to Project structures.

The Project would not impair implementation of either the Operational Area Emergency Plan or the Multi-Jurisdictional Hazard Mitigation Plan or interfere with evacuation activities conducted in accordance with these documents. Similarly, the Project would not cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response due to structure location and height as the Project has been designed to avoid peak-top development and keep maximum structure heights below 55 feet. Impacts would be less than significant.

3.6.5.5 Exposure to Wildland Fires

Guidelines for the Determination of Significance

A significant impact from exposure to wildland fires would occur due to the following:

- A comprehensive FPP has been accepted and the Project is inconsistent with its recommendations.
- The Project cannot demonstrate compliance with all applicable fire codes.
- The Project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives.

Analysis

Preparation of a FPP

The primary focus of a FPP is to provide an implementable framework for suitable protection of the planned structures and the people living there. The Project's FPP provides measures for fire protection that meet the San Diego County 2023 CoFC. However, it should be noted that the Project would be required to meet the adopted San Diego County CoFC at the time of construction; therefore, this analysis provides a "worst-case" analysis by evaluating the 2023 CoFC because any future fire code would be more stringent and would build upon the requirements of the current 2023 CoFC. The FPP identifies the fire risk associated with the Project's planned land uses, and identifies requirements for fuel modification, building design and construction, and other pertinent development infrastructure criteria for fire protection. These requirements are listed in the FPP and incorporated into the Project as PDFs. Therefore, the Project would be consistent with the recommendations of the FPP and impacts due to being inconsistent with the FPP's recommendations would be less than significant.

Compliance with Applicable Fire Code

The FPP demonstrates that the Project would comply with applicable portions of the 2023 CoFC, and 2019 CBC, Chapter 7A; the 2019 CFC, Chapter 49; and the 2019 California Residential Code, Section 237 as adopted by San Diego County. Chapter 7A of the CBC addresses reducing ember penetration into structures, a leading cause of structure loss from wildfires (California Building Standards Commission 2019). However, the Project shall be required to meet all applicable codes at the time of

building permit submittal, which would be confirmed during the building permit plan check by County staff.

Code compliance is an important component of the requirements of the FPP, given the Project's WUI location that is within an area statutorily designated as a VHFHSZ by CalFire. Fire hazard designations are based on topography, vegetation, and weather, among other factors with more hazardous sites, including steep terrain, unmaintained fuels/vegetation, and WUI locations. Projects situated in a VHFHSZ require fire hazard analysis and application of fire protection measures to create defensible communities within these WUI locations. As described in the FPP, the Project would meet applicable code requirements for building in these higher fire hazard areas. These codes have been developed through decades of wildfire structure save and loss evaluations to determine the causes of structure loss during wildfires. The resulting fire codes now focus on mitigating former structural vulnerabilities through construction techniques and materials so that the buildings are resistant to ignitions from direct flames, heat, and embers, as indicated in the 2023 CBC (Chapter 7A, Section 701A Scope, Purpose, and Application). Therefore, the Project would comply with all applicable fire codes and impacts due to not complying with all applicable fire codes would be less than significant.

Fire Department Response Capabilities

The Project is located within the RSFFPD responsibility area; however, the closest fire station RSFFPD Station 6 is 2.46 miles from the Project site. The City of Carlsbad provides fire service to areas west of the Project site and has a fire station located approximately 1.55 miles west of the Project site. Given its proximity and ability to meet the County's 5-minute travel time requirement, Carlsbad Fire Department Station 6 would serve the Project site, per the North County Boundary Drop Program.

The Project is projected by call volume analysis (using a San Diego County per-capita call generation factor of 82 calls per 1,000 persons) to add approximately 18 calls per year to the Carlsbad Fire Department's existing call load. This call volume (0.05 calls per day) is not considered enough of an increase to require additional resources.

Carlsbad Fire Department Station 6 would be able to provide first engine response to all Project lots in under five minutes, consistent with the San Diego County General Plan Safety Element requirement for village and limited semi-rural residential areas. It would be able to reach the furthest lots within 3.71 minutes. The next closest fire station is San Marcos Fire Department Station 4, located at 204 San Elijo Road, San Marcos, CA, approximately 2.29 miles from the Project site along San Elijo Road. Carlsbad Fire Department Station 6 averages roughly 87 calls per month within its response area. Further, City of San Marcos Fire Station 4 is located approximately 2.29 miles east of the Project site, and could provide additional resources, if necessary. Therefore, the Project would meet the emergency response objectives identified in the Safety Element of the County General Plan and impacts would be less than significant.

Evacuation Plan

A Conceptual Wildfire Evacuation Plan (CWEP) (*Appendix M2*) has been prepared for the Project site based on the County and RSFFPD Emergency Operations Procedures, which closely follow the Unified San Diego County Emergency Services Organization and County Operational Area Emergency Operations Plan (EOP), including its Evacuation Annex. The CWEP also provides Project specific evacuation planning, operations restrictions, and monitoring requirements. Therefore, the Project would meet the emergency response objectives identified in the Safety Element of the County General Plan and impacts would be less than significant.

3.6.6 Cumulative Impact Analysis

Impacts associated with hazardous materials are generally site-specific. The Project site does not contain known contaminated groundwater or soils, or asbestos- or lead-containing structures. In addition, the Project would not result in significant impacts related to airport hazards or regional emergency/evacuation plans. Cumulative projects in the Project site vicinity would be required to implement, as appropriate, similar site-specific measures to address potential impacts from hazardous materials and airport hazards. These kinds of impacts do not combine together to increase effects. Therefore, there would be less than significant cumulative impacts from hazardous materials and airport hazards.

Development of the Project would introduce potential ignition sources, particularly more people in the area. However, as mitigating factors for this increase in potential ignition sources, the Project would develop the site which would reduce the amount of ignitable fuels on-site and would lower flammability landscape. Furthermore, development of the Project site would allow for better access throughout on-site areas, managed and maintained landscapes, and consistent human presence in the area, which would reduce the likelihood of arson, off-road vehicles, or shooting-related fires.

The Project is projected by call volume analysis (using San Diego County per-capita call generation factor of 82 calls per 1,000 persons) to add approximately 18 calls per year to the Carlsbad Fire Department's existing call load. This call volume (0.05 calls per day) is not considered enough of an increase to require additional resources. Therefore, the Project's cumulative contribution of 0.05 call per day would be less than significant.

Based on the type of wildfire anticipated/modeled for this area, wildland fire hazards exist for this and other projects in the vicinity. With implementation of the corresponding fire protection PDFs summarized above and discussed in further detail in Section 3.14, *Wildfire*, including conformance with building and fire codes, provisions for ongoing maintenance of roads, infrastructure, vegetation management, and defensible space, the Project would not contribute to a cumulative wildland fire risk. Cumulative projects in the study area, as shown on Table 1-3, *Cumulative Developments*, along with any future projects, would be required to implement site-specific measures to address potential impacts from wildfires. Based on the conclusion that the Project would not contribute to a cumulative wildland fire risk, and on the requirement that future projects in the vicinity would also implement preventative wildfire measures, cumulative impacts from wildland fire hazards would be less than significant.

3.6.7 Significance of Impacts Prior to Mitigation

Based on the analysis, mandatory regulatory compliance and PDFs, the Project would have less than significant impacts related to hazards and hazardous materials.

3.6.8 Mitigation

Based on the above analysis, all hazards and hazardous materials-related impacts would be less than significant, and no mitigation would be required.

3.6.9 Conclusion

Based on the analysis, mandatory regulatory compliance and PDFs, the Project would have less than significant impacts related to hazards and hazardous materials.

3.7 Hydrology and Water Quality

The following section provides a Project-level analysis of potential impacts related to hydrology and water quality that may result from implementation of the Project. The potential impacts of the Project related to hydrology and water quality are evaluated in detail in the Stormwater Quality Management Plan (SWQMP) and Hydrology Study for the Questhaven Project, both prepared by Excel Engineering. Copies of the two reports are provided as *Appendix I* and *Appendix J*, respectively, to this EIR. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. One comment regarding hydrology and water quality was received. Camille Perkins (received October 3, 2022) requested that the EIR include mitigation for stormwater and drainage impacts to Copper Creek and downstream developments and resources.

3.7.1 Existing Conditions

3.7.1.1 Hydrological Setting

The Project site is in the Carlsbad Hydrologic Unit and is bisected by the boundary line between the Batiqitos subarea of the San Marcos hydrologic area (904.51), and the San Elijo subarea of the Escondido Creek hydrologic area (904.61). The northern portion of the site is tributary to San Marcos Creek, and the southern portion of the site is tributary to Escondido Creek. A map showing the Project location with respect to the hydrologic basin areas can be found in Attachment 2 of *Appendix J*. (Excel Engineering, 2021)

3.7.1.2 Floodplain Setting

The Project site is not located within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, including County Floodplain Maps.

3.7.1.3 Drainage and Runoff Setting

Under existing conditions, the Project site is composed of undeveloped natural terrain. The site is tributary to two distinct hydrologic subareas of the Carlsbad Hydrologic Unit. The average slope of the pre-development conditions is determined by following the County Standard S-1 and is calculated as 18% for the Project overall.

Drainage from approximately 34 acres of the site discharges from the southern portion of the site, which starts near the southern limits of the drainage basin and flows mainly in a northeasterly direction. As the northeasterly flows meet the eastern limits of the property, the water discharge from the site enters an unnamed tributary of the Escondido Creek flowing in a southerly direction along the eastern property line. The point where the discharge leaves the site is identified as POC-1 in the Project's hydrology study.

Drainage from the remaining 45 acres of the southern tributary area flows in a northerly direction where it meets a natural channel flowing in a north westerly direction to a point where it leaves the site along the western boundary. This point is identified as POC-2 in the Project's hydrology study. After

reaching POC-2, the flows continue along their existing offsite flow path in a natural channel until they meet San Elijo Road and continue to San Marcos Creek.

Drainage from approximately 3.0 acres in the northeastern portion of the site flow into an existing brow ditch that carries the water in an easterly direction along the property line and discharge directly to the public storm drain system along San Elijo Road. This point of discharge is identified as POC-3 in the Project's hydrology study. Drainage from the remaining approximately 1.0 acre of the northwestern frontage of the site along San Elijo Road flows into two brow ditches that flow westerly and enter the public storm drain system along San Elijo Road tributary to San Marcos Creek. This point is identified as POC-4 in the Project's hydrology study.

3.7.1.4 Water Quality Setting

The beneficial uses identified in the Regional Water Quality Control Board (RWQCB) Water Quality Plan for the Batiquitos subarea of the San Marcos hydrologic area, include municipal and domestic supply, agricultural supply, industrial service supply; and the San Elijo subarea of the Escondido Creek hydrologic area include municipal and domestic supply, agricultural supply, industrial service supply, recreational uses, cold and warm freshwater habitat, and wildlife habitat.

The Project site and the associated watershed were compared to the current published federal Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segment (Section 303[d] List), which lists the surface waters that do not meet applicable water quality standards, required pursuant to Section 303(d) of the CWA. The Escondido Creek has been identified on the Section 303(d) List as sensitive to phosphate, total dissolved solids, sulfates, manganese, DDT (dichlorodiphenyltrichloroethane), indicator bacteria, toxicity, nitrogen, selenium, benthic community effects, bifenthrin, and malathion.

3.7.1.5 Regulatory Setting

Federal Regulations

FEMA Flood Plain Management Standards

The Federal Emergency Management Agency (FEMA) is the primary federal agency with the responsibility of administering programs and coordinating with communities to establish effective flood plain management standards. FEMA is responsible for developing the Flood Insurance Rate Map (FIRM), which delineates Special Flood Hazard Areas and flood risk zones. State and local agencies are responsible for implementing regulations, ordinances, and policies in compliance with FEMA requirements to address floodplain management issues.

Federal Clean Water Act

The Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), was adopted in 1972 and established basic guidelines for regulating discharges of pollutants into waters of the United States. The CWA set up a system of water quality standards, discharge limitations, and permits to protect the designated beneficial uses of water resources. The CWA also requires that states

adopt water quality standards to protect public health or welfare, enhance the quality of water, and serve the purposes of the CWA.

The CWA was amended in 1987, which established the National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402 of the CWA. Other relevant provisions of the CWA include Section 401, which requires that applicants for federal permits relating to the construction or operation of a facility that may result in the discharge of a pollutant obtain certification of those activities from the state in which the discharge originates. Section 404 of the CWA establishes a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which is administered by the USACE and enforced by USEPA. In California, USEPA has authorized the State Water Resources Control Board (SWRCB) to implement the NPDES program.

Federal Antidegradation Policy

The federal antidegradation policy has been in existence since 1968. The policy protects existing uses, water quality, and national water resources. It directs states to adopt a statewide policy that includes the following primary provisions:

- maintain and protect existing instream uses and the water quality necessary to protect those uses;
- where existing water quality is better than necessary to support fishing and swimming conditions, maintain and protect water quality unless the state finds that allowing lower water quality is necessary for important local economic or social development; and
- where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, maintain and protect that water quality.

State Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) was established to create a regulatory program to protect water quality and beneficial uses of the state's waters. Accordingly, the Act established the responsibilities and authorities of the State Water Resources Control Board (SWRCB) and the nine RWQCBs.

State Water Resources Control Board

The SWRCB issues stormwater permits in accordance with the NPDES program, which requires regulated entities to obtain coverage under an NPDES stormwater permit and implement a storm water pollution prevention plan (SWPPP) or a storm water management plan (SWMP), and to utilize Best Management Practices (BMPs) to reduce or prevent the discharge of pollutants into receiving waters, as described further below.

San Diego Regional Water Quality Control Board

The San Diego RWQCB is responsible for implementing and enforcing the laws and regulations regarding water quality in the San Diego region. With regard to storm water runoff, RWQCB requires compliance with RWQCB regulations and the applicable provisions of the federal CWA, including NPDES criteria and permitting. The RWQCB San Diego Basin Plan is the Water Quality Control Plan for the San Diego Basin and establishes the beneficial uses and water quality objectives for surface and groundwater resources. The beneficial uses for Escondido Creek are described above in Section 2.4.1.

The NPDES Storm Water Program addresses non-agricultural sources of storm water runoff that adversely affect the quality of the Country's waters. Under the NPDES Program, regulated entities must obtain coverage under an NPDES storm water permit and implement a SWPPP or a SWMP, and must utilize BMPs to reduce or prevent the discharge of pollutants into receiving waters. NPDES storm water permit regulations generally cover the following classes of storm water dischargers: operators of municipal separate storm sewer systems (MS4), operators of certain industrial facilities, and operators of construction activities that disturb 1 or more acre of land. Implementation of the Project requires conformance with the NPDES Storm Water Program's Construction General Permit and the Municipal Permit, as defined and described below.

Construction General Permit

Dischargers whose projects disturb 1 or more acres of soil, or less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the SWRCB's Order 2012-0006-DWQ (amending Order 2009-0009-DWQ as amended by 2010-0014-DWQ), the Construction General Permit (SWRCB 2012). Construction and demolition activities subject to this permit include clearing, grading, grubbing, and excavation, or any other activity that results in a land disturbance equal to or greater than 1 acre.

Permit applicants are required to submit a Notice of Intent to the SWRCB and to prepare a SWPPP. The SWPPP must identify BMPs that are to be implemented to reduce construction impacts on receiving water quality based on potential pollutants. The SWPPP also must include descriptions of the BMPs to reduce pollutants in storm water discharges after all construction phases are completed at a site (post-construction BMPs).

The Construction General Permit includes several additional requirements (as compared to the previous Construction General Permit, 2009-0009-DWQ), including risk-level assessment for construction sites, a storm water effluent monitoring and reporting program, rain event action plans, and numeric action levels for pH and turbidity.

San Diego County Municipal Storm Water Permit (R9-2013-0001)

Under Phase I of its storm water program, USEPA published NPDES permit application requirements for municipal storm water discharges for municipalities that own and operate separate storm drain systems serving populations of 100,000 or more, or that contribute significant pollutants to waters of

the U.S. The Project is subject to the San Diego Municipal Storm Water NPDES Permit (Municipal Permit) under Order R9-2013-0001. The Project design would be required to comply with requirements and measures outlined in this municipal permit to minimize impacts to water quality and runoff hydrology for the construction and operational phases of the Project life.

The Municipal Permit requires that each co-permittee covered under the permit (i.e., a variety from San Diego, Orange, and Riverside counties) prepare Water Quality Improvement Plans (WQIPs), establish action levels for non-storm water and storm water pollutants, monitor and assess program requirements, and update Jurisdictional Urban Runoff Management Plans (JURMPs). JURMPs address water pollution management for construction activities, development planning, and existing development management.

The local jurisdictions within the San Diego region regulate water quality through a variety of ordinances and guidelines, including but not limited to, jurisdictional urban runoff management programs and storm water standards. In accordance with the provisions of the Municipal Permit, the County of San Diego developed a Standard Urban Storm Water Mitigation Plan (SUSMP) (County of San Diego 2011a). The SUSMP identifies mitigation strategies required to protect storm water quality for new development and significant redevelopment within the San Diego region. Development within each respective County of San Diego municipality is subject to each respective SUSMP, accordingly.

Local Regulations and Standards

San Diego County General Plan

The Safety Element of the San Diego County General Plan includes goals and policies regarding flood hazards to minimize personal injury and property damage losses resulting from flood events; and to maintain adequate capacity in floodways and floodplains to accommodate flood events. Policy LU-6.5, Sustainable Stormwater Management, in the Land Use Element states: “Ensure that development minimizes the use of impervious surfaces and incorporates other Low Impact Development techniques as well as a combination of site design, source control, and stormwater best management practices, where applicable and consistent with the County’s Low Impact Development (LID) Handbook.”

County of San Diego Flood Damage Prevention Ordinance

The Flood Damage Prevention Ordinance (County Code of Regulatory Ordinances Section 811.101-811.104) identifies Special Flood Hazard Areas throughout the County as having a special flood or flood-related erosion/sedimentation hazard and as being shown on a FIRM or on a County floodplain map. The ordinance also defines methods to reduce flood losses. By complying with the requirements of this ordinance, a project is considered to be in compliance with FEMA regulations.

County of San Diego Grading Ordinance

The Grading Ordinance (County Code of Regulatory Ordinances sections 87.601-87.608) combines regulations affecting grading and land clearing with activities affecting watercourses.

County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance

The San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance (WPO) defines the storm water management requirements that are legally enforceable by the County in the unincorporated areas. As referenced in Section 67.810 of the WPO, the County prepared a detailed Storm Water Standards Manual (SSM), which is a guidance document addressing the use of pollution prevention practices and BMPs for specific activities or facilities. The WPO also addresses connections for, and disposal of, storm water, and incorporates the County's LID Handbook, which is a guidance document that provides a comprehensive list of LID planning and storm water management techniques that emphasize storm water infiltration, conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic conditions.

County of San Diego Standard Urban Storm Water Mitigation Plan for Land Development and Public Improvement Projects

The County developed the Standard Urban Storm Water Mitigation Plan (SUSMP) for proposed land development and public improvement projects. The SUSMP is mandated for significant new development and redevelopment projects, including "Priority Projects," which are defined in the NPDES Municipal Permit to include residential development of ten or more dwelling units or commercial development greater than one acre. The Project is classified as a Priority Project and, therefore, is subject to the SUSMP requirement to prepare a Stormwater Quality Management Plan which is included as Technical Appendix I of this EIR.

The County's SUSMP is focused on improving the quality of stormwater runoff through BMPs for project design and related post-construction activities. The SUSMP requires a project applicant to develop and submit a SWMP that complies with the requirements of the WPO and the SSM. The SWMP serves as the basis for long-term water quality improvements and the SUSMP requires that Priority Projects be designed to minimize, to the maximum extent practicable, the introduction of pollutants and creation of conditions that may result in significant impacts generated from site runoff to the stormwater conveyance system. Priority Projects also must control post-development peak stormwater runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Thus, the Project must implement site design, source control, and treatment control BMPs to address both water quality and hydrologic impacts.

San Diego County Hydrology Manual

The San Diego County Hydrology Manual (County of San Diego 2003) provides uniform procedures for analyzing flood and stormwater conditions in the County. Specific elements of these procedures include methods to estimate storm flow peaks, volumes, and time distributions. These data are used in the design of stormwater management facilities to ensure appropriate dimensions and capacity (typically 100-year storm flow volumes), pursuant to applicable requirements in the San Diego County Drainage Design Manual (County of San Diego 2005).

San Diego County Hydromodification Management Plan

San Diego Regional Water Board Order R9-2007-0001 requires that hydromodification and its influence on water quality be addressed through the implementation of a Hydromodification Management Plan (HMP) to manage increases in runoff discharge rates and durations (10% of Q2 to Q10 rainfall events) from priority development projects. The HMP is required to identify increased frequencies and durations of runoff that could cause increased erosion of channel beds and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force. The HMP must establish standards to control flows and avoid erosion. Supporting analyses must be based on continuous hydrologic simulation modeling. Consistent with this directive, the County has prepared the San Diego County HMP.

San Diego Integrated Regional Water Management (IRWM) Plan, including Appendix 7-B (Integrated Flood Management Planning Study)

The San Diego IRWM Plan was prepared under the direction of a Regional Water Management Group consisting of the San Diego County Water Authority, the County of San Diego, and the City of San Diego. The IRWM Plan builds on local water and regional management plans within the San Diego Region and is aimed at developing long-term water supply reliability, improving water quality, and protecting natural resources. The Statewide IRWM Program is supported by bond funding provided by the California Department of Water Resources (DWR) to fund competitive grants for projects that improve water resources management.

The goals of the IRWM Plan include the following:

- Improve the reliability and sustainability of regional water supplies;
- Protect and enhance water quality;
- Protect and enhance our watersheds and natural resources, and
- Promote and support sustainable integrated water resource management.

Appendix 7-B of the IRWM Plan, Integrated Flood Management Planning, is a guidance document aimed to facilitate an integrated water resources approach to flood management. The planning document defines general applicable strategies and approaches, as well as provides planning level tools, to guide flood management decision making on a watershed basis. The focus of integrated planning is a balance between community flood management needs with environmental constraints and watershed resources to ensure an acceptable solution with the flexibility to adapt to future changes.

Construction Dewatering Permit

Construction dewatering discharges must be permitted either by the San Diego RWQCB under the general Order 2001-96 (NPDES No. CAG919002) for construction dewatering discharge to surface waters or authorized to discharge to local publicly owned treatment works (i.e., industrial or sanitary

sewer system of municipal wastewater treatment plants). Discharge via either of these mechanisms must meet applicable water quality objectives, constituent limitations, and pretreatment requirements.

3.7.2 Analysis of Project Effects and Determinations as to Significance

Guidelines for the Determination of Significance

Hydrology

A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect on hydrology, absent specific evidence of such effect:

- The project will substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.
- The project will result in increased velocities and peak flow rates exiting the Project site that would cause flooding downstream or exceed the stormwater drainage system capacity serving the site.
- The project will result in placing housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, a County Flood Plain Map, or County Alluvial Fan Map, which would subsequently endanger health, safety, and property due to flooding.
- The project will place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following:
 - Alter the Lines of Inundation resulting in the placement of other housing in a 100-year flood hazard

Guidelines Source

The thresholds of significance are based on the County Guidelines for Determining the Significance – Hydrology (County 2007g).

Guidelines for the Determination of Significance

Water Quality

A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect on water quality, absent specific evidence of such effect:

- The project is a development project, as defined in the WPO, County of San Diego Code of Regulatory Ordinances (Regulatory Ordinances) Section 67.803, and does not comply

with the standards set forth in the County SSM or the Additional Requirements for Land Disturbance Activities set forth in the County WPO, Regulatory Ordinances Section 67.811.

- The project would drain to a tributary of an impaired water body listed on the Clean Water Act Section 303(d) List, and will contribute substantial additional pollutant(s) for which the receiving water body is already impaired.
- The project would drain to a tributary of a drinking water reservoir and will contribute substantially more pollutant(s) than would normally run off from the Project site under natural conditions.
- The project will contribute pollution in excess of that allowed by applicable state or local water quality objectives or will cause or contribute to the degradation of beneficial uses.
- The project does not conform to applicable federal, state, or local “Clean Water” statutes or regulations including, but not limited to, the federal Water Pollution Control Act, California Porter-Cologne Water Quality Control Act, and the County WPO.

Guidelines Source

The significance guidelines for water quality identified above are based on the County of San Diego Guidelines for Determining Significance for Surface Water Quality, dated July 30, 2007.

3.7.2.1 Hydrology

Guideline for the Determination of Significance

A significant impact to hydrology would occur if the project would:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.

Analysis

Post-Development Topography and Drainage Patterns

The site is graded such that the distribution of discharge from the site to the respective POCs will remain balanced as much as possible. The area of the project to the southwest will remain open space and will be directed to flow separately from the flow from the developed portions of the site until discharging to the respective POC. The developed portions of the site will all be directed to a stormwater treatment facility. Multiple treatment facilities will be located onsite. The parts of the site that serve as access to the building lots, and the lots themselves will be directed to combination of biofiltration and flow detention facilities. The remainder of the project on the westerly access road, will be treated with Green Street methods (tree wells) sized to meet pollutant treatment and hydromodification goals.

Implementation of the Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. No significant alteration of any stream or river will occur on this site due to grading operations. All defined drainage channels are due to erosive effects of high velocity runoff from the uphill slopes. The development of the site will help mitigate further erosion downstream.

Additionally, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. No significant alteration of drainage patterns will occur on this project. All defined drainage channels are due to erosive effects of high velocity runoff from the uphill slopes. The development of the site will help mitigate further erosion downstream and all discharge is back to the existing POCs and discharge points.

Accordingly, impacts from the Project substantially altering the existing drainage pattern of the site, in a manner that would result in substantial erosion or siltation on- or off-site would be less than significant.

3.7.2.2 Runoff Rates/Amounts and Related Drainage System and/or Flood Hazards

Guideline for the Determination of Significance

A significant impact to hydrology would occur if the project would:

- The project will result in increased velocities and peak flow rates exiting the project site that would cause flooding downstream or exceed the stormwater drainage system capacity serving the site.

Analysis

Implementation of the Project would result in the construction of new impervious surfaces, including pavement and structures.

For areas conveying water that has drained through the proposed graded lots, it was found that the total percent impervious is 44%. This value includes roadways and assumes 5,000 s.f. of impervious area to be built on each lot. The offsite, undeveloped, and pervious graded areas are all 0% impervious. This area is also associated with the category of Undisturbed Natural Terrain (Natural) Permanent Open Space, which is also representative of these areas since they will not be developed. The driveway section at the northeastern side of the site was calculated to be 80% pervious. The driveway area near the northwestern includes the biofiltration basin and some contributing graded area. The total impervious percentage is around 28%.

Proposed on-site storm drain facilities include a series of curb/gutter inlets and four detention facilities, all of which would be tied to an underground storm drain system of pipelines and related structures (refer to Figure 1-5, *Preliminary Drainage Plan*). The proposed storm drain facilities would

accommodate peak 100-year storm flows pursuant to County guidelines. The Project Hydrology/Hydraulics Study (Appendix J) includes an assessment of pre- and post-development runoff rates and amounts within and from the site, including analyses of Project-related effects to existing/proposed storm drain systems, off-site flows, and related downstream flooding hazards. Calculated post-development flows from the Project site are summarized below in Table 3.7-1, *Summary of Peak 100 Year Runoff*, for the proposed drainage systems, along with the previously described existing flows.

Based on the results of and with the inclusion of the proposed storm drain facilities in the Project design per the Project Hydrology/Hydraulics Study (Appendix J), assuming that the site is used for a medium density residential use, implementation of the Project will result in a decrease in the 100-year peak flow runoff value for each respective POC. Both POC-3 and POC-4 are both ultimately tributary to San Marcos Creek. POC-4 enters a public drainage pipe and is directed immediately across San Elijo and is discharged to a natural lined channel. POC-3 enters another public storm drain branch which discharges to a point downstream and in the same channel as POC- 4. Potential Project-related impacts associated with increased peak flow rates and amounts, associated flooding hazards, and the capacity of existing or planned storm drain systems would be less than significant.

3.7.2.3 Floodplains, Floodwater Surface Water Elevations and Related Flood Hazards

Guidelines for the Determination of Significance

A significant impact related to floodplains, floodwater surface elevations, and related flood hazards would occur if the Project would:

- Place housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area or other special flood hazard area, as shown on a Flood Insurance Rate Map (FIRM), a County Floodplain Map or County Alluvial Plain Map, which would subsequently endanger health, safety and property due to flooding; or
- Place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following:
 - a. Alter the Lines of Inundation resulting in the placement of other housing in a 100-year flood hazard; or
 - Increase the water surface elevation in a watercourse with a watershed equal to or greater than 1 square mile by 1 foot or more in height.

Analysis

The Project does not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, including County Floodplain Maps. No FIRM identified flood hazard areas are located on the parcel.

The Project does not place structures within a 100-year flood hazard area which would impede or redirect flood flows. No FIRM identified flood hazard areas are located on the parcel.

From the above analysis, potential impacts associated with floodplains, floodwater surface elevations, and related flood hazards would be less than significant.

3.7.2.4 Groundwater

Guidelines for the Determination of Significance

A significant impact related to groundwater level drawdown/reduced well yields, or increased groundwater aquifer levels would occur if the Project would:

- Cause or contribute to substantial drawdown of local groundwater aquifers, or cause or contribute to a substantial reduction in local groundwater well yields.
- Cause or contribute to a substantial increase in local groundwater aquifer levels, resulting in adverse effects to conditions such as liquefaction/settlement potential, or the operation of septic systems.

Analysis

The Project would obtain potable water with connections to existing water lines within San Elijo Road and would not utilize any groundwater. Thus, the Project would not cause or contribute to a substantial drawdown of local groundwater aquifers, or cause or contribute to a substantial reduction in local groundwater yields.

As stated in the Geotechnical Report prepared for the Project site, groundwater was not encountered in the exploratory excavations. No natural groundwater condition is known to exist at the site that would impact the proposed site development. Intermittent surface water within the onsite drainages is anticipated during heavy and/or prolonged rain events. It should be noted that localized perched groundwater may develop at a later date, most likely at or near fill/bedrock contacts, due to fluctuations in precipitation, irrigation practices, or factors not evident at the time of field explorations. However, the limited occurrence of perched groundwater would not cause or contribute to a substantial increase in local groundwater aquifer levels resulting in adverse impacts. Impacts would be less than significant.

3.7.2.5 Water Quality

Guideline for the Determination of Significance

A significant impact to water quality would occur if the project would:

- Consist of a development project listed in County of San Diego, Code of Regulatory Ordinances (Regulatory Ordinances), Section 67.804(g), as amended and does not comply with the standards set forth in the County BMP Design Manual, Regulatory Ordinances 67.813, as amended, or the Additional Requirements for Land Disturbance Activities set forth in Regulatory Ordinances, Section 67.

- Drain to a tributary of an impaired water body listed on the Clean Water Act Section 303(d) list, and contribute substantial additional pollutants for which the receiving water body is already impaired.
- Contribute pollution in excess of that allowed by applicable State or local water quality objectives or cause or contribute to the degradation of beneficial uses.
- Fail to conform to applicable Federal, State or local “Clean Water” statutes or regulations including, but not limited to, the Federal Water Pollution Control Act (Clean Water Act)

Analysis

The Project SWQMP (*Appendix J*) identifies pollutants of concern and appropriate control measures related to development of the Project, based on procedures identified in the County Stormwater Ordinance/BMP DM, JURMP and LID Manual, as well as the related NPDES Municipal Permit (as outlined below). The Project is identified as a PDP due to the inclusion of proposed development categories such as residential properties, parking areas, and roadways. Potential pollutants associated with the Project include sediment, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. Urban pollutants accumulate in areas such as streets, parking areas, and drainage facilities, and are picked up in runoff during storm events. Runoff within the Project site would increase as a result of constructing impervious surfaces, with a corresponding increase in pollutant loading potential. Based on these conditions, long-term Project operation could result in the on- and off-site transport of urban pollutants.

County standards require the use of LID/site design and source control BMPs for all development projects, as well as pollutant control BMPs for PDPs. The selection of pollutant control BMPs further requires initial screening to determine the feasibility of using retention (infiltration) BMPs for pollutant control. If infiltration is not feasible, PDPs are required to consider (in order of priority) harvest and reuse BMPs, biofiltration BMPs, and flow-through BMPs. The Project would conform to applicable County and NPDES storm water standards, with such conformance to include the use of appropriate post-construction LID/site design, source control and pollutant control BMPs. Specific proposed BMPs are identified in the Project SWQMP (*Appendix I*), with these measures summarized below.

The following BMPs would be incorporated into the Project:

- Erosion control for disturbed slopes
 - Hydraulic stabilization hydroseeding (summer)
 - Physical stabilization erosion control blanket (winter)
- Erosion control for disturbed flat areas
 - County standard lot perimeter protection detail
- Energy dissipation
 - Energy dissipater outlet protection
- Sediment control for all disturbed areas
 - Silt fence
 - Gravel and sand bags
 - Storm drain inlet protection

- Engineered desilting basin (sized for 10-year flow)
- Preventing off-site tracking of sediment
 - Stabilized construction entrance
 - Construction road stabilization
 - Entrance/exit tire wash
 - Entrance/exit inspection and cleaning facility
 - Street sweeping and vacuuming
- Materials management
 - Material delivery and storage
 - Spill prevention and control
- Waste Management
 - Waste management concrete waste management
 - Solid waste management
 - Sanitary waste management
 - Hazardous waste management

The SWQMP has been prepared in accordance with the County of San Diego BMP Design Manual and SDRWQCB Order No. R9-2015-0001 Municipal Separate Storm Sewer System (MS4) permit (2015).

LID/Site Design BMPs. LID/site design BMPs are intended to avoid, minimize and/or control post-development runoff, erosion potential and pollutants generation to the MEP by mimicking the natural hydrologic regime. The LID process employs design practices and techniques to effectively capture, filter, store, evaporate, detain and infiltrate runoff close to its source. Specific LID and site design BMPs identified in the Project SWQMP are summarized below, with additional discussion provided in Appendix I. All of the proposed LID and site design BMPs would help reduce long-term urban pollutant generation by minimizing runoff rates and amounts, retaining permeable areas, increasing on-site filtering and infiltration, and reducing erosion/sedimentation potential. Impacts would be less than significant.

Guideline for the Determination of Significance

A significant impact to water quality would occur if the project would:

- Drain to a tributary of an impaired water body listed on the Clean Water Act Section 303(d) list, and contribute substantial additional pollutants for which the receiving water body is already impaired.
- Contribute pollution in excess of that allowed by applicable State or local water quality objectives or cause or contribute to the degradation of beneficial uses.

Analysis

The beneficial uses identified in the RWQCB San Diego Basin Plan for the Batiquitos subarea of the San Marcos hydrologic area, include municipal and domestic supply, agricultural supply, industrial service supply; and the San Elijo subarea of the Escondido Creek hydrologic area include municipal and domestic supply, agricultural supply, industrial service supply, recreational uses, cold and warm freshwater habitat, and wildlife habitat.

As discussed above under Section 3.7.1, *Existing Conditions*, runoff from the Project would drain to the Escondido Creek, which is identified on California's 2018 List of Water Quality Limited Segments as impaired for phosphate, total dissolved solids, sulfates, manganese, DDT (dichlorodiphenyltrichloroethane), indicator bacteria, toxicity, nitrogen, selenium, benthic community effects, bifenthrin, and malathion. To reduce the potential impacts to water quality, the Project would be required to comply with the SWRCB Construction General Permit and the NPDES Municipal Permit, as described above.

The Project is expected to add pollutants to runoff from urban development. The addition of these pollutants to the Batiquitos subarea of the San Marcos hydrologic area and San Elijo subarea of the Escondido Creek hydrologic area could violate water quality objectives required to sustain the beneficial uses without a properly designed water quality treatment system. Runoff from the developed portion of the Project site would be subject to a comprehensive set of BMPs including Construction-Phase BMPs, Site Design Measures and LID BMPs, Source Control BMPs, and Treatment Control BMPs as discussed in detail above to reduce and remove potential pollutants from the Project's runoff. As described above, with incorporation of these BMPs, the Project would not contribute substantially more pollutants than would normally run off from the Project site to Batiquitos subarea of the San Marcos hydrologic area and San Elijo subarea of the Escondido Creek hydrologic area under natural conditions. Thus, development of the Project site would not degrade potential beneficial uses of downstream water bodies as designated by RWQCB and impacts related would be less than significant.

Guideline for the Determination of Significance

A significant impact to water quality would occur if the project would:

- Fail to conform to applicable Federal, State or local "Clean Water" statutes or regulations including, but not limited to, the Federal Water Pollution Control Act (Clean Water Act)

Analysis

Implementation of the Project would include construction-related activities such as grading and other earth-moving activities. These activities would generate sediment and dust that could affect water quality. In addition, the Project would result in an increase in postconstruction pollutants related to development of the property and the effects of automobile use. Runoff from paved surfaces may contain both sediment in the form of silt and sand, and a variety of pollutants transported by the

sediment. Landscape activities by homeowners would be an additional source of sediment and pollutants. To reduce the potential impacts to water quality, the Project would be required to comply with the SWRCB Construction General Permit and the NPDES Municipal Permit, as described above.

To be covered under the Construction General Permit, a Notice of Intent must be filed with the SWRCB. Compliance with the permit requires that a SWPPP be prepared and implemented for the Project, and that construction BMPs, post-construction BMPs, inspections, sampling, and monitoring for water quality be addressed. A SWPPP must be prepared and submitted to the SWRCB and a Waste Discharge Identification Number (WDID) must be received prior to construction.

To address post-construction water quality impacts during operation of the Project from pollutants related to urban development, automobile use, and landscaping activities, the Project would be required to comply with the requirements of the Municipal Permit, and the County's WPO and SUSMP requirements pursuant to the Municipal Permit. The RWQCB and County of San Diego require treatment of the 85th percentile runoff at the Project site prior to discharge into Escondido Creek. To address this requirement, as discussed above, the Project would divert runoff from the developed portions of the Project site for treatment via bioretention basins. In summary, the proposed Project has been designed to comply with all applicable water quality standards and guidelines for storm water runoff. As discussed above, the Project includes a comprehensive set of Construction-Phase BMPs, Site Design and LID BMPs, Treatment Control BMPs, and Source Control BMPs. These applicable BMPs are in compliance with the standards set forth in the NPDES permit requirements, and the County SUSMP requirements. Thus, implementation of the Project's BMPs conforms to applicable federal, state, and local water quality statutes and regulations and, therefore, impacts related to this issue are considered less than significant.

3.7.3 Cumulative Impact Analysis

As described in the preceding analysis, implementation of the Project would require conformance with a number of regulatory requirements related to hydrology and water quality, including applicable elements of the CWA, NPDES, County storm water standards, California Porter-Cologne Water Quality Control Act, and RWQCB Basin Plan. Based on such conformance (including the design measures described in this EIR), all identified Project-level hydrology and water quality impacts from the Project would be avoided or reduced below a level of significance.

The described regulatory requirements constitute a regional effort to implement hydrology and water quality protections through a watershed-based program designed to meet applicable criteria such as Basin Plan Beneficial Uses and Water Quality Objectives. To this end, these standards require the implementation of efforts to reduce runoff and contaminant discharges to the MEP, with the NPDES Municipal Permit identifying the goal of "...promoting attainment of water quality objectives necessary to support designated beneficial uses." The County has implemented all of these requirements in the form of the Stormwater Ordinance/BMP DM. LID Handbook, JURMP and related Municipal Code standards, as well as applicable education, planning, and enforcement procedures. Based on the described regional/watershed-based approach required for hydrology and water quality issues in existing regulatory standards, as well as the fact that conformance with these requirements

would be required for all identified projects within the cumulative projects area (including the Project), cumulative hydrology/ water quality impacts would be less than significant.

3.7.4 Significance of Impacts Prior to Mitigation

With implementation of the BMPs discussed above, as required by federal, state, and local regulations, the Project is not expected to result in significant Project-related or cumulative impacts.

3.7.5 Mitigation

No mitigation measures are proposed because the Project design (i.e., Construction-Phase BMPs, Site Design and LID BMPs, Treatment Control BMPs, and Source Control BMPs) avoids all potentially significant Project-related impacts associated with hydrology and water quality. BMPs would be implemented by the Project and other related cumulative projects in accordance with applicable laws and regulations to avoid significant hydrology and water quality impacts during construction and operation.

3.7.6 Conclusion

Based on the discussions provided above, potential Project-specific and cumulative hydrology and water quality impacts associated with implementation of the Project would be effectively avoided or reduced below identified significance guidelines through implementation of recommendations provided in the Project Hydrology/Hydraulics Study and SWQMP, as well as conformance with established regulatory requirements.

Table 3.7-1 Summary of Peak 100 Year Runoff

Basin	Pre Area (ac)	Post Area (ac)	Pre T _c (min)	Post T _c (min)	Pre Q (cfs)	Post Q (cfs)	Increase (post-pre) (cfs)
POC-1	36.05	38.56	11.33	10.17	55.43	52.50	-2.93
POC-2	44.68	42.98	12.54	9.84	68.31	66.72	-1.59
POC-3	4.98	4.43	5.44	13.21	11.81	11.60	-0.21
POC-4	1.09	0.72	11.51	6.02	1.76	1.75	-0.01

(Excel Engineering, 2021, Table 3-1)

3.8 Mineral Resources

This section provides a summary of the potential mineral resources impacts caused by implementation of the Project. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. No comment letters regarding mineral resources were received.

3.8.1 Existing Conditions

3.8.1.1 General Geologic Setting

The Project site is situated within the western portion of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges province occupies the southwestern portion of California, extending southward from the Transverse Ranges and Los Angeles Basin to the southern tip of Baja California. In general, the province consists of young, steeply sloped, northwest trending mountain ranges underlain by Late Jurassic to Early Cretaceous-age metavolcanic and metasedimentary rock and Cretaceous-age igneous plutonic rock of the Peninsular Ranges Batholith. The westernmost portion of the province is predominantly underlain by younger marine and non-marine sedimentary rocks. The Peninsular Ranges' dominant structural feature is northwest-southeast trending crustal blocks bounded by active faults of the San Andreas transform system.

Published regional geologic maps indicate the site is underlain by metamorphic Santiago Peak Volcanics. Based on information gathered during subsurface explorations, the site is underlain by metamorphic Santiago Peak Volcanics and a sedimentary unit likely associated with the Santiago Formation. These units are mantled by relatively thin veneers of surficial soils including undocumented artificial fill, colluvium and residual soil. The following section contains a summary of the soil and bedrock units encountered onsite. Description of these geologic units, as observed during AGS's investigation, are presented below. Test pit logs are presented in Appendix B of Appendix F1.

The geotechnical investigations identified the following surficial units and geologic formations on the Project site:

- Artificial Fill-undocumented (afu)
Undocumented artificial fill soils were locally encountered in test pit TP-6 to a depth of eight feet. As encountered these materials can generally be described as brown to gray, silty clay in a dry to moist and loose/soft to stiff condition. Based on a review of historical satellite imagery of the Project site, it appears that minor grading/mining operations were conducted during the mid-1990's in the lower, central and southeasterly portions of the site.
- Alluvium
Alluvium was encountered in several test pits at the southeasterly boundary of the site. As encountered, these materials can generally be described as brown, silty to clayey sand with gravel in a moist and loose condition. The alluvium ranged from 3 to 9 feet in thickness.

Alluvium is also anticipated to exist within the northwesterly drainage on-site. Subsurface exploration within this area was precluded due to environmental constraints.

- Colluvium (Qcol)
A relatively thin veneer colluvium mantles a majority of the Project site and was encountered the majority of the test pits. The colluvium can generally be described as grayish brown/brown to reddish brown, silty to sandy clay in a dry to moist and loose to stiff condition. The colluvium ranged from 3 to 8 feet in thickness.
- Santiago Formation (Map Symbol Tsa)
Sedimentary bedrock materials which appear to be related to the Tertiary-aged Santiago Formation were encountered across the site below the surficial units and were observed to non-conformably overlie the Santiago Peak Volcanics. These materials ranged from three to 23 feet in thickness. As encountered, these materials can generally be described as gray to greenish gray to light brown, soft to hard, clayey sandstone and claystone.
- Santiago Peak Volcanics (Map Symbol Jsp)
Santiago Peak Volcanics were encountered at depth in many of the test pits across the site and are anticipated to underlie the remaining portions of the site beneath the Santiago Formation. The Santiago Peak Volcanics are generally comprised of metavolcaniclastic and metasedimentary bedrock. As encountered, these materials are completely to slightly weathered and moderately hard to very hard, generally reducing to 8-inch minus rock fragments in the highly weathered zones and 12-inch minus in the moderately weathered zones. Some rock fragments greater than 12-inches were encountered. A residual soil horizon on the order of two (2) feet thick locally mantled the intact bedrock in several test pits. Jointing observed within the unit typically ranged from tight to blocky and widened with depth. The excavator encountered refusal in the Santiago Peak Volcanics at depths between 6.5 feet and 19 feet during the due diligence investigation.

For a more detailed description and analysis of the on-site geology, refer to EIR Section 3.5, *Geology and Soils*.

3.8.1.2 Regional and Local Mineral Resources

According to information for the California Department of Conservation, the closest mine to the Project site is the San Pasqual Quarry, located approximately 10 miles east of the Project site.

3.8.1.3 On-Site Mineral Resources

Based on site reconnaissance and research performed by AGS, Inc., there is no information or reason to believe that any commercially viable mining resources currently exist on the Project site. There is evidence that minor mining operations were conducted during the mid-1990's in the lower, central and southeasterly portions of the Project site. (AGS, Inc., 2016, p. 8) There may be minor opportunities to obtain rock and aggregate materials during grading of the site; however, the quantities of these

materials are expected to be limited. Furthermore, any potential mining opportunities on the Project site would be well below the limiting threshold criteria for regionally significant mineral deposits, as described below.

3.8.1.4 Regulatory Setting

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA) mandated the initiation of a mineral land classification and designation process to help identify and protect mineral resources in the State that are subject to urban expansion and other irreversible land uses that would preclude mineral extraction. Classification is the process of identifying lands containing significant mineral deposits. Designation is the formal recognition by the State Mining and Geology Board of areas containing mineral deposits of regional or statewide importance. CDMG established Guidelines for Classification and Designation of Mineral Lands to guide the classification and designation of mineral resources. Based on the Guidelines, to be considered significant for purposes of classification of mineral resources, a mineral deposit must meet the following criteria:

- Marketability – the mineral deposit must be minable, processable, and marketable under the technologic and economic conditions that exist at present or are expected to exist in the next 50 years.
- Threshold Value – for deposits that meet the marketability criteria, the deposit must meet a minimum threshold value. The threshold amount depends on the type of mineral material, as follows:
 - construction materials – minimum threshold value of \$12,500,000
 - industrial and chemical mineral material – minimum threshold value of \$2,500,000
 - metallic and rare minerals – minimum threshold value of \$1,250,000

Mineral deposits that are considered significant based on the above criteria are further classified based on a determination of the Mineral Resource Zone (MRZ) in which the deposits are located. The State has established criteria with respect to MRZ classification that are based on a geologic appraisal of the mineral resource potential of the land. This appraisal includes research of geologic and mining-related literature, compilation of geologic maps, site investigations, sampling, surveys, and mapping, as appropriate. The following MRZ categories are used by the State Geologist in classifying California's lands:

- MRZ-1 are areas where available geologic information indicates that no significant mineral deposits are present or where little likelihood exists for their presence.
- MRZ-2 are areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. A typical MRZ-2 area would include an operating mine or an area where extensive sampling has indicated the presence of a significant mineral deposit.

- MRZ-3 are areas that contain known mineral deposits that may qualify as significant mineral resources, pending further exploration and evaluation. Further exploration within these areas could result in the reclassification of specific areas into the MRZ-2 category.
- MRZ-4 are areas where geologic information does not rule out either the presence or absence of mineral resources and further exploration and evaluation is required. Further exploration could result in the reclassification of MRZ-4 lands into the MRZ-1 or MRZ-2 categories.

3.8.2 Analysis of Project Effects and Determinations as to Significance

3.8.2.1 Loss of a Known Mineral Resource

Guidelines for the Determination of Significance

A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect on mineral resources, absent specific evidence of such an effect.

- On or within the vicinity (generally up to 1,300 feet from the site) of an area classified as MRZ-2; or
- On land classified as MRZ-3; or
- Underlain by Quaternary alluvium; or
- On a known sand and gravel mine, quarry, or gemstone deposit; and
- The project will result in the permanent loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and
- The deposit is minable, processable, and marketable under the technologic and economic conditions that exist at present or which can be estimated to exist in the next 50 years and meets or exceeds one or more of the following minimum values (in 1998 equivalent dollars):

Construction materials (sand and gravel, crushed rock)	\$12,500,000
Industrial and chemical mineral materials (limestone, dolomite, and marble [except where used as construction aggregate]; specialty sands, clays, phosphate, borates and gypsum, feldspar, talc, building stone, and dimension stone)	\$2,500,000
Metallic and rare minerals (precious metals [gold, silver, platinum], iron and other ferroalloy metals, copper, lead, zinc, uranium, rare earths, gemstones and semi-precious materials, and optical-grade calcite)	\$1,250,000

Guidelines Source

The Significance Guideline for loss of a known mineral resource is from the County of San Diego Guidelines for Determining Significance – Minerals (County of San Diego, July 30, 2008), which addresses question (a) of Section X in Appendix G of the CEQA Guidelines. A significant impact would occur if the Project contains areas designated as MRZ-2 or MRZ-3 and the mineral resources present have been determined to be minable, process-able, and marketable under the technologic and economic conditions that exist at present or that can be estimated to exist in the next 50 years and meets or exceeds the State Geologist minimum dollar values for mineral resources.

Analysis

The Project site is located within an area Designated MRZ-3 defined by the MRZ map of the County’s Production-Consumption Region Boundary as designated by California Division of Mines and Geology (CDMG). According to the California Department of Conservation (CDC), the Project site occurs within an area that has not been studied for mineral resources (CDC, 2021b). Therefore, the Project site does not contain any known mineral resources that would be of value to the region or the residents of the State. No lands in the Project site’s vicinity are classified or designated by the State as containing mineral resource deposits, and the nearest known surface mine is located approximately 10 miles east of the Project site. Accordingly, with implementation of the Project there would be no impact to known mineral resources.

3.8.2.2 Delineated Mineral Resource Recovery Sites

Guideline for the Determination of Significance

A significant impact to mineral resources would occur due to the following:

- The Project would 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.

Guidelines Source

The Significance Guideline for impacts to delineated mineral resource recovery sites is from the County of San Diego Guidelines for Determining Significance – Minerals. It addresses question (b) of Section X in Appendix G of the CEQA Guidelines, and requires identification of projects that would result in the loss of availability of mineral resources on lands zoned as S82 Extractive Use Zone.

Analysis

The General Plan designates the Project site as “Semi-Rural Residential” land uses and does not propose or plan for operation of mineral resource extraction on the Project site. Therefore, any mining operation or mining activity would be inconsistent with the land uses planned for the Project site.

Per the San Diego County Zoning Ordinance, mining and extractive uses are allowed within the S82 (Extractive Use) zone. The entire Project site is zoned for “Rural Residential” and “Open Space” and does not include any area zoned S82 (Extractive Use). Therefore, implementation of the Project would not result in the permanent loss of availability of a locally important mineral resource recovery site. Therefore, mining activities on the Project site would be inconsistent with the planned land uses and the impact related to a delineated mineral resource recovery site is considered less than significant.

3.8.3 Cumulative Impact Analysis

Mineral resources, particularly sand, gravel, and rock are a regional resource and are generally defined by the MRZ map of the County’s Production-Consumption Region Boundary as designated by CDMG. As described above in Section 3.8.1.4, MRZ-3 zones are areas that contain known mineral deposits that may qualify as significant mineral resources, pending further exploration and evaluation. Implementation of the Project would not result in significant direct impacts to known mineral resources because the Project site does not contain any known mineral resources that would be of value to the region or the residents of the State or the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

As discussed above, implementation of the Project would not impact mineral resources designated by the CDMG. Therefore, the Project would not contribute to any significant cumulative mineral resource impacts that may accrue from other projects in the region.

3.8.4 Significance of Impacts Prior to Mitigation

Based on the above analyses, implementation of the Project would not result in any significant direct, indirect, or cumulative impacts to mineral resources.

3.8.5 Mitigation

As discussed above, implementation of the Project would not result in any significant impacts to the availability of mineral resources. Therefore, no mitigation is required.

3.8.6 Conclusion

As discussed above, the Project site is not identified to contain known mineral resources or locally important resources delineated on a local plan, lacks sufficient geologic materials for significant mining opportunities, and has no known commercially valuable mineral resources. In addition, the existing and planned land uses and zoning for the Project site preclude mining activity. Therefore, implementation of the Project would not result in loss of availability of a known mineral resource that would be of value to the region; and would not result in the loss of a mineral resource recovery site delineated on an adopted land use plan. Therefore, impacts related to mineral resources resulting from implementation of the Project are considered less than significant.

3.9 Population and Housing

An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. One comment letter related to population and housing was received. Beth Houser (received September 23, 2022) noted that the Project would result in an increase in population.

3.9.1 Existing Conditions

There are no residential structures suitable for occupation currently located within the Project site boundaries. There are thus no applicable regulations that pertain directly to the environmental consequences of displacement of housing or people for the Project.

3.9.2 Analysis of Project Effects and Determinations as to Significance

Guidelines for the Determination of Significance

A significant impact associated with population and housing would occur if the Project would:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. I

Refer to EIR Chapter 1.0, Section 1.8 for a discussion of potential growth inducement including the construction of additional housing in the area surrounding the Project site. As concluded in Section 1.8, the Project would not be growth inducing.

Guidelines Source

The above identified significance guidelines are based on CEQA Guidelines Appendix G, issue XIII, thresholds (b) and (c).

Analysis

This analysis evaluates the Project as a whole. Proposed off-site activities are limited to minor modifications along existing roadways to upgrade local access, accommodate Project access points, and install Project utilities; these would have no impacts on population or housing and are not addressed separately.

Due to the absence of on-site housing, the Project would not displace any existing housing. To the contrary, the Project would provide new housing opportunities, resulting in a gain of 76 dwelling units and approximately 213 residents, including seven affordable housing units, in an area accessible to employment, shopping, and recreational opportunities. Thus, the Project would not result in the displacement of any residents. As a result, no impacts would occur relative to displacement of substantial numbers of housing or people.

3.9.3 Cumulative Impact Analysis

It is expected that all of the cumulative projects identified in Table 1-3, *List of Cumulative Projects*, would be built in accordance with the San Diego County General Plan. Some of those cumulative projects would result in displacements of residences or people, and would substitute a greater number of new dwelling units, resulting in a net housing gain. Regardless, as the Project would have no impacts to population and housing; therefore, the Project's contribution to any cumulative effect would be less-than-cumulatively-considerable and no impacts to population and housing would occur.

3.9.4 Significance of Impacts Prior to Mitigation

No Project-related environmental impact associated with population and housing would occur.

3.9.5 Conclusion

Based on the analysis provided above, no direct or cumulatively considerable impacts to population and housing would result from implementation of the Project.

3.10 Public Services

The following section addresses schools, fire protection, and police protection. The Project's Fire Protection Plan (FPP) (Dudek 2024, *Appendix M1* of this EIR, and additionally discussed in Sections 3.6 and 3.13), provided information for the fire service discussion. Project Facility Availability Forms are provided in *Appendix N* of this EIR for school and fire services. Please refer to Section 3.11, *Recreation*, for discussion of parks. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Six comment letters related to public services were received. Danielle Allison (received September 23, 2022) noted the wildfire potential of the abutting open space. The City of San Marcos (received September 29, 2022) requested that the EIR analyze potential Project impacts to the City of San Marcos parks. Jay Petrek (received October 3, 2022) noted the locations of the nearest fire station park with active recreation amenities and expressed concern regarding development impact fees and property taxes. Jessica Heinz (received September 26, 2022) noted that the proposed Project could rely on public services from the City of San Marcos, which would not be receiving property tax income from the Project. Jodi Rowin (received September 23, 2022) requested that overcrowding of local schools be addressed. Beth Houser (received September 23, 2022) expressed concern regarding the capacity of local schools.

3.10.1 Existing Conditions

3.10.1.1 *Service Facilities, Capacities, Standards and Timing*

Fire Protection and Emergency Services

The Project is located within the Rancho Santa Fe Fire Protection District (RSFFPD) responsibility area; however, the closest fire station, RSFFPD Station 6, is 2.46 miles from the Project site. The City of Carlsbad provides fire service to areas west of the Project site and operates a fire station located approximately 1.55 miles west of the Project site. Additionally, the City of San Marcos provides fire service to areas north and east of the Project site and operates a fire station located approximately 2.29 miles east of the Project site. Given its proximity and ability to meet the County's 5-minute travel time requirement, Carlsbad Fire Department Station 6 would serve the Project site, per the North County Boundary Drop Program.

Based on current resources, there are up to three staffed fire stations with three different fire agencies in the area. The RSFFPD is a combination fire agency that uses both paid and volunteer reserve firefighters. Initial response to the Project site would be from Carlsbad Fire Department Station 6, which is located at 7201 Rancho Santa Fe Road, in Carlsbad, approximately 1.55 road miles from the Project site. Carlsbad Fire Department Station 6 has three full-time firefighters (captain, engineer, and fighter fire/paramedics and the following apparatus: (Dudek, 2023, p. 37)

- Type I engine
- Type III brush engine

Fire Station 6 responds to approximately 87 calls per month. Vegetation fires require special apparatus and, depending on weather and fuel conditions, may require a significant response. Carlsbad Fire

Department and RSFFPD would be able to call on all of its wildfire apparatus, and depending on the size of the fire, neighboring and regional fire agencies would be dispatched along with the full CAL FIRE response weight, outlined as follows. (Dudek, 2023, p. 37)

Local Government response:

- Two (2) Type I Engine
- Five (5) Type III Engines
- Water tender
- Two (2) Battalion Chiefs

Full CAL FIRE response:

- Five (5) to ten (10) Type III engines (depending on dispatch level)
- Battalion chief
- Three (3) fixed-wing aircraft (two tankers and air attack)
- Dozer
- Two (2) hand crews
- Two (2) helicopters

Of the existing fire stations in the vicinity of the Project, San Marcos' Fire Station 4 is the second closest. San Marcos Fire Station 4 is located at the intersection of San Elijo Road and Ledge Street, approximately 2.29 miles from the Project Site. It houses a staffed engine company. This location does allow for a five-minute travel time to a majority of the Project site. (Dudek, 2023, p. 38)

Currently, the closest ladder truck is housed at San Marcos Fire Station 1 in San Marcos, approximately 5.6 road miles northeast of the Development Footprint, although no Project structures would trigger ladder truck response as all are below 30 feet roof height. (Dudek, 2023, p. 38)

Law Enforcement

The Project site is currently served by the San Diego County Sheriff's Department from the San Marcos station located at 182 Santar Place. This station serves the Project area, City of San Marcos, and unincorporated portions of San Diego County surrounding the cities of San Marcos and Escondido. The San Marcos Station consists of more than 100 deputies, volunteers, and professional staff members. (SDCSD, 2023)

County Sheriff's Department

The San Diego County Sheriff's Department classifies calls for services into the following four categories:

- Priority 1: Life-threatening situations, serious injury vehicle accidents, plane crashes, etc.
- Priority 2: Felony crimes-in-progress, domestic violence, rape, missing persons-at-risk.
- Priority 3: Incomplete 911 calls, persons under the influence, found juveniles, etc.

- Priority 4: Assaults, cold crime reports, disturbances, vandalism, trespass, etc.

The Sheriff's Department uses two measures to determine if its responses to calls are meeting response time standards. "Received to Arrival" measures the time between when the communications center receives the call and when the deputy arrives on the scene. "Dispatched to Arrival" measures the time between when the call is dispatched from the communication center and when the deputy arrives on the scene. For analysis purposes, the "Received to Arrival" measure is used in this EIR because it most closely represents overall response times for law enforcement services.

Schools

The Project site is located within the service area of the San Marcos Unified School District (SMUSD) for K-12 education. SMUSD serves the major portion of the City of San Marcos and portions of the surrounding unincorporated area including the Project site.

SMUSD currently operates 10 elementary schools, three middle schools, four high schools, and two combined elementary and middle schools. All students generated by Project development would attend existing schools within the San Marcos area. The Project would be served by Carrillo Elementary School for K-5 students located approximately 4.2 miles from the Project site; students grade 6-8 would be served by San Elijo Middle School located approximately 0.65 mile from the Project site. High school students would attend San Marcos High School, located approximately 4.6 miles from the Project site.

Parks

Existing Local Park Facilities

Public parks in the vicinity of Project site are located within the City of San Marcos and the City of Carlsbad, including: San Elijo Park, located approximately 0.5 mile northeast of the Project site, which is developed with a trail connection, lighted ballfield and multi-purpose field, picnic area, splashpad area, restroom, tot lot and horseshoe court; Cadencia Park, which is located approximately 1.4 miles east of the Project site and is developed with open play grass area and a children's playground; and Stagecoach Community Park, located approximately 1.8 miles southwest of the Project site, which is developed an athletic field, basketball court, picnic facilities, gymnasium, sand lot, tennis court, restrooms, a tot lot and turf play area.

Libraries

The County of San Diego has 20 library facilities serving the North County area. Nearby facilities are located in San Marcos, Vista, Encinitas, and Rancho Santa Fe. Bookmobile service provides circulation and distribution in rural areas. The Project site lies within the service area of the County's San Marcos library branch.

3.10.1.2 Regulatory Setting

Fire Protection

California Code of Regulations Title 24, Part 2 and Part 9

Part 2 of Title 24 of the CCR refers to the California Building Code which contains complete regulations and general construction building standards of State adopting agencies, including administrative, fire and life safety and field inspection provisions. Part 2 is preassembled with the 2012 International Building Code with necessary California amendments. Part 9 refers to the California Fire Code, which contains fire safety-related building standards referenced in other parts of Title 24, and is described in Section 3.1, *Wildfire*, of this EIR.

Safety Element of the 2011 County General Plan

The Safety Element states that for unincorporated “Village” areas and limited Semi-Rural Residential Areas, the maximum travel time for emergency response is five minutes for single-family uses (County of San Diego, 2011a). The Project would be serviced by Carlsbad Station 6. Travel time to the site is less than four minutes. Additional analysis is included below, under the discussion of impacts to fire protection and emergency services.

San Diego County Board of Supervisors Policy I-84

County Board of Supervisors Policy I-84 establishes procedures for using Project Facility Availability forms, and in certain cases, Project Facility Commitment forms, for the processing of major and minor subdivisions and certain other discretionary land use permits. The standardized procedural forms are used to: (1) obtain information on special districts and other facility providers regarding facility availability for public sewer, water, school and fire services; (2) ensure that this information is reviewed by the appropriate decision-making body; and (3) provide data to the facility provider in order to determine what capital improvements are required to serve the Project.

Law Enforcement

There are not many regulations that specifically pertain to the issue of law enforcement facilities. The Law Enforcement Facilities Master Plan was prepared in 2005 by the San Diego County Sheriff's Department to guide facility decisions and development over the next 15 years. New or expanded facilities proposed under the County's jurisdictional authority are typically required to obtain a Site Plan or MUP. In addition, any future facility development for San Diego County Sheriff's Department law enforcement services would be required to conduct environmental review pursuant to CEQA prior to approval.

Schools

Senate Bill 50/CA Government Code Section 65995

SB 50 was signed into law in 1998, imposing limitations on the power of cities and counties to require mitigation of school facilities' impacts as a condition of approving new development. It also authorizes school districts to levy statutory developer fees at a higher rate for residential development than previously allowed. SB 50 amended Government Code Section 65995(a) to provide that only those fees expressly authorized by law (Education Code Section 17620 or Government Code Sections 65970, et seq.) may be levied or imposed in connection with or made conditions of any legislative or adjudicative act by a local agency involving planning, use, or development of real property.

County of San Diego School Facilities Mitigation Ordinance (7966)

This ordinance requires mitigation of school facilities impacts prior to legislative action on a project. "Legislative Action" for the purposes of this ordinance includes adoption of a Specific Plan; a General Plan Amendment, including a Community Plan Update; and/or adoption of a Rezone, etc. The ordinance requires execution of a binding agreement between an applicant and the affected school district prior to those legislative approvals. Such an agreement can consist of a statement by the affected district that fees routinely assessed at the building permit stage are sufficient to mitigate impacts, and that no agreement is necessary.

Parks

County Park Land Dedication Ordinance (PLDO)

The County PLDO requires dedication of land or payment of an in-lieu fee for the provision of neighborhood or community parks that provide active recreational uses. The Recreation Element of the County General Plan specifies that neighborhood parks should be 5 to 20 acres and community parks should be 20 to 100 acres. For land within the San Dieguito Local Park Planning Area (LPPA), the dedication requirement is 360.68 s.f. of park space per dwelling unit or payment of an in-lieu fee. For the proposed 76 dwelling units, the dedication requirement would be 0.63 acre.

3.10.2 Analysis of Project Effects and Determinations as to Significance

Guideline for the Determination of Significance

A significant impact to public services would occur if the Project would:

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 and emergency services;
- Law enforcement facilities;
- Schools;
- Parks;
- Other public facilities.

Guidelines Source

The significance thresholds for public services are based on Appendix G of the CEQA Guidelines.

Analysis

Fire Protection and Emergency Services

As indicated in Table 7 of the Project's FPP, *Appendix MI*, using San Diego County Fire Agencies' estimate of 82 annual calls per 1,000 population, the Project's conservatively estimated 219 permanent residents would generate approximately 18 calls per year (0.05 calls per day). Of these calls, at least 44% are expected to be medical emergencies and 9% fire-related calls, based on typical call volumes reported by North County Dispatch JPA between 2017-2019.

The Project would be subject to the San Diego County General Plan five-minute travel time standard post-development based on its parcel sizes and Project densities and applying the most restrictive travel time. To understand fire department response capabilities, Dudek conducted an analysis of the travel-time response coverage from the three closest fire stations. Table 3.11-1, *Responding Fire Stations Summary*, presents a summary of the location, maximum travel distance, and travel time for the three closest stations. Travel distances are derived from Google road data while travel times are calculated applying the nationally recognized Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard formula ($T=0.65 + 1.7 D$, where T = time and D = distance). The ISO response travel time formula discounts speed for intersections, vehicle deceleration and acceleration, and does not include turnout time.

Based on the Project site location in relation to existing Carlsbad Fire Station 6, travel time to the site for the first responding engine to the furthest parcel of the Project is less than four minutes. Secondary response would arrive in under six minutes from either RSFFPD Station 6 or San Marcos Fire Station 4. Based on these calculations, emergencies within the Project can be responded to according to San Diego County General Plan five-minute travel time standard. That is, when dispatch (1.0 minute) and turnout time (1.5 minutes) are added to the calculated travel time from Carlsbad Station 6, the total response time is approximately 5.5 to 6.5 minutes for the site. Therefore, the Project complies with the County's response time standards.

There are automatic aid agreements and dropped boundary agreements on first alarm or greater emergency calls with surrounding communities, ensuring that the closest unit will be dispatched,

regardless of jurisdictional boundaries. The RSFFPD is also part of both the San Diego County and State of California Master Mutual Aid Agreements.

The Project includes a modest number of new homes which would not substantially impact Carlsbad Fire Station or RSFFPD response times and capabilities. Additionally, the requirements described in the FPP are intended to aid fire-fighting personnel and minimize the demand placed on the existing emergency service system. The Project's demand for fire services would not result in the need for a new or physically altered fire station. As such, the Project would not result in significant impacts to fire protection and emergency services.

Law Enforcement

The nearest Sheriff's Department substation is located at 175 North El Camino Real, in Encinitas, CA, approximately 4.2 miles southwest of the Project site. Officers respond depending on such factors as type of call, call priority, previous calls pending, time of day, location of the responding squad car and amount of traffic.

The provision of sheriff department personnel is funded through the County's general fund, revenues for which come largely from property taxes. Service demand would be likely to increase with implementation of the Project, but it is anticipated that expanded police protection services would be funded, as necessary, from increased property taxes and other revenues to the County resulting from the Project. The Project's demand for sheriff services would not result in the need for a new or physically altered sheriff's station. As a result, the Project would not generate a significant direct impact to police protection. Accordingly, potential Project impacts to police protection services would be less than significant.

Schools

The Project would generate new school-aged students. As indicated in Table 3.11-2, *Project-Related Student Generation*, the Project is anticipated to generate 18 elementary school aged students, 8 middle school-aged students, and 10 high school-aged students for a total of 36 students.

It is anticipated that the Project's generation of elementary, middle, and high school students would be accommodated by existing and planned facilities. The need for additional school facilities and related services is addressed through compliance with payment of required school impact fees. SB 50 sets forth a state school facilities construction program that includes restrictions on a local jurisdiction's ability to condition a project on mitigation of impacts on school facilities in excess of fees set forth in Section 17620 of the California Education Code. These fees are collected by school districts at the time of issuance of building permits for commercial, industrial, and residential projects. The SMUSD would be able to collect these school impact fees for development on the Project site. The State Legislature has declared that the payment of school impact fees constitutes full mitigation for the impacts generated by new development, per Section 65995 of the California Government Code. Since required impact fees would be paid, the Project would mitigate the impacts associated with its activities. Thus, impacts from implementation of the Project on school services in the SMUSD would be less than significant.

The Project would not result in the need for new or physically altered school facilities and no physical environmental impacts would result. Impacts would be less than significant.

Parks

The Project would be required to dedicate 0.63 acre of neighborhood or community parks pursuant to the County PLDO or pay an in-lieu park fee. The County ordinance allows the development of private parks but reduces the parkland dedication credit for private parkland to 50 percent of the park acreage. To fulfill the requirements of the PLDO, the Project includes 0.31 acre of private parkland within the Project site. Because private park acreage totals are calculated at 50 percent for purposes of PLDO satisfaction, an additional 0.47 acre of parkland would be required to meet the required 0.63 acre of parkland. The remaining PLDO requirement would be satisfied through the payment of in lieu fees. The development of a private park and a trail connection are components of the Project's design. One private park totaling 0.31 acre is planned as part of the Project and would be operated and maintained by the Homeowners Association (HOA). In addition, the Project includes approximately 64 acres of open space. A 10-foot-wide public trail made of decomposed granite is proposed along the eastern boundary of the development area which would connect to the existing portion of the Copper Creek Trail located along southeastern boundary of the Project site (Figure 1-8). Parking spaces for trail access would be privately maintained, while public trail easements would be dedicated to the County. Note that the Project trail would be open to the public, however the associated acreage would not be counted towards PLDO requirements.

Impacts from construction of the private on-site recreational park have been addressed as part of the Project and have been analyzed throughout this EIR. Mitigation measures have been included, where applicable, to avoid or reduce impacts from construction and operation of the Project to less-than-significant levels. Therefore, construction and operation of the proposed park would not have any additional impacts beyond those identified in this EIR and impacts from construction of local parks would be less than significant.

Libraries

At buildout the Project would result in an incremental increase in the local demand for library facilities. Library facilities would be provided by the San Marcos library and additional library services that are available in the County through a cooperation of County libraries and independent city libraries which enables County library cardholders to check out library books from other member libraries.

The existing and planned library facilities in addition to the San Marcos library would be able to provide acceptable service to existing patrons and meet future demand associated with the Project. Thus, impacts to library facilities as a result of the Project would be less than significant.

3.10.3 Cumulative Impact Analysis

3.10.3.1 *Fire Protection and Emergency Services*

The geographic scope for analysis of cumulative fire protection impacts includes areas served by the Carlsbad Fire Station 6 and RSFFPD. Although the Project would be adequately serviced by fire protection services, based on the proximity and response times estimated from nearby fire station facilities, the Project would nonetheless result in an incremental increase in requests for service, which would affect the fire department's ability to provide acceptable levels of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures, increased traffic volumes, and increased population. When considered in the context of on-going cumulative development throughout the service area, such impacts would be cumulatively considerable. However, the Project and all cumulative developments within the Carlsbad Fire Station 6 and RSFFPD service area would be required to contribute development fees. Mandatory fee contributes by the Project and cumulative developments would ensure that adequate funding is provided to RSFFPD for the acquisition of additional facilities, equipment, and personnel. Accordingly, the Project's impact to the RSFFPD is evaluated as less than significant on a cumulative basis with the payment of development fees.

3.10.3.2 *Law Enforcement*

The geographic scope for analysis of cumulative law enforcement impacts include the areas currently served by the Sheriff's substation located in Encinitas. Although the Project site would be adequately served by sheriff facilities, the increased population that would be generated by the Project, when considered in conjunction with other on-going development in the Sheriff's station service area, has the potential to adversely affect service response times. However, the Project and all cumulative developments would be required to contribute development fees, which would help to provide adequate equipment and personnel in the Project area. Therefore, with mandatory payment of development fees, Project impacts to law enforcement services would be less than significant on a cumulative basis.

3.10.3.3 *Schools*

The geographic scope for the cumulative school impact analysis includes the service area of SMUSD. The Project, when considered in conjunction with on-going development throughout the SMUSD service area, would cumulatively affect the ability of the school district to provide school services. The need for additional school facilities and related services is addressed through compliance with payment of required school impact fees. Pursuant to the Leroy F. Greene School Facilities Act of 1998, payment of school impact fees constitutes complete mitigation for project-related impacts to school services. Therefore, although the Project's impacts to school services would be cumulatively considerable, cumulative impacts would be less than significant with contribution of mandatory school impact fees.

3.10.3.4 *Parks*

The geographic scope for cumulative park and recreation impacts includes the unincorporated portions of San Diego County. The Project would be required to comply with the County PLDO, which implements parkland requirements and species parkland dedication requirements and imposes in-lieu

park fees. Other developments within the County would also be subject to the County PLDO. Compliance ensures there is enough parkland to serve the population. It is important to note that Project residents and residents from cumulative developments may increase utilization of nearby recreation facilities in the area. However, construction of adequate parkland and/or payment of fees by other cumulative developments would ensure the provision of parkland in accordance with County standards and would ensure that cumulatively considerable impacts would not occur.

Construction and operational impacts of the Project's proposed park and recreation facilities have been included as a part of the Project and have been analyzed throughout this EIR. Mitigation measures have been included, as needed, to avoid or reduce these impacts to less-than-significant levels. The Project would not require construction of any additional park facilities beyond those identified in this EIR and would not contribute to any significant cumulative park and recreation facility impacts.

3.10.3.5 Libraries

The geographic scope for cumulative library impacts includes areas served by the San Marcos library and the unincorporated portions of San Diego County. The Project, when considered in conjunction with on-going development throughout the San Marcos library and County library service area, would cumulatively affect the ability of the libraries to provide library services. However, the Project and all cumulative developments would contribute property taxes and would be required to contribute development fees, which could be used for the purpose of acquiring book titles and/or additional library square footage. Accordingly, the Project's impacts to library facilities are evaluated as less than significant on a cumulative basis with payment of property taxes and development fees.

3.10.4 Significance of Impacts Prior to Mitigation

As discussed throughout sections 3.10.2 and 3.10.3, the Project would not result in direct or cumulatively significant impacts to public services.

3.10.5 Mitigation

As discussed above, implementation of the Project would result in less-than-significant impacts to public services. Therefore, no mitigation is required.

3.10.6 Conclusion

As described above, the Project was determined to have no physical impacts to fire protection and emergency services, law enforcement, and schools, with payment of impact fees. Also, there are no significant environmental effects particular to the on-site park proposed as part of the Project and the park is evaluated throughout this EIR as an inherent part of the Project's design. Therefore, implementation of the Project would not result in any significant impacts to public services.

Table 3.10-1 Responding Fire Stations Summary

Station	Location	Maximum Travel Distance*	Travel Time**
RSFFPD Station 6	20223 Elfin Forest Road, Elfin Forest	2.84 mi.	5.48 min.
Carlsbad Fire Station 6	7201 Rancho Santa Fe Road, Carlsbad	1.8 mi.	3.71 min.
San Marcos Fire Station 4	204 San Elijo Road, San Marcos	2.67 mi.	5.19 min.

* Distance measured to the Project's entrance.

** Assumes travel time to the furthest parcel, an adjusted speed based on the ISO travel time formula and does not include turnout time.

(Dudek, 2023, Table 9)

Table 3.10-2 Project-Related Student Generation

School Type	Dwelling Units	Student Generation Rate	Project Generated Students
Elementary	76	0.2297	18
Middle	76	0.0993	8
High	76	0.1234	10
Total			36

3.11 Recreation

3.11.1 Existing Conditions

3.11.1.1 Existing Parks and Recreational Facilities

The County Parks and Recreation Department provides parks and recreational opportunities for residents and visitors in the vicinity of the Project site. There are more than 48,000 acres of recreational facilities within the County including local and regional parks (active and passive), campgrounds, 350 miles of trails, fishing lakes, recreation centers and sports complexes, ecological preserves, and open space preserves. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Four comment letters were received related to recreation. Ed Philbrick (received September 27, 2022) noted the current recreational uses of the existing open space on the Project site. Camille Perkins (received October 3, 2022) requested that the Project not include trails through Copper Creek and Rancho La Costa Preserve. Jay Petrek (received October 3, 2022) requested that the Project coordinate with the City of San Marcos to ensure future trail linkages. The City of San Marcos (received September 27, 2022) requested that the EIR address the recreational facilities on the Project site.

Additional nearby public parks are located within the City of San Marcos and the City of Carlsbad and include: San Elijo Park, located approximately 0.5 mile northeast of the Project site, which is developed with a trail connection, lighted ballfield and multi-purpose field, picnic area, splashpad area, restroom, tot lot and horseshoe court; Cadencia Park, which is located approximately 1.4 miles east of the Project site and is developed with open play grass area and a children's playground; and Stagecoach Community Park, located approximately 1.8 miles southwest of the Project site, which is developed an athletic field, basketball court, picnic facilities, gymnasium, sand lot, tennis court, restrooms, a tot lot and turf play area.

3.11.1.2 Regulatory Setting

Quimby Act

The Quimby Act of 1975 (California Government Code Section 66477, adopted 1975 and amended 1982), part of the Subdivision Map Act, requires developers seeking subdivision approvals to assist in mitigating the potential impacts resulting from improvements that may directly or indirectly increase the need for recreational facilities or park lands within a given city or county. In 1982, the Quimby Act was amended to allow local governments to be held accountable for imposing park development fees. The 1982 amendment to AB 1600 requires that agencies demonstrate a reasonable relationship between the public need for a recreational facility or park land and the development upon which the fee is being imposed. Cities and counties were required to show a strong direct relationship (or nexus) between park fees imposed and a proposed development. As a result, local ordinances are required to include specific standards for identifying the percentage of a subdivision to be dedicated and/or the relative fee that is required based on standards for local jurisdiction park lands. The Act establishes a maximum of 3 acres of park land dedication/fee per 1,000 residents unless the amount of existing neighborhood and community park land exceeds that limit (at the time of adoption). If the 3 acres per 1,000 residents

standard is exceeded, a greater standard of 5 acres per 1,000 residents may be adopted by the jurisdiction in order to meet anticipated park land needs.

County General Plan

The Project site is located within the boundaries of the San Diego County General Plan. The Land Use Element (Chapter 3) and the Conservation and Open Space Element (Chapter 5) of the General Plan provide background information, policies, and measures aimed at the acquisition, provision, and maintenance of public recreational resources within San Diego County. Goals and policies given in the Land Use Element (LU-Chapter 7) and Conservation and Open Space Element (COS Chapter 5) of the General Plan are applicable to the Project with regard to recreation and are each addressed in Section 3.1.6 5 of this EIR. The General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific to development such as the Project.

Goal COS-21: Park and Recreational Facilities states that park and recreation facilities that enhance the quality of life and meet the diverse active and passive recreational needs of County residents and visitors, protect natural resources, and foster an awareness of local history, with approximately 10 acres of local parks and 15 acres of regional parks provided for every 1,000 persons in the unincorporated County. Per the County General Plan EIR (County 2011a), the current estimated population for the unincorporated County area is 678,270; therefore, the General Plan requirement would be satisfied by approximately 6,780 acres of local park land and 10,170 acres of regional parkland. (County Park demand increases as the County residential population increases.)

Zoning Ordinance Section 4900 – Usable Open Space Regulation

These regulations promote the availability of outdoor areas for leisure and recreation throughout San Diego County by establishing requirements for minimum areas of usable open space for residential developments with three or more dwelling units per lot or building site. The provisions for usable open space include standards for surfacing, location, size and shape, accessibility, openness, screening, and maintenance of the required usable open space.

Community Trails Master Plan (Subdivision Ordinance Sec. 81.706.1 through 81.707 and Regulatory Code Sect 812.201 et. seq.)

The Board of Supervisors adopted the County Trails Program (CTP) on January 12, 2005, and incorporated the CTP into the General Plan. The CTP has various components, including the Community Trails Master Plan (CTMP). The CTMP contains the 22 individual community trail and pathway maps. The Project is located in the San Dieguito area.

A number of existing and proposed community trails are located along public rights-of-way and over private property in the vicinity of, or on, the Project site, consistent with the CTMP (County 2009). These facilities are designed to be located in close proximity to residents, and to provide transportation, recreation, access, infrastructure, linkages and safe routes throughout a community. North of the Project site along the southern side of San Elijo Road is the existing Copper Creek Trail located in the

City of San Marcos. Additionally, along the northern side of San Elijo Road north of the Project site, is the existing Quarry Trail also located in the City of San Marcos.

County of San Diego Park Land Dedication Ordinance

Section 66477 of the Government Code enables local governments to require the dedication of land or the payment of an in-lieu fee, or a combination of both, for neighborhood and community park or recreational purposes. The Park Land Dedication Ordinance (PLDO) (County Code sections 810.101 through 810.114) provides the mechanism for implementing Section 66477 of the Government Code in San Diego County. It is the intent of this ordinance to ensure the construction of recreational facilities to adequately serve the residents of the County as well as ensure consistency with the Quimby Act.

The Project would be subject to the requirements of the PLDO, for the San Dieguito Local Park Planning Area (LPPA), which specifies a minimum of 373.74 s.f. of park space per each residential dwelling unit (DU) for developments of 50 DUs or more. The PLDO establishes several methods by which developers may satisfy their park requirements. Options include the payment of park fees, the dedication of a park land, or a combination of these methods. PLDO funds from payment of in-lieu fees must be used for the acquisition, planning, and development of local parkland and recreation facilities. Up to 50 percent of the total acreage of private active recreation areas provided by a development may be used to satisfy up to 50 percent of the PLDO public park land requirement for a development. The balance of the PLDO requirement would need to be satisfied by payment in-lieu if the combination of public and private acreage does not satisfy the requirement.

All PLDO-required parks must be large enough and physically suitable to accommodate amenities typically associated with neighborhood parks and “active recreational uses” as defined in Section 810.102(a) of the PLDO. They must provide adequate off-street parking, restroom facilities, maintenance facilities, and other infrastructure such as utility connections and storm water drainage. Parking lots, retention/detention basins and slopes do not count toward the PLDO acreage requirements.

All park sites must be fully developed to comply with PLDO dedication requirements and require identification of ownership and maintenance responsibilities and related funding mechanisms. Park design and amenities must reflect County development standards.

3.11.2 Analysis of Project Effects and Determinations as to Significance

Guidelines for the Determination of Significance

A significant impact to recreation would occur if the Project would:

- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

Guidelines Source

The identified guidelines are based on Appendix G of the CEQA Guidelines.

Analysis

The development of a private park and a trail connection and privately maintained parking spaces for trail access are components of the Project's design. One private park totaling 0.31-acre is planned as part of the Project and would be operated and maintained by the Project's Homeowners Association (HOA). In addition, the Project includes approximately 64 acres of open space. A 10-foot-wide public trail made of decomposed granite is proposed along the eastern boundary of the development area which would connect to the existing portion of the Copper Creek Trail located along southeastern boundary of the Project site (refer to EIR Figure 1-1). Public trail easements would be dedicated to the County. Note that the Project's trail would be open to the public, however the associated acreage would not be counted towards PLDO requirements.

Park Land Dedication Ordinance Compliance

The Project entails the proposed development of 76 residential homes and would be subject to the requirements of the PLDO, as amended, for the San Dieguito LPPA. This ordinance specifies a minimum of 360.68 s.f. of park space per dwelling unit. This would require that the Project provide approximately 0.63 acre of parkland for the use and benefit of members of the public and future Project residents within an effective service radius (considered to be a maximum of 0.25 mile for pocket parks, and a maximum of 0.5 mile for neighborhood parks).

To fulfill the requirements of the PLDO, the Project includes 0.31 acre of private parkland within the Project site. Because private park acreage totals are calculated at 50 percent for purposes of PLDO satisfaction, an additional 0.47 acre of parkland would be required to meet the required 0.63 acre of parkland. The remaining PLDO requirement would be satisfied through the payment of in lieu fees.

With the provision of the new parks and recreational facilities to serve the Project and the public, combined with the additional PLDO payment, the Project would not increase the use of existing neighborhood parks, regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated.

With regard to the second threshold, the new recreational facilities constitute Project features that are analyzed as part of the Project's physical disturbance footprint throughout this EIR. As discussed in Chapter 2.0 of this EIR, the "footprint" impacts associated with Project features, including new recreational facilities, would be mitigated as warranted. The Project's proposed recreational facilities are inherent components of the Project's design and would not result in construction activities beyond those that are already proposed as part of the overall Project. The proposed on-site facilities would serve Project residents. The on-site trail segment would also be available to the general public, but it is not reasonably foreseeable that substantial additional vehicle traffic and associated vehicle-related effects would be created due to public use of the trail segment, as the trail would be connected to the

existing Copper Creek Trail that is already being used by the public. It is expected that the Project's trail would provide opportunities for longer trail length and not necessarily draw substantially more people to the trail than are already using the Copper Creek Trail. Therefore, the new recreational facilities would not have an adverse physical effect on the environment beyond the construction effects that are an inherent part of the Project's design and discussed throughout this EIR.

Taking all of the above into consideration, recreation demands generated by the Project would be satisfied through the inclusion of on-site private recreational facilities, and payment of PLDO fees. Impacts to recreation would be less than significant.

3.11.3 Cumulative Impact Analysis

Several related cumulative development projects have been recently completed or are planned for development in the vicinity of the Project, as listed in Table 1-3, *List of Cumulative Development Projects*. These future projects include residential developments totaling approximately 450 dwelling units, as well as other types of development, such as medical office, senior living, student living, commercial, office space, and others. Cumulative impacts to recreation of these development projects are discussed below. The significance guidelines used to evaluate Project-specific impacts, described above in Section 3.12.2, also are applicable here.

Regarding use of existing parks, it was determined that implementation of the Project would not have a significant impact on parks and recreational facilities because it would conform to the PLDO, as do other projects in the County. Similar to the Project, the cumulative projects would be required to comply with the PLDO in proportion to their potential impact on the demand for parks and recreational facilities, as required by the County (or similar requirements of other corresponding jurisdictions). Since compliance with the PLDO would be required prior to granting of building permits for all cumulative projects approved by area lead agencies, and a number of compliance avenues exist (e.g., payment of park fees, the dedication of park land, or a combination of these methods), the cumulative projects would provide for an adequate amount of recreational space not increase the use of existing neighborhood parks, regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated. No cumulative regional impact would occur. As noted above, the Project contribution to any regional effect also would be addressed through design and PLDO consistency. Resulting contributions to the less than significant cumulative effect would be less than considerable, and therefore less than significant.

The adverse impacts of any new or expanded recreational facility required for the cumulative projects would be location specific and associated with the companion development, and impacts would be analyzed and addressed separately in a project-level CEQA analysis. The Project's new recreational facilities would not result in cumulatively considerable environmental effects or contribute to a cumulative recreational impact.

As a result, cumulative recreation impacts would be less than significant.

3.11.4 Significance of Impacts Prior to Mitigation

Based on the analysis provided above, the Project would have less-than-significant impacts related to recreation.

3.11.5 Conclusion

Based on the analysis provided above, less-than-significant direct and cumulative impacts related to recreation would result from implementation of the Project.

3.12 Utilities and Service Systems

This section addresses water and wastewater services required for Project development, as well as service providers and facilities needed to meet the demands. The utilities and services evaluated in this section are water supply, wastewater/sewer service, storm drainage, and gas and electric. A completed Project Facility Availability – Sewer form has been received from San Diego County Sanitation District, and a completed Project Facility Availability – Water form has been received from Rincon MWD. These forms are included in *Appendix N*, and the information within them is also summarized below. The potential impacts of the Project related to stormwater are evaluated in detail in the Stormwater Quality Management Plan (SWQMP) and Hydrology Study for the Questhaven Project, both prepared by Excel Engineering. Copies of the two reports are provided as *Appendix I* and *Appendix J*, respectively, to this EIR. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. One comment letter related to utilities and service systems was received. Vallecitos Water District (received September 8, 2022) noted that the Project would require annexation into the district for water and sewer service.

3.12.1 Existing Conditions

3.12.1.1 Water Supply

Olivenhain Municipal Water District

Olivenhain Municipal Water District (MWD) provides water service to the Project area. Olivenhain MWD's service area covers 48 square miles in northern San Diego County, with approximately 87,000 residents, over 29,000 water service connections, over 6,100 sewer connections, over 400 recycled water connections, and over 450 miles of distribution pipeline. Olivenhain Municipal Water District is a member of the San Diego County Water Authority (SDWCA), and purchases all of its water supply from SDCWA. SDCWA in turn purchases its water from Metropolitan Water District (MWD).

Olivenhain MWD prepared an Urban Water Management Plan (UWMP) in 2020 (adopted in June 2021) in compliance with state law, to restructure its then-existing 2015 UWMP in order to comply with the California Department of Water Resources' review process. The 2020 UWMP contains a comparison of projected supply and demands within the district's existing boundaries through the year 2045. Projected potable water resources to meet planned demand primarily would be supplied with imported water purchased from SDCWA. Olivenhain MWD currently supplies approximately 17,100 acre-feet of water per year to serve customer demands.

The Metropolitan Water District of Southern California

Metropolitan Water District of Southern California (Metropolitan) is a consortium of 26 cities and water districts that provides imported water to nearly 21.2 million people in its 38,155-square-mile service area, which includes parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. Metropolitan's primary purpose is to provide a supplemental supply of water for domestic and municipal uses at wholesale rates to its member public agencies. From 2010 through 2019, Metropolitan's provided 40% to 50% of the water needs in its service area from the Colorado

River via the Colorado River Aqueduct (CRA), and from the Sacramento-San Joaquin River Watershed via the State Water Project (SWP). Approximately 50% of the region's water supplies come from resources separately controlled or operated by local water agencies (i.e., water extracted from local groundwater basins; recycling, groundwater recovery, and seawater desalination; surface water, and the Los Angeles Aqueduct). Based on Metropolitan's 2021 UWMP, Metropolitan has supply capabilities sufficient to meet expected demands from 2025 through 2045 under a single dry-year condition and a period of drought lasting five consecutive water years, as well as in a normal water year hydrologic condition. (MWD, 2021)

San Diego County Water Authority

The San Diego County Water Authority (SDCWA) is an independent public agency that serves as a wholesale water supplier to its 24 member agencies. The SDCWA is San Diego County's predominant source of water, supplying from 75% to 95% of the region's needs to the member agencies that purchase water for retail distribution in the SDCWA service territories. The population within the Water Authority's service area was approximately 3.3 million people in 2020 and is projected to increase to approximately 3.8 million people by 2045. In fiscal year 2020, total water demand in the SDCWA's service area was 463,128 AFY, of which 92% was for municipal and industrial (M&I) use and 8% was for agricultural water use. By 2045, the Water Authority's total water demands are projected to reach 630,771 AFY. This projection accounts for planned future water conservation savings. (SDCWA, 2021).

Historically, SDCWA relied solely on imported water supplies purchased from the Metropolitan, but SDCWA has pursued strategies over the last two decades to diversify San Diego's regional water supply portfolio and reduce the region's dependence on water deliveries from Metropolitan. In addition to water deliveries from Metropolitan, SDCWA currently receives water from the Imperial Irrigation District (IID) (through a water conservation and transfer agreement), the Carlsbad Desalination Plant, and dry year carryover storage supplies (in-regional surface water storage and out-of-region groundwater storage in the Central Valley.) The 2020 UWMP presents the SDCWA's water reliability assessments from 2025 through 2045. Each assessment compares total projected water supply and demands over the next 20 years in five-year increments under normal water year, single dry-year, and multiple dry-year scenarios. The reliability assessment results demonstrate that, even when making conservative assumptions about the availability of dry year supplies from Metropolitan, the San Diego region's water resource mix is drought resilient. (SDCWA, 2021)

3.12.1.2 Wastewater Management

Vallecitos Water District (VWD) provides wastewater service to the Project area. The service area covers approximately 45 square miles in northern San Diego County, with approximately 108,000 residents. VWD provides water, wastewater, and reclamation services to San Marcos; parts of Carlsbad, Escondido, Vista and other unincorporated areas in north San Diego County. The Project would be required to be annexed into the Vallecitos Water District through a future annexation process that would be reviewed and approved by (LAFCO). Wastewater is treated at the Meadowlark Water Reclamation Facility located in Carlsbad, which has a 5.25-million-gallon capacity and recycles up to

74 percent of the wastewater generated in the VWD boundary. Following water treatment, the wastewater processed at Meadowlark is used again for irrigation purposes in the Carlsbad and Encinitas area. Wastewater that is not recycled at the Meadowlark Facility is treated at the Encina Water Pollution Control Facility, which is partially owned by VWD.

3.12.1.3 Storm Drainage

The Project site is in the Carlsbad Hydrologic Unit and is bisected by the boundary line between the Batiquitos subarea of the San Marcos hydrologic area (904.51), and the San Elijo subarea of the Escondido Creek hydrologic area (904.61). The northern portion of the site is tributary to San Marcos Creek, and the southern portion of the site is tributary to Escondido Creek. A map showing the Project location with respect to the hydrologic basin areas can be found in Attachment 2 of Technical Appendix J. (Excel Engineering, 2021)

3.12.1.4 Gas and Electricity

Electric service is necessary for residential developments. Electricity is used to provide power for lighting and many appliances in homes. San Diego Gas and Electric (SDG&E) would be the electric service provider for the Project. The Project site is currently undeveloped and there is no on-site natural gas or electrical infrastructure currently serving the Project area. SDG&E would also be the provider for natural gas; however, as discussed in further detail below, the Project would not require natural gas service.

The project site is bisected by a 150' wide SDG&E easement shown on proposed TM 5643 as Lots P, Q, and S. The SDG&E easement corridor is improved with 230 kV overhead electric transmission lines supported by steel towers accessed by dirt roads and work pads maintained by SDG&E. The proposed project includes grading, private street crossings, landscaping, and erosion control measures within the SDG&E easement corridor. Prior to grading or construction of improvements within the SDG&E easement corridor, project grading and improvement plans must pass a conflict check by SDG&E to ensure the improvements are compatible with SDG&E facilities and operations. Moreover, these improvements must first be approved by the California Public Utilities Commission through an advice letter process pursuant to Section 851 of the California Public Utilities Code. The SDG&E easement contains large high voltage power lines that would remain in place with implementation of the Project. The easement area is identified as an SDG&E easement and fire buffer open space on TM 5643. Maintenance of the SDG&E easement would be the responsibility of the HOA.

3.12.1.5 Regulatory Setting

Urban Water Management Planning Act

In 1983, the Legislature enacted the UWMP Act (California Water Code sections 10610 through 10656), which requires every urban water supplier that provides water to 3,000 or more customers, or more than 3,000 acre-feet of water annually, to make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its customers during normal, dry, and multiple-dry years. The UWMP is required for a water supplier to be eligible for the State Department of Water

Resources' (DWR) grants, loans, and drought assistance. The UWMP provides information on water use, water resources, recycled water, water quality, reliability planning, demand management measures, best management practices, and water shortage contingency planning for a specified service area or territory.

Senate Bill 221

Senate Bill 221, codified in the California Water Code beginning with Section 10910, requires that the legislative body of a city or county, which is empowered to approve, disapprove, or conditionally approve a subdivision map, must condition such approval upon proof of a sufficient water supply. The term "sufficient water supply" is defined in Senate Bill 221 as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that would meet the projected demand associated with the proposed subdivision. The definition also includes the requirement that sufficient water supplies encompass not only the proposed subdivision, but also existing and planned future uses, including agricultural and industrial uses.

San Diego County General Plan Policies

The San Diego County General Plan includes a Land Use Element that contains policies regarding water supply and wastewater. These policies are analyzed in the Section 3.1.5 of this EIR.

3.12.2 Analysis of Project Effects and Determinations as to Significance

3.12.2.1 *Water Supply*

Guidelines for the Determination of Significance

For the purposes of this EIR, a significant water supply impact will occur if the Project:

- Requires or results in the construction or expansion of water supply, storage, or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Has insufficient water supplies available to serve the project from existing entitlements and resources so that new or expanded entitlements are needed.

Guidelines Source

The above identified significance guidelines are based on CEQA Guidelines Appendix G.

Analysis

Water Facilities

The Project would receive water service by expanding Olivenhain MWD's existing water system. Figure 1-8, *Water Plan*, illustrates the existing and proposed water facilities on-site or in the vicinity of the Project site. The Project includes construction on an 8-inch water main within proposed Streets "A", "B", and "C" that would connect to an existing 18-inch water main located to the west of San Elijo Road near Fallsview Road. Improvements to the water system would occur within the existing San Elijo Road right-of-way and on the Project site. The Project would not result in the need for new off-site water systems aside from the point of connection to the existing water system and would not require substantial alterations to the existing facilities that would result in adverse physical impacts. Impacts would be less than significant.

Water Supply

Olivenhain MWD's current potable water supply is dependent on the SDCWA as the wholesale water supplier. The Project does not exceed the specified size threshold of 500 residential units or equivalent, and thus, preparation of a Water Supply Assessment (WSA) per SB 610 is not required. The following assessment of water supply for the Project is based on the Olivenhain MWD 2020 UWMP.

Water service would be provided to the Project site by Olivenhain MWD. A completed Project Facility Available – Water form was received for the Project (Appendix O). The form notes that the Project is in the district and facilities to serve the Project are reasonably expected to be available within the next five years based on the capital facility plans of the district. The form also notes that the district will submit conditions at a later date, and provided a letter discussing conditions for water service to be provided.

Furthermore, the Project is consistent with the General Plan designation for the Project site; thus, Olivenhain MWD and SDCWA have included the anticipated supply and demand requirements for the Project in their water supply and demand projections detailed in their 2020 UWMPs.

Water Code Section 10635 requires that every urban water supplier assess the reliability of its water services during normal, dry and multiple dry water years. Based on the Olivenhain MWD 2020 UWMP, if Metropolitan Water District, SDCWA, and Olivenhain MWD supplies are developed as planned, no shortages are anticipated within the Olivenhain MWD service area in a normal year through 2045. Regionally, SDCWA's water supply and demand assessment contained in their 2020 UWMP compared the total projected water use with expected water supply in normal, dry, and multiple dry years. The normal water year assessment showed no water shortages through 2045. Single and multiple dry year assessments showed some years over the next 20 years where management actions, such as additional conservation due to drought, would be required to maintain supply. Overall, the assessment projected water reliability through the next 25 years to correspond with population growth forecasted by SANDAG.

Table 3.12-1, *Olivenhain MWD Projected Demand Summary*, presents a supply summary for normal-year conditions from the 2020 UWMP. Potable water supply obtained from SDCWA from 2025 to 2040 is projected to decline from 17,410 acre-feet/year (afy) to 16,310 afy. Recycled water purchases from are projected to increase from 2,693 in 2025 to 2,855 in 2040. Total supplies are estimated to decrease slightly from 20,103 afy in 2025 to 19,165 in 2040. The estimates are based on data and projections contained in the most recent Regional Growth Forecast prepared by SANDAG, and considered new development, reductions due to additional conservation efficiencies, and the potential effects of climate change.

The potable water demands in Table 3.12-1 reflect per capita demands that decrease over time from 400 gpd per person 2000 to 206 gpd per person in 2020. Per capita potable water use is expected to continue to decline due to demographic changes, recycled water conversions in parks, and conservation efficiencies.

The Project would be consistent with the 2022 Title 24 Energy Code (which went into effect January 1, 2023). The 2022 CALGreen Building Code targets reduction of both potable water use and wastewater generation by 20 percent. The Project incorporates measures such as a drought-tolerant landscaping plan; high efficiency drip irrigation systems; weather-based smart irrigation control systems, and use of reclaimed water for outdoor irrigation. In addition, the Project commits to installation of low-flow water fixtures, including low-flow bathroom fixtures. The estimated water demand of the Project is 43,054 gpd (206 gpd per capita x 206 residents = 43,054 gpd). The total average potable water demand of 43,054 gpd estimated for the Project is equivalent to approximately 48.3 afy, which represents 0.2 percent of Olivenhain MWD's projected potable water supply from SDCWA.

The Project would have sufficient water supplies available to serve the Project from existing entitlements and resources so that new or expanded entitlements are needed. Impacts would be less than significant.

3.12.2.2 Wastewater

Guidelines for the Determination of Significance

For the purposes of this EIR, a significant wastewater impact will occur if the Project:

- Requires or results in the construction or expansion of wastewater collection or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Exceeds wastewater treatment requirements of the applicable RWQCB; or
- Results in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Guidelines Source

The above identified significance guidelines are based on CEQA Guidelines Appendix G.

Analysis

Wastewater Facilities

The Project would receive wastewater service by expanding VWD's existing wastewater system following a future annexation process that would be reviewed and approved through LAFCO. Figure 1-7, *Sewer Plan*, illustrates the existing and proposed water facilities on-site or in the vicinity of the Project site. The Project includes construction on an 8-inch sewer main that would connect to an existing sewer main located in San Elijo Road. Improvements to the wastewater system would occur within the existing San Elijo Road right-of-way and on the Project site. The Project would not result in the need for new off-site wastewater systems aside from the point of connection to the existing wastewater system and would not require substantial alterations to the existing facilities that would result in adverse physical impacts. Impacts would be less than significant.

Wastewater Treatment Requirements

The design criteria used to determine the Project's proposed wastewater flow are in accordance with the San Diego County Code of Regulatory Ordinances, Section 94.1.001, et seq., which adopts the California Plumbing Code, to meet and comply with all federal and state policies regarding the regulation of wastewater discharges and treatment, including all applicable federal and state laws required by the Clean Water Act of 1977 and subsequent amendments and general pretreatment regulations. In addition, as discussed in Section 3.7, *Hydrology and Water Quality*, the Project would be in compliance with all NPDES discharge criteria and permitting requirements. Therefore, impacts would be less than significant.

Wastewater Treatment Capacity

Wastewater service would be provided to the Project site by VWD following a future annexation process that would be reviewed and approved through LAFCO. A completed Project Facility Available – Sewer form was received for the Project (Appendix O). The form notes that the Project is in the district and facilities to serve the Project are reasonably expected to be available within the next five years based on the capital facility plans of the district. The form also notes that a sewer study would be required prior to submittal of implementation plans.

Using the VWD sewer generation rate of 3,300 gpd/ac and the Project's proposed 18.27 acres of residential uses, the Project would generate approximately 60,291 gallons of wastewater per day. Wastewater generated by the Project would be treated at the Meadowlark Water Reclamation Facility or at the Encina Water Pollution Control Facility, which is partially owned by VWD. The Meadowlark Water Reclamation Facility has a capacity of 5 million gallons per day (MGD), with a wet weather treatment capacity of 8 MGD and average daily flow of 3.5 MGD. VWD's capacity at the Encina

Water Pollution Control Facility is 10.5 MGD, with an average daily flow of 3 MGD. It is expected that both the Meadowlark Water Reclamation Facility and Encina Water Pollution Control Facility would be able to adequately treat wastewater flows from the Project, and therefore new wastewater treatment facilities would not be needed.

The Project would have sufficient wastewater treatment capacity available to serve the Project. Impacts would be less than significant.

3.12.2.3 Storm Drainage

Guidelines for the Determination of Significance

For the purposes of this EIR, a significant storm drainage impact will occur if the proposed project does the following:

- Requires or results in the construction or expansion of storm drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Guidelines Source

The above identified significance guideline is based on CEQA Guidelines Appendix G.

Analysis

Development of the Project would require improvements to the current drainage system. These improvements are shown in Figure 1-5, *Preliminary Drainage Plan*, and discussed in Section 3.7, *Hydrology and Water Quality*, and are summarized below.

All runoff from the Project site currently drains to two hydrologic subareas of the Carlsbad Hydrologic Unit. The Project would accommodate 100-year storm event peak flows. Storm water runoff would be conveyed through the Project site via separate storm drain systems. The site is graded such that the distribution of discharge from the Project site to remain balanced as much as possible. The area of the Project to the southwest would remain open space and would be directed to flow separately from the flow from the developed portions of the site until discharging to the respective point of connection. The developed portions of the site would all be directed to a stormwater treatment facility. Multiple treatment facilities would be located on-site. The parts of the site that serve as access to the building lots, and the lots themselves would be directed to combination of biofiltration and flow detention facilities. The remainder of the Project on the westerly access road, would be treated with Green Street methods (tree wells) sized to meet pollutant treatment and hydromodification goals.

As presented in Table 3.7-1, *Summary of Peak 100 Year Runoff*, development of the Project site would internally divert the developed area drainage to discharge into the culverts located under San Elijo Road. Drainage of the open space area in the southwestern portion of the site would be directed to flow

separately from the developed portions of the site. In addition, minor alterations to the drainage pattern may result from development of the Project site through the conversion of natural surfaces to impervious surfaces and through activities such as grading, excavation, and construction activities. However, the Project would not result in a change in the overall drainage area draining into the Carlsbad Hydrologic Unit. Implementation of the Project would result in a decrease in the 100-year peak flow runoff.

Construction of these storm drain improvements would have the potential to create environmental impacts. However, construction of such facilities has been analyzed as part of the development footprint of the Project and the environmental impacts of such construction have been analyzed throughout this EIR (i.e., biological resources, cultural resources). Therefore, impacts related to construction of the storm drain facilities would not have any additional impacts beyond those identified in other chapters of this EIR. Impacts would be less than significant.

3.12.2.4 Gas and Electric

Guidelines for the Determination of Significance

For the purposes of this EIR, a significant impact to gas and electric services will occur if the Project:

- Would require or result in the construction of new gas and electric facilities or the expansion of existing facilities, the construction of which would cause significant environmental effects.

Guidelines Source

The above identified significance guidelines are based on CEQA Guidelines Appendix G.

Analysis

To provide gas and electrical service to the Project development, it would be necessary to extend new facilities into the Project site. However, it should be noted that the Project is designed to only require electrical service and gas connections would not be needed. Therefore, the analysis below only evaluates the need for electric facilities to serve the Project.

The infrastructure required to provide electrical service would consist of underground electrical conduits that would be located within planned sidewalks or within other utility rights-of-way. Also required for electrical service would be electric vaults, switches, fuse cabinets, and transformers. Some of these necessary components would be aboveground features and located behind sidewalks, as is typical in residential developments. Electrical services for the Project would connect into existing service infrastructure in San Elijo Road. No new substation is anticipated to be needed for the Project and no other service infrastructure outside of areas designated on Project development plans for grading and construction would be impacted by extension of electrical infrastructure.

The placement of the infrastructure in areas already planned for disturbance, either for Project street rights-of-way or for installation of other utilities such as water and sewer pipelines or telecommunication lines, would avoid environmental impacts specific to the provision of electric and gas service. The planned Project rights-of-way and roadway alignments have been analyzed for potential environmental effects in this EIR and any impacts, (i.e., biological resources, cultural resources) are discussed in the appropriate topic section. The placement of electric infrastructure within these areas analyzed and planned for disturbance would not result in any additional environmental effects than what has been described in other chapters of this EIR. Impacts would be less than significant.

3.12.3 Cumulative Impact Analysis

3.12.3.1 *Water*

The geographic scope for cumulative water supply impacts is the service area of the SDCWA. As described above, the 2020 UWMPs prepared by SDCWA and Olivenhain MWD were based on SANDAG forecasts that incorporated population projections for the projects in the area, including the Project, in their water planning estimates. The SDCWA 2020 UWMP provided water demand forecasts based on the projected population growth in the area and, based on its water supply reliability assessment, concluded that if water supplies are developed as planned, no water shortages are anticipated within the SDCWA service area under average, single-dry, and multiple-dry years through 2045. The SDCWA 2020 UWMP also addressed additional storage and desalination programs being pursued by SDCWA to further supplement supplies, and to address the potential risk of water shortages. The Olivenhain MWD 2020 UWMP conducted a similar water demand and supply assessment within its service area. Olivenhain MWD's assessment also included the Project's water demand. As discussed above, an adequate water supply from SDCWA has been identified for its member agencies, including Olivenhain MWD, and the Project would not require expansion of existing facilities other than the extension of water mains to connect to the existing infrastructure. Therefore, the Project is not anticipated to contribute to a cumulatively considerable impact on water supply. As described above, the provision of water service to the Project would not create new or additional environmental impacts beyond those that are identified in other sections of this EIR. Similarly, any potential cumulative impacts related to construction of new water facilities has been addressed in other sections of this EIR and no additional impacts or mitigation measures have been identified in this section.

3.12.3.2 *Wastewater*

A collection system with the appropriate capacity for the Project would be constructed as part of the Project. All other cumulative developments that would generate sewage would be required to provide adequate wastewater collection and treatment facilities. Therefore, the Project's contribution to cumulative impacts on wastewater treatment services would be less than significant.

3.12.3.3 *Storm Drainage*

Improvements to the drainage system for the Project would occur within the Project's drainage basins and would not affect drainage at a cumulative level. The cumulative effect of construction that would

impact environmental resources has been analyzed throughout this EIR. Other projects in the area would also be required to construct drainage improvements in compliance with the environmental reviews that were conducted for the individual impacts of each project. Similar to the direct analysis presented in this section, any potential cumulative impact related to construction of new storm drainage improvements has been addressed in other sections of this EIR and no additional impacts or mitigation measures have been identified in this section.

3.12.3.4 Gas and Electric

As shown in Table 1-3, there are eight cumulative projects occurring in the Project area. Many of these projects are residential, commercial, or institutional and would require gas and electric services. Though the environmental impacts specific to the provision of gas or electrical service to each of the projects is not known, it is typical that, similar to the Project, the required infrastructure is placed within public or utility rights-of-way, which would be disturbed by other project construction activities. As described above, the provision of gas and electric service to the Project would not create new or additional environmental impacts beyond those that are identified in other sections of this EIR. Similarly, any potential cumulative impacts related to construction of new gas and electrical facilities has been addressed in other sections of this EIR and no additional impacts or mitigation measures have been identified in this section.

3.12.4 Significance of Impacts Prior to Mitigation

As discussed above, the Project would not result in less than significant direct and cumulatively considerable impacts to utilities and service systems.

3.12.5 Conclusion

As discussed above, the Project would have no significant direct, indirect, or cumulatively considerable impacts to water supply, wastewater, storm drainage, and gas and electricity usage. Therefore, implementation of the Project would result in less-than-significant impacts to utilities and service systems.

Table 3.12-1 Olivenhain MWD Projected Demand Summary

	2020	2025	2030	2035	2040
Potable Water, Raw, Other Non-Potable	17,100	17,410	16,940	16,640	16,310
Recycled Water Demand	2,482	2,693	2,819	2,834	2,855
Optional Deduction of Recycled Water Put Into Long-Term Storage¹	0	0	0	0	0
TOTAL WATER USE	19,582	20,103	19,779	19,474	19,615

¹ Long-term storage means water that is placed into groundwater or surface storage that is not removed from storage in the same year. Supplier may deduct recycled water placed in long-term storage from their reported demand.
 Source: (MWD, 2021)

3.13 Wildfire

An NOP for the proposed Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Nine comment letters related to wildfire were received. Endangered Habitats League (received September 9, 2022) requested that evacuation plans for the proposed Project should account for road capacity, surrounding evacuations, and environmental conditions. Jessica Heinz (received September 26, 2022), Jerry Block (received September 27, 2022), Ed Philbrick (received September 27, 2022), Carol Moser (received September 24, 2022), Danielle Allison (received September 23, 2022), Jodi Rowin (received September 23, 2022), and Beth Houser (received September 23, 2022) expressed concern regarding evacuation times and plans. Jay Petrek (received October 3, 2022) requested that the EIR contain analysis regarding evacuation measures.

3.13.1 Analysis Methodology

A Fire Protection Plan (FPP) was prepared for the Project by Dudek and is contained as *Appendix M* to this EIR. The FPP evaluates the potential impacts resulting from wildland fire hazards and identifies measures necessary to adequately alleviate those risks to a level consistent with County of San Diego (County) thresholds. Additionally, the FPP develops and memorializes the fire safety requirements of the fire authority having jurisdiction, which is the Rancho Santa Fe Fire Protection District (RSFFPD). Requirements and recommendations detailed in the FPP are based on site-specific characteristics, applicable code requirements, and input from the Project's applicant and the RSFFPD.

As part of the assessment, the FPP includes the evaluation of, among other site factors, property location, topography (including saddles, chutes, chimneys), geology, combustible vegetation (fuel types), climatic conditions, and fire history. The FPP addresses water supply, fire department and emergency access (including secondary access, where applicable), structural ignitability and ignition-resistive building features, fire protection systems and equipment, potential impacts to existing emergency services, defensible space, and vegetation management. It also identifies and prioritizes areas for potentially hazardous fuel reduction treatments and recommends the types and methods of treatment to protect the community and essential infrastructure. The FPP also recommends measures that property owners and the Project's homeowners association (HOA) could take to reduce the probability of structure ignition throughout the area.

The Project site is located within the boundaries of the RSFFPD in the unincorporated portion of San Diego County. The FPP addresses RSFFPD's and California Department of Forestry and Fire Protection's (CAL FIRE's) response capabilities and response travel time within the Project area, along with projected funding for facility improvements and fire service maintenance. The following tasks were performed by Dudek to complete the FPP:

- Gathered site specific climate, terrain, and fuel data.
- Processed and analyzed the data using the latest GIS technology.
- Predicted fire behavior using scientifically based fire behavior models, comparisons with actual wildfires in similar terrain and fuels, and experienced judgment.
- Analyzed and guided design of proposed infrastructure.

- Analyzed the existing emergency response capabilities.
- Assessed the risk associated with the Project.
- Collected site photographs and mapped fuel conditions using 200-scale aerial images. Field observations were used to augment existing digital site data in generating the fire behavior models and formulating the recommendations presented in this FPP. (Refer to Appendix A for site photographs of existing site conditions.)
- Evaluated nearby firefighting and emergency medical resources.
- Prepared the Project's FPP detailing how fire risk would be addressed through a system of fuel modification, structural ignition resistance enhancements, and fire protection delivery system upgrades.

3.13.2 Existing Conditions

The Project site is located in a State Responsibility Area (SRA) and is located in Very High Fire Hazard severity zone as shown on Figure 3.13-1, *Fire Responsibility Zones*, and 3.13-2, *Fire Hazard Severity Zones*. The information presented below relates to fire hazard and wildfire behavior influences related to the Project site.

Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower spread downslope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind.

The Project site's topography in its current condition is characterized by a large area of steep hills in the southwest that transition into a relatively flat area in the northern and central portions of the Project site, with terrain sloping up and away from the Project. Surrounding areas include similar terrain. The Project site is bordered by the Rancho La Costa Reserve to the west and south. Additionally, a small drainage crosses the southeast corner of the site.

Elevations of the Project site range from approximately 500 feet above mean sea level (amsl) at the eastern boundary of the property to approximately 930 feet amsl in the southwest corner of the Project Site. Slope is important relative to wildfire because steeper slopes typically facilitate more rapid fire spread up slope, which can range from 9% to 23% within the Project site. On the Project site, the steeper slopes are primarily within the southern portion of the site, ascending up from the northern portions of the property. The Project site's topography is generally in alignment with the extreme Santa Ana wind events, which can influence fire spread by creating wind-driven fires, especially when moving upslope.

Climate

North San Diego County, including the Project site, is influenced by the Pacific Ocean and frequently under the influence of a seasonal, migratory subtropical high-pressure cell known as the “Pacific High”. Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. Local climate, which has a large influence on fire risk, is typical of a Mediterranean area. The climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, northeasterly Santa Ana winds. The average high temperature for the Project site during fire season is approximately 81°F, though the temperature often exceeds that, reaching into the high 90°F range in the event of a heatwave. Temperature in summer and early fall months (July–October) have reached up to 108°F. Precipitation typically occurs November through April, with annual rainfall averaging 13 inches. The prevailing wind is an onshore flow from the Pacific Ocean, which is approximately 6.25 miles to the west. Hot, dry (Santa Ana) winds, which typically occur in the fall and are usually from the northeast, can gust to 50 mph or higher. The Santa Ana winds are due to the pressure gradient between high pressure in the plateaus of the Great Basin and lower pressure gradient over the Pacific Ocean. Drying vegetation (fuel moisture of less than 5% for 1-hour fuels is possible) during the summer months becomes fuel available to advancing flames should an ignition occur. Extreme conditions, used in fire modeling for this Project, include 81°F temperatures in summer and winds of up to 50 mph during the fall. Relative humidity of 13% or less is possible during fire season.

Fuels (Vegetation)

Developed areas are located to the north, northeast, east, and west of the Project site, and open space areas are to the north, south and east. The Project site is undeveloped and is composed of a variety of vegetation types that were mapped by Alden Environmental (refer to EIR Section 2.1, *Biological Resources*). Extensive vegetation type mapping is useful for fire planning because it enables each vegetation community to be assigned a fuel model, which is used by a software program to predict fire characteristics, as discussed in Section 4.1, Fire Behavior Modeling, of *Appendix M1*. The Project site’s vegetative fuels are primarily Diegan coastal sage scrub/chaparral ecotone, non-native grassland, Diegan coastal sage scrub, and chamise chaparral, although smaller pockets of native grassland, riparian scrub, eucalyptus woodland, and southern mixed chaparral vegetation types are present. This vegetation is adapted to periodic wildfire events. Fire history data described in Section 2.2.6, Fire History, of *Appendix M1*, indicates that the vegetation last burned in 1996 over the entirety of the Project site. Small areas of disturbed habitat and urban/developed land cover types are also present within the site. Vegetation is important relative to wildfire, as some vegetation such as coastal sage scrub and grassland habitats are highly flammable, and other vegetation such as chamise chaparral is less flammable due to its higher moisture content, but will burn under certain, more intense fire conditions.

Fuel Loads

The vegetation along the perimeter of proposed development areas and within approximately 300 feet of the development’s Fire Management Zones (FMZs) is the area of highest concern for determining what effects wildfire may have on the project’s landscape and structures. It is these fuels that, if ignited,

would burn adjacent to the proposed FMZs and alternative protections, designed to reduce flame length, spread, and intensity as it gets closer to the built portions of the Project. Vegetation types in these areas of the Project site have been classified into fuel models used for fire behavior modeling, discussed in Section 4, Anticipated Fire Behavior, of *Appendix M1*.

The importance of vegetative cover on fire suppression efforts is its role in affecting fire behavior. For example, although fires burning in grasslands may exhibit lower flame lengths than those burning in chaparral fuels, fire spread rates in grasslands are often much more rapid than those in other vegetation types.

Fuel loading in non-native grassland is estimated to be 0.4 tons per acre, and in chaparral-sage scrub it is estimated to be between 8.4 and 8.6 tons per acre. The fuel load is the total amount of combustible material in a defined area. Shrub-dominated plant communities tend to include higher fuel loads than grass-dominated plant communities. Tree-dominated communities may include higher fuel loads than shrub-dominated landscapes. However, there are many other facets of fire behavior that govern fire ignition and spread. Therefore, because an area may include higher fuel loads, it does not necessarily mean that it presents a higher fire risk.

Vegetation Dynamics

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, the native shrub species that comprise the chaparral communities on the Project site are considered to be less likely to ignite but would exhibit higher potential hazard (higher-intensity heat and flame length) than grass-dominated plant communities (fast moving, but lower intensity) if ignition occurred. The corresponding fuel models for each of these vegetation types are designed to capture these differences. Additionally, vegetative cover influences fire suppression efforts through its effect on fire behavior. For example, although fires burning in grasslands may exhibit lower flame lengths and heat outputs than those burning in native shrub habitats, fire spread rates in grasslands are often more rapid.

As described, vegetation plays a significant role in fire behavior and is an important component to the fire behavior models discussed in the Project's FPP. A critical factor to consider is the dynamic ecologic nature of vegetation communities. Fire presence and absence at varying cycles or regimes (fire return interval) disrupts plant succession, setting plant communities to an earlier state where less fuel is present for a period of time as the plant community begins its succession again.

In summary, high-frequency fires tend to convert shrublands to grasslands or maintain grasslands, and fire exclusion tends to convert grasslands to shrublands over time, as shrubs sprout back or establish and are not disturbed by repeated fires. In general, biomass and associated fuel loading will increase over time, assuming that disturbance (fire, grazing) or fuel reduction efforts are not regularly implemented. It is possible to alter successional pathways for varying plant communities through manual alteration. This concept is a key component in the overall establishment and maintenance of

the proposed FMZs for a development project. The FMZs would consist of irrigated and maintained landscapes and thinned native fuel zones that would be subject to regular “disturbance” in the form of maintenance and would not be allowed to accumulate excessive biomass over time, which results in reduced fire ignition, spread rates, and intensity.

Conditions adjacent to the proposed Project’s development footprint (outside the FMZs and described in more detail in the impact analysis below), where the wildfire threat would exist post-development, are currently classified as low to moderate fuel loads due to the higher percentage of grasslands intermixed with sparse stands of chamise chaparral and coastal sage scrub fuels. However, the climax vegetation state (undisturbed brush stands that are not disturbed for an extended period of 50 years or more) includes more uniform and dense stands of sage scrub-chaparral fuels, which were employed for a conservative modeling approach to represent worst-case (i.e., max fuels) wildfire scenarios around the perimeter of the Project site.

Fire History

Fire history is an important component of preparing and designing FPPs. Fire history data provides valuable information, including fire spread, fire frequency, most vulnerable areas, and significant ignition sources. In turn, this understanding of why fires occur in an area and how they typically spread can then be used for pre-planning and designing defensible communities. As represented in Figure 3.14-3, *Fire History Map*, there have been 28 fires recorded by CAL FIRE since 1919 on the Fire and Resource Assessment Program database within five miles of the Project site. The total of 28 fires in this area over the last 101 years within five miles of the Project is not considered a high number for Southern California. On average, CAL FIRE annually responds to 5,000 wildfires of more than 10 acres (CAL FIRE 2015). Of the 28 fires that have burned within five miles of the Project site, there have been two fires that burned across the Project property. The most notable fire (Witch Fire) occurred in October 2007 and burned approximately 162,070 acres in the northern portion of the County; however, it did not burn any portion of the Project site. RSFFPD may have data regarding other smaller, undocumented fires that have occurred in the area and on the Project site that have not been included herein because fires under 10 acres are not recorded by CAL FIRE. Figure 3.14-3 presents fire history within five miles of the Project site and provides a graphical representation of the quantity of times the landscape has burned in the area. Recorded fires since 1900 that have burned onto the Project site are listed in Table 3 of *Appendix M1*.

Based on fire history data for the vicinity, fire return intervals range between 0 and 27 years, indicating the wildfire potential in the region and the potential for the vicinity of the Project site to be subject to occasional wildfire encroachment, most likely from the large expanses of open space to the south and east.

3.13.3 Existing Regulatory Setting

State

Public Resources Code (PRC) Sections 4290-4299

Public Resources Code Sections 4290-4299 establish minimum Statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these Statewide standards. The State requirements, however, do not supersede more restrictive local regulations. (CA Legislative Info, n.d.)

As defined by the California Department of Forestry and Fire Protection (CAL FIRE), wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CAL FIRE has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CAL FIRE every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor. (CA Legislative Info, n.d.)

Public Resources Code Section 4213 – Fire Prevention Fees

Pursuant to Public Resources Code (PRC) Section 4213, in July of 2011, the State of California began assessing an annual "Fire Prevention Fee" for all habitable structures within SRAs to pay for fire prevention services. SRAs are the portions of California where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or federally owned land. As a result of AB 398, California Global Warming Solutions Act of 2006, the fire prevention fee was suspended as of July 1, 2017. (CA Legislative Info, n.d.)

California Government Code (CGC) Sections 51178 and 51182

The Director of CALFIRE, in cooperation with local fire authorities, is required to identify areas that are Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRAs), based on consistent Statewide criteria, and the expected severity of fire hazard. Per California Government Code (CGC) § 51178, a local agency may, at its discretion, exclude from the requirements of § 51182 an area within its jurisdiction that has been identified as a VHFHSZ, if it provides substantial evidence in the record that the requirements of § 51182 are not necessary for effective fire protection within the

area. Alternatively, local agencies may include areas not identified as VHFHSZ by CalFire, following a finding supported by substantial evidence in the record that the requirements of § 51182 are necessary for effective fire protection within the new area. According to § 51182, such changes made by a local agency shall be final and shall not be rebuttable by CalFire. (CA Legislative Info, n.d.)

California Code of Regulations (CCR) Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design, and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.). (Westlaw, n.d.)

CCR Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, “Materials and Construction Methods for Exterior Wildfire Exposure,” in the 2010 California Building Code addresses fire safety standards for new construction. In addition, Section 701A.3.2, “New Buildings Located in Any Fire Hazard Severity Zone,” states: (BSC, n.d.)

“New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.”

California Public Utilities Commission General Order 95: Rules for Overhead Electric Line Construction

The California Public Utilities Commission’s (CPUC’s) General Order (G.O.) 95 specifies requirements for overhead transmission line design, construction, and maintenance, including a number of requirements to avoid or minimize potential safety hazards. These requirements include standards related to vegetation management and maintenance of minimum vegetation clearances from high-voltage lines to minimize potential fire hazard. (CPUC, n.d.)

Local

County Fire Code

The County of San Diego 2023 Consolidated Fire Code (CoFC) contains the ordinances of each of the fire protection districts that service the County, including the Rancho Santa Fe Fire Protection District (RSFFPD), which services the Project site. The CoFC is based upon the California Fire Code, which each fire protection districts adopts subject to the modifications or changes that are reflected in the CoFC. (County, 2023)

Hazard Mitigation Plan

The Board of Supervisors of the County of San Diego adopted the revised 2023 Multi-Jurisdictional Hazard Mitigation Base Plan on February 7, 2023. The Multi-Jurisdictional Hazard Mitigation Plan is a countywide plan that identifies risks and ways to minimize damage by natural and human-caused disasters, including wildfire. The plan is a comprehensive resource document that serves many purposes such as enhancing public awareness, creating a decision tool for management, promoting compliance with State and Federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination. The Plan identifies Wildfire in a high threat category indicating that wildfire hazard has a “Highly Likely” probability of occurrence and/or a severe impact on the community. The Plan sets forth mitigation goals and objectives, mitigation actions, and priorities, and an action plan/implementation strategy countywide. (County, 2023b)

Fire and Rescue Mutual Aid Operations, Operational Area Emergency Operations Plan

The Fire and Rescue Mutual Aid Operation Annex is an integral part of the San Diego County Operational Area (OA) Emergency Operations Plan (EOP) and the current State of California Fire and Rescue Emergency Mutual Aid Plan. It identifies the implementation procedures for mutual aid and other support in the event of fires. (County, 2022a)

3.13.4 Analysis of Project Effects and Determinations as to Significance

Guideline for the Determination of Significance

Because the Project site is located in a State Responsibility Area and has lands classified as a very high fire hazard severity zones, a significant impact to wildfire would occur if the Project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.

Guideline Source

The identified guideline is based on Appendix G of the CEQA Guidelines.

Analysis

The Project site's wildland/urban interface (WUI) location is within an area statutorily designated as a Very High Fire Hazard Severity Zone by CAL FIRE and is located within a State Responsibility Area (SRA). The Project would not result in inadequate emergency access. The proposed internal looped roadways meet County standards and provide emergency access over the roadways that include a minimum width of 24 feet (two 12-foot-wide, unobstructed travel lanes) and additional width for parking. Further, 'No Parking' signs shall be placed throughout the community along the roads that are 24 feet wide and cannot accommodate on-street parking. Additionally, the roads would provide residents the option to evacuate from at least two egress access points in two different directions from the Project site. Depending on the nature of the emergency, residents can exit at the east end of the community using Street "E" or the west end of the community using Street "B" and travel east (toward Carlsbad and I-5) or west (toward San Elijo Hills and SR-76) on San Elijo Road. In emergencies where evacuation was considered unsafe and it would be safer to remain within the developed portions of the community, temporary refuge within the EdenPark recreational center, the neighboring shopping center, or San Elijo Elementary School, or other area identified by emergency responders would be possible.

A Conceptual Wildfire Evacuation Plan (CWEP) was prepared for the Project Dudek and is included as *Appendix M2* to this EIR. The CWEP promotes the "Ready, Set, Go!" model, adopted by Rancho Santa Fe Fire Protection District, San Diego County Fire Authority, CAL FIRE, and many fire agencies statewide. A copy of the CWEP would be provided to the Project's HOA, which would distribute the CWEP to Project residents so that residents are aware of the evacuation routes, the fluidity of wildfire events, and the options that may be presented to them by responding law enforcement and/or fire personnel, Reverse 911, or other officials. Evacuation routes for the Project are shown on Figure 3.13-4, *Wildfire Evacuation Routes*. The HOA may also provide online access to fire awareness educational material such as on the community's website if there is such a website.

The CWEP (*Appendix M2*), Section 4, presents an analysis that calculates evacuation times along San Elijo Road based on congested roadways that can occur during a wildfire evacuation. Along San Elijo Road from S. Rancho Santa Fe Road to SR-78, vehicles from the Project site would add a maximum of 2.0 minutes to the evacuation time. Similarly, along San Elijo Road between S. Rancho Santa Fe Road and I-5, the vehicles from the Project site also would add a maximum of 2.0 minutes to the evacuation time. Dudek determined that the 2.0 minutes would be virtually no change to the overall evacuation travel time scenario, which is considered a less than significant impact. With required implementation of the Project's CWEP, the Project would have a less-than-significant impact to adopted emergency response plans and emergency evacuation plans.

Guideline for the Determination of Significance

Because the Project site is located in a State Responsibility Area and has lands classified as a very high fire hazard severity zones, a significant impact to wildfire would occur if the Project would:

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

Guideline Source

The identified guideline is based on Appendix G of the CEQA Guidelines.

Analysis

In order to evaluate the Project's potential to exacerbate wildfire risks, a Project-specific Fire Protection Plan (FPP) was prepared for the Project, the results and recommendations of which are discussed below. Refer to Section 4 of the Project's FPP (*Appendix MI*) for a discussion of the methodology and computer software used to assess fire risks in the local area.

The site fire risk analysis resulted in the determination that wildfire has occurred and will likely occur near the Project area, but the Project would provide ignition-resistant landscape and structures, and defensible space with implementation of specified safety measures. Based on modeling and analysis of the Project area to assess its unique fire risk and fire behavior, it was determined that the California and San Diego County standard of 100-foot-wide fuel modification zones (FMZs) would be suitable to protect the Project from an anticipated wildfire that may burn in areas adjacent to developed areas. The Project's FMZs are labeled on the Project plans as "Defensible Space" based on direction from RSFFPD. For purposes of analysis herein and to maintain consistent terminology with San Diego County standards, the term FMZ will continue to refer to the on-site fuel modification areas. The Project includes an approximately 105-foot-wide FMZ, which includes the rear yard of Lots 19-45. This 105-foot-wide FMZ, when properly maintained, has proven effective at minimizing structure ignition from direct flame impingement or radiant heat, especially for structures constructed using the latest ignition-resistant codes.

FMZs are designed to gradually reduce fire intensity and flame length and, therefore, slow the fire from advancing by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the community's WUI exposed structures. As shown on Figure 3.14-5, *Fuel Modification Plan*, FMZs would be located in the following areas:

- All residential occupancies
- Open space areas within the development footprint
- Emergency access roads or streets

To accommodate these FMZs, the Project would be required to provide FMZ easements along the Project's western boundary. The FMZ easement would need to be 30 feet beyond the required road easement for the road along the western boundary. Further, the FMZ easement would be required to include the additional 30-feet necessary to accommodate the remaining portion of the FMZ's Zone 3 to the southwest of the development footprint. The required FMZ areas are shown the Project's

Landscape Concept Plan (refer to Figure 1-3 in EIR Chapter 1.0) for assurance of implementation. The Project's property owners and HOA would be responsible for FMZ perpetual maintenance.

It should be noted a San Diego Gas and Electric Company (SDG&E) easement traverses the Project site from the southeastern boundary through the central portion of the site. The easement area is identified as an SDG&E easement and fire buffer open space on TM 5643. Maintenance of the SDG&E easement would be the responsibility of the Project's HOA.

Based on the modeled extreme weather flame lengths for the Project, average wildfire flame lengths are projected to be approximately 45 feet high in open space-adjacent fuels. The fire behavior modeling system used to predict these flame lengths was not intended to determine sufficient FMZ widths, but it does provide the average predicted length of the flames, which is a key element for determining adequate "defensible space" distances for providing firefighters with room to work and minimizing structure ignition. For this Project, the FMZ width outside the lot line is 80 feet, ranging from over two to several times the modeled flame lengths based on the fuel type represented adjacent to the development footprint.

The following FMZ requirements would be implemented for the Project and implemented and maintained prior to any combustible lumber being brought on site. In addition to the FMZs meeting defensible space requirements, the entire developed landscape would be restricted to lower flammability landscaping as part of a fire adapted community approach. The Project is designed to cluster development in the northern portion of the Project site in order to allow for the development of residential uses while providing biological open space in the southern portion of the Project site. Further, the topography of the Project site, the cut slope that will occur along the southern edge of Lot R, and the construction of a 6-foot heat-deflecting fencing along the lot lines of Lots 19-24 and atop the manufactured slope behind Lots 25-45 will provide enhanced protection for the Project. The FMZs and landscape areas are presented graphically in Figure 3.14-5. In addition, the proposed fire adapted plant palette is provided in Appendix E of *Appendix M1*.

Site Specific Fuel Modification Zones

- The effective total width of the FMZs for the Project would be approximately 105 feet, with the rear yards, which average 20 feet, included as part of the FMZ measurement. Therefore, a typical landscape/fuel modification installation for the Project's perimeter lots exceeds the 100-foot standard, consisting of up to a 1050-foot-wide fuel management area from the structure extending outwards toward preserved areas.

The following FMZ specifications are required to be implemented during Project construction and during long-term operation of the residential community. Requirements to adhere to FMZ requirements will be made a responsibility of the Project's HOA and imposed on homeowners through the HOA's CC&Rs.

Zone 1 – Immediate Zone: 0 to 5 feet from structure

This zone shall be constructed of continuous hardscape. Removal of combustible materials surrounding the exterior wall area and maintaining area free of combustible materials. The use of mulch and other combustible materials shall be prohibited.

RSFFPD Zone 1 Requirements:

- Any combustible vegetation, any dead or dying materials, combustible materials (i.e., hay bales, firewood), accumulation of ground needles and leaf litter shall be removed within this zone.
- All accumulations of needle and leaf litter shall be removed from roofs, rain gutters, deck, and porches.
- All new construction or any replacement landscape installations shall NOT have any combustible mulch within this five (5) foot zone from the furthest attached exterior point of the home. Landscape plantings shall only be irrigated lawn or Fire District approved low-growing properly spaced fire resistive shrubs or herbaceous (non-woody) plants. Vegetation shall not come in contact with the structure and specimen spacing shall be such as not to allow the transfer of fire from plant to plant, or from plant to the structure.
- Any combustible materials that could catch fire shall not be stored under decks, exterior stairways and balconies. Combustible patio furniture, umbrellas, trash receptacles, or other combustible items should not be stored or placed directly adjacent to structures.
- Firewood shall not be stored in unenclosed space beneath a building or structure, on a deck or under eaves, a canopy or other projection or overhang. When required by the fire code official, firewood or other combustible material stored in the defensible space surrounding a structure shall be located at least 30 feet from any structure and separated by a minimum of 15 feet from the drip line of any trees, measured horizontally. Firewood and combustible materials not for use on the premises shall be stored so as to not pose a fire hazard. Wood storage shall be located on bare soil or a non-combustible material. Minimum clearance around wood storage pile shall be 10' bare soil, free of vegetation or other combustible material measured on a horizontal plane. The maximum size of wood storage shall be 2 cords of woods with the pile dimensions no greater than 4 feet in height, 4 feet in width, and 16 feet in length. A permit may be issued by the FAHJ for wood storage amounts in excess of the standards described above.
- All fireplace chimney flues must have a metal screen covering with openings of 3/8 inch to 1/2 inch and have 12-gauge thickness or larger.

Zone 2 – Intermediate Zone: 6 to 50+ feet from structure

- This zone shall consist of planting of low growth, drought tolerant and fire resistive plant species. The height of the plants in this zone starts at 6" adjacent to Zone 1 and extending in a linear fashion up to a maximum of 18" at intersection with Zone 3. Vegetation in this zone shall be irrigated and not exceed 10' in height and shall be moderate in nature. Trees

shall not exceed 30' in height and be limited or as approved by the FAHJ. Firewood inside this zone shall be piled minimum of 30' away from all buildings and structures. Cords of firewood shall also be maintained at least 10' from property lines and not stacked under tree canopies drip lines.

RSFFPD Zone 2 Requirements:

- The area from six (6) to fifty (50) feet of a building or structure shall be cleared of vegetation that is not fire resistant and if re-planted, it shall be with fire-resistant plants. Fire resistive planting materials shall be Fire District approved, properly irrigated, spaced, and maintained. Any weeds or dead grasses shall be cut to a height not to exceed four (4) inches. Single specimens of trees, ornamental shrubbery or ground covers approved by the Fire District are permissible provided they are irrigated and that they do not form a means of rapidly transmitting fire to any structure or from the native growth to any structure. The Fire District must approve of such specimens and will provide the spacing requirements according to the desired planting species.
- All trees and shrubs in this zone shall be properly maintained free of deadwood, litter or dead palm fronds. Trees canopies shall be maintained and if in vicinity of structures shall be trimmed up to ten (10) feet from rooflines.
- Remove any portion of trees, which extend within ten (10) feet of the outlet of a chimney.
- Composted wood chip mulch may be used in a limited non-continuous fashion for landscaping purposes. Depth shall not exceed three (3) (inches). Course non-composted wood or vegetation chips, bark or wood nuggets, rubber mulch, or other shredded mulch shall not be utilized within thirty (30) feet of habitable structures.
- All newly planted fire-resistive tree species shall be planted and maintained at a minimum of ten (10) feet from the tree's drip line to any structure utilizing the trees mature canopy size.
- All newly planted non-fire-resistive tree species shall be planted and maintained at a minimum of thirty (30) feet from the tree's drip line to any structure utilizing the tree's mature canopy size. Newly planted trees of this nature must be approved by the Fire District and strictly comply with the Fire District's landscape standards.

Zone 3 – 51+ to 105 feet from structure

This zone consists of planting of drought tolerant and fire resistive plant species of moderate height. Brush and plants shall be limbed up off the ground, so the lowest branches are 1/3 height of bush/tree/plant or up to 6' off the ground on mature trees. This area would be considered selective clearing of natural vegetation and dense chaparral by removing a minimum 50% of the square footage of this area.

RSFFPD Zone 3 Requirements

- Combustible vegetation in this zone must be removed by methods such as mowing, thinning and trimming, or by other means of modification that leave the plant root structure intact to stabilize the soil. Native vegetation may remain in this area provided that the vegetation is modified so that combustible vegetation does not occupy more than twenty (20) percent of this area and meets horizontal spacing requirements and vertical spacing requirements.
- Accumulated leaf litter or any combustible mulch in this zone may not exceed three (3) inches in depth.

Furthermore, fire resistive landscaping, as approved by the RSFFPD, for the Project would be maintained in perpetuity by the Homeowner's Association (HOA). In addition, the landscaping plans have been reviewed and approved by RSFFPD, and as condition of approval, a bond would be required during construction that would not be released until RSFFPD has inspected the installed landscaping and provided final approval.

The above-described requirements would be enforced by the County as part of the Project's Conditions of Approval and through the County's future review of implementing developments. As concluded by the Project's FPP, implementation of the recommendations in the FPP for fire abatement, including the provision of FMZs as well as site design features (e.g., asphalt roads, parking areas, irrigated landscaping), would reduce the risk of wildfire hazards occurring on site to acceptable levels. Thus, with compliance with the fire abatement requirements of the Project's FPP, the Project would not exacerbate wildfire risks, and would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Additionally, the Project would not expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant.

Guideline for the Determination of Significance

Because the Project site is located in a State Responsibility Area and has lands classified as a very high fire hazard severity zones, a significant impact to wildfire would occur if the Project would:

- 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 in the environment.

Guideline Source

The identified guideline is based on Appendix G of the CEQA Guidelines.

Analysis

The Project would require the installation or maintenance of private roads, fuel breaks, and sewer/water connections. All impacts associated with the installation of infrastructure associated with the Project has been evaluated and analyzed within this EIR. As described above, the effective total width of the FMZs for the Project would be approximately 105 feet, with the rear yards, which average 20 feet, included as part of the FMZ measurement. Therefore, a typical landscape/fuel modification installation for the Project's perimeter lots exceeds the 100-foot standard, consisting of up to a 105-foot-wide fuel management area from the structure extending outwards toward preserved areas.

The proposed fire abatement measures would reduce the risk of fire in the local area as compared to existing conditions. While FMZs would be required throughout the Project, areas subject to fuel modification would occur in areas already planned for impact as part of site development. Thus, impacts to areas requiring FMZs have been evaluated throughout this EIR under the appropriate subject heading (e.g., biological resources, cultural resources), and where impacts are identified mitigation measures are identified to reduce impacts to the extent feasible. There are no components of the proposed FMZs that would result in impacts not already addressed by this EIR. Accordingly, the Project would not exacerbate fire risk, and would not result in temporary or ongoing impacts to the environment beyond what is already evaluated and disclosed by this EIR. Impacts would be less than significant.

Guideline for the Determination of Significance

Because the Project site is located in a State Responsibility Area and has lands classified as a very high fire hazard severity zones, a significant impact to wildfire would occur if the Project would:

- Expose people or structures to significant risk, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

Guideline Source

The identified guideline is based on Appendix G of the CEQA Guidelines.

Analysis

As stated in the Hydrology Study prepared for the Project (*Appendix J*), the Project would not alter existing drainage patterns onsite in a manner which would result in flooding on or offsite. The Project does not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems and flows from the Project leave the site at less than predeveloped rates per the mitigated flow rates shown.

Additionally, as stated in the Geology Investigation prepared for the Project (*Appendix FI*), the Project is not located within a 100-year flood hazard area, floodway, or floodplain and would not be impacted

from downstream flooding. Further, the site is not located within a landslide susceptibility area per County GIS.

In addition, the Project's manufactured slopes are assured to be stable through required adherence to the recommendations given in the Geology Investigation prepared for the Project (*Appendix F1*). The Project would also include defensible space, including FMZs as described in detail above. Therefore, the Project would not expose people or structures to a significant risk, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes and impacts would be less than significant.

3.13.5 Cumulative Impact Analysis

The Project site and surrounding areas are within a designated VHFHSZ and are within SRAs and Local Responsibility Areas (LRAs) as shown on Figure 3.14-1. Various cumulative development projects listed in Table 1-3, *List of Cumulative Development Projects*, are also within the VHFHSZ. However, all projects proposed within VHFHSZs would be required to meet minimum fire fuel modification and/or clearing requirements in addition to meeting the standards of the various fire codes in effect at the time of building permit issuance, including but not limited to the CoFC, California Building Standards Code (SBSC), and County Zoning Ordinance. Brush management is required by the County of San Diego, and the CBSC outlines building design requirements related to building materials and construction methods for exterior wildfire exposure. With adherence to applicable requirements, the Project and cumulative development within the VHFHSZ would not increase hazards to on-site structures from wildland fires and hazards to adjacent properties.

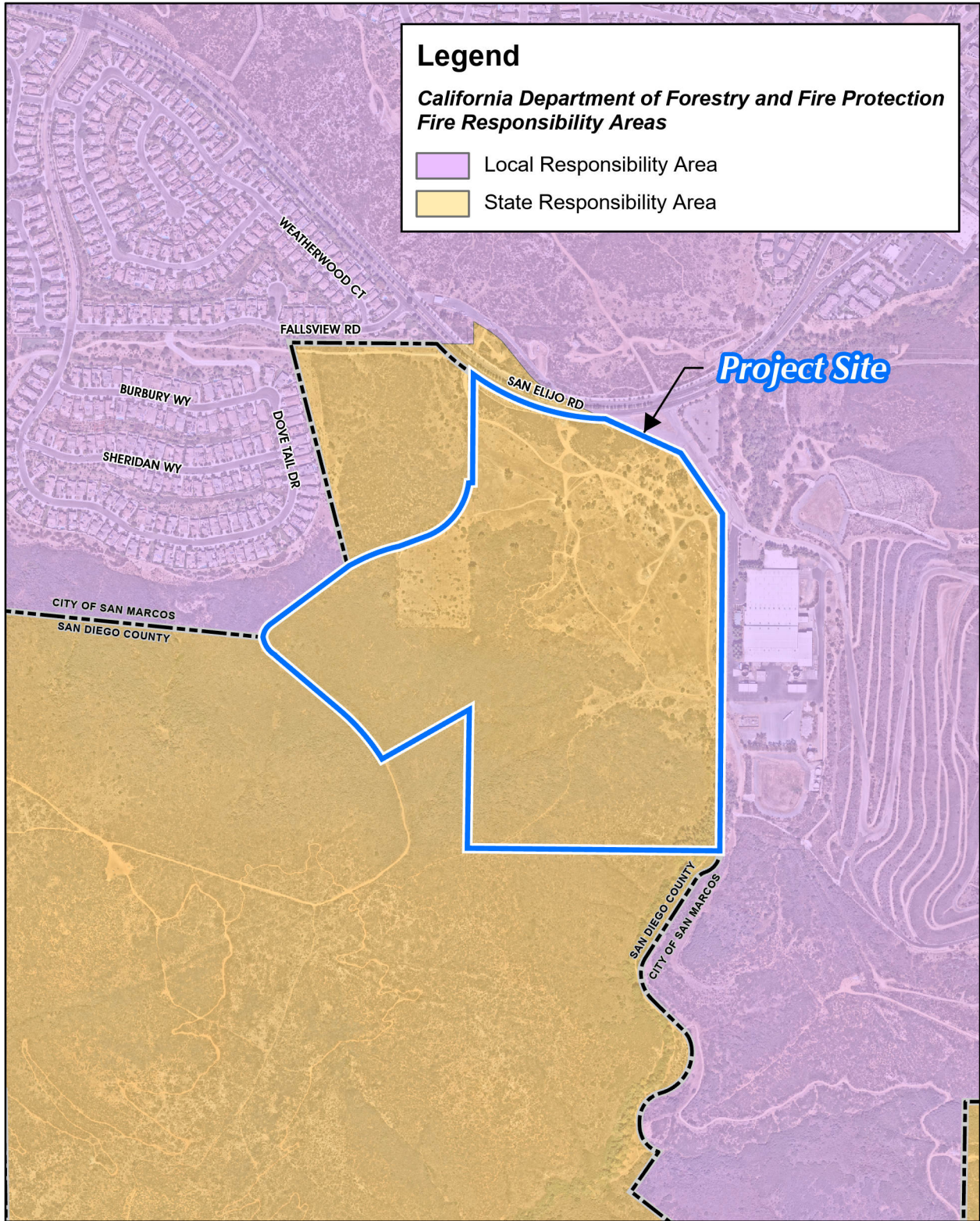
The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. Further, the Project would involve implementation of site access improvements and would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan area as demonstrated in *Appendix M1*. Similarly, cumulative development in proximity to the Project area would be required to adhere to emergency access requirements. The Project would not result in a cumulatively considerable significant impact associated with an adopted emergency response plan or emergency evacuation plan, as it would add only 2.0 minutes to evacuation times on San Elijo Road as analyzed in *Appendix M1*.

3.13.6 Significance of Impacts Prior to Mitigation

Based on the analysis provided above, the Project would have less than significant impacts related to wildfire with incorporation of the Project's required conditions of approval, including adherence to the Project's FPP and CWEP. Accordingly, no additional wildfire attenuation or management measures are required or proposed.

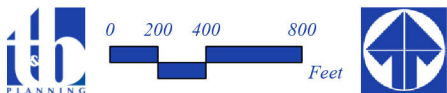
3.13.7 Conclusion

Based on the analysis provided above, the Project would not have a significant direct or cumulatively considerable impact related associated with wildfire.

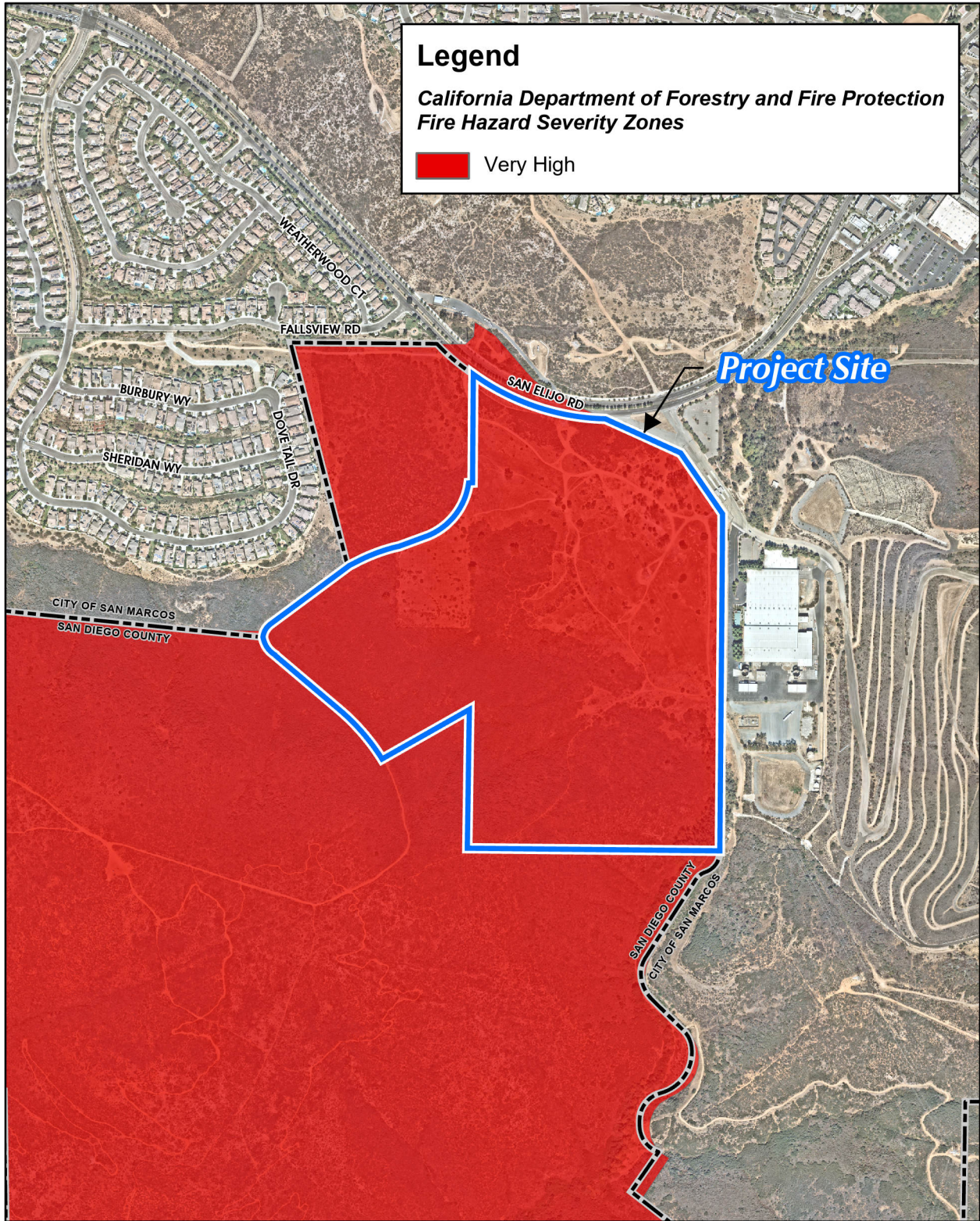


Source(s): Esri, Nearmap Imagery (September 2022), CALFIRE (2021)

Figure 3.13-1

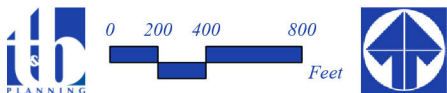


Fire Responsibility Area

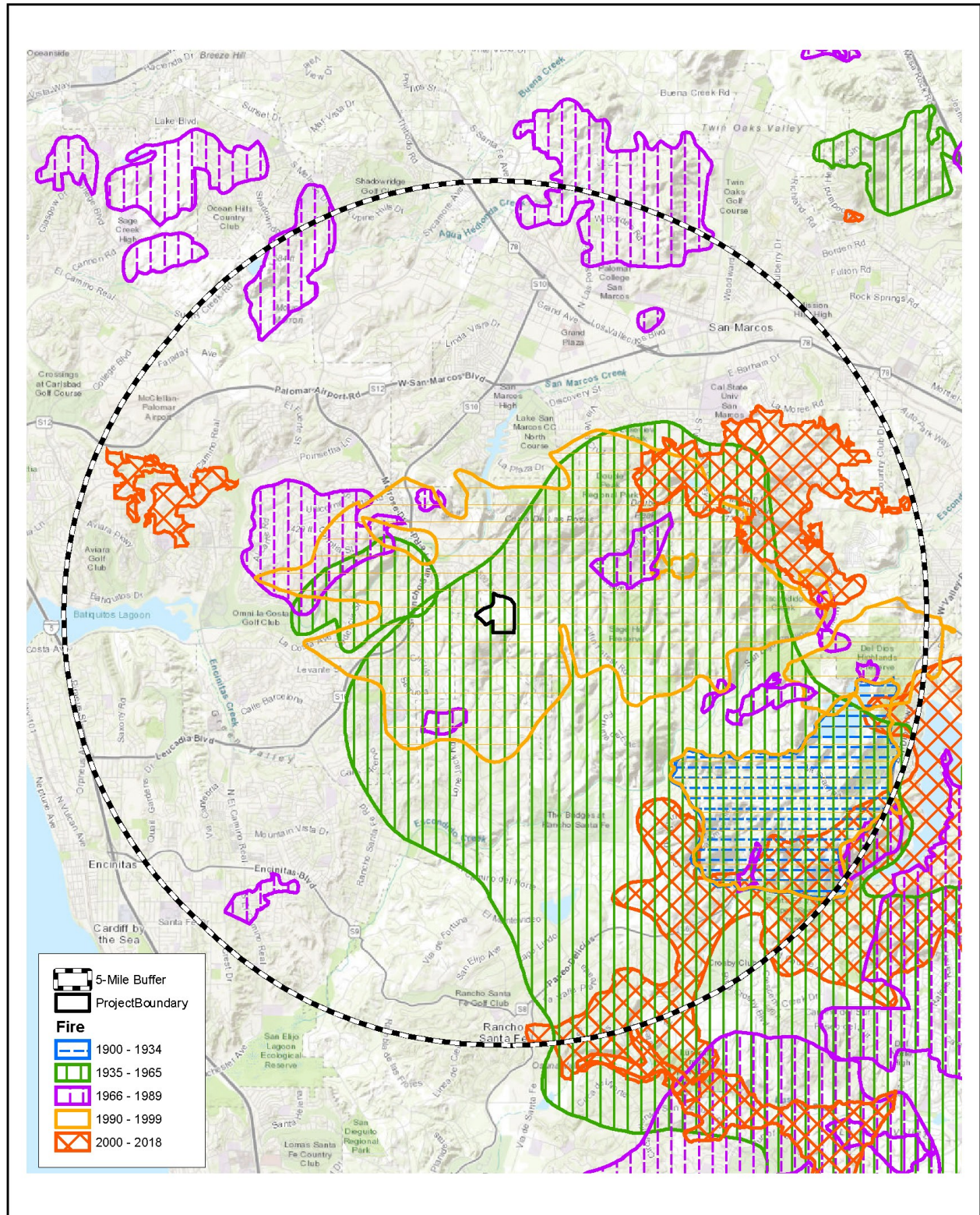


Source(s): Esri, Nearmap Imagery (September 2022), CALFIRE (2021)

Figure 3.13-2

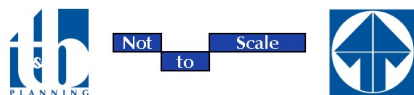


Fire Hazard Severity Zones

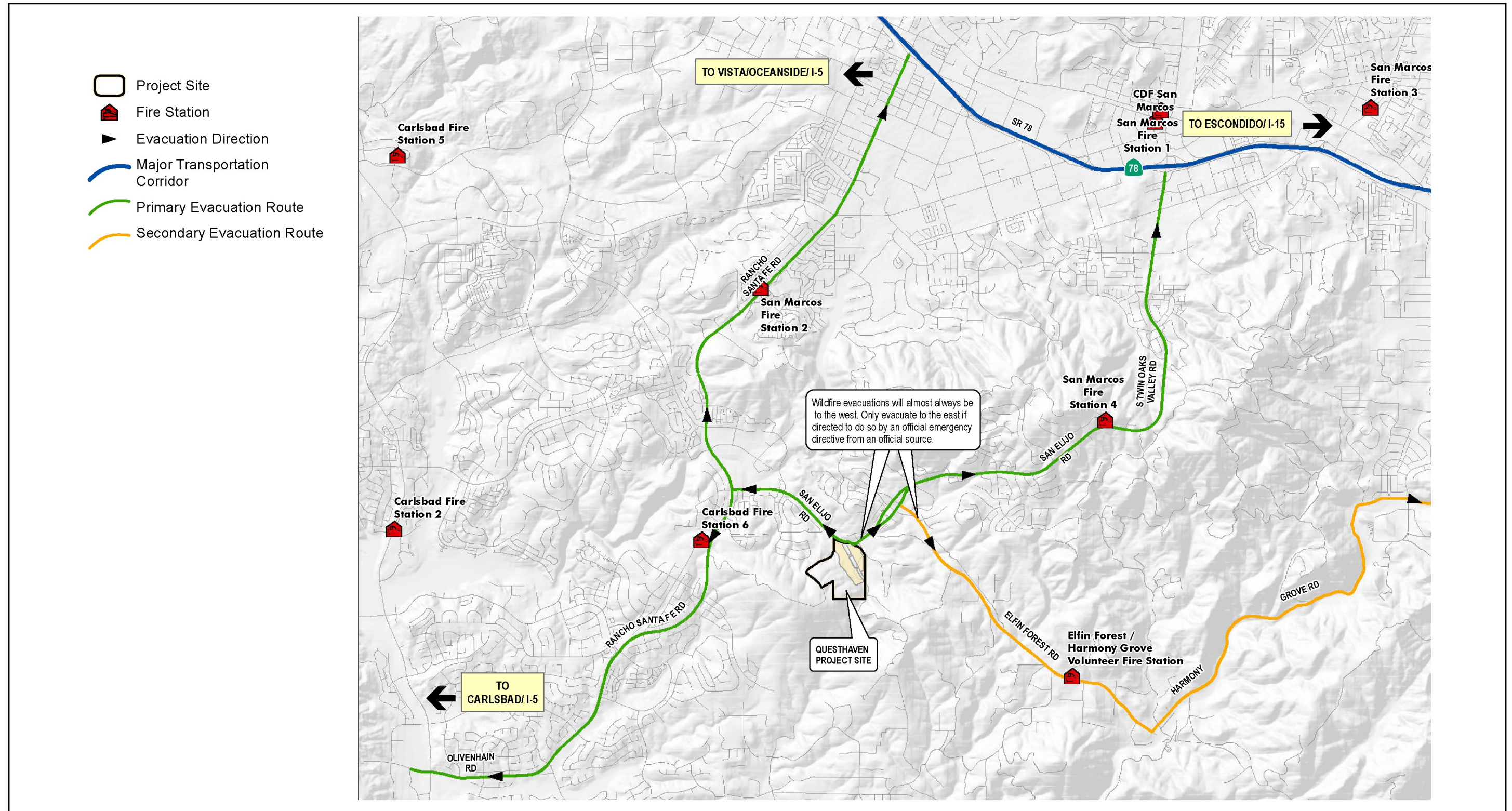


Source(s): Dudek (February 2022)

Figure 3.13-3

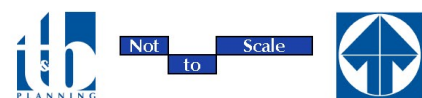


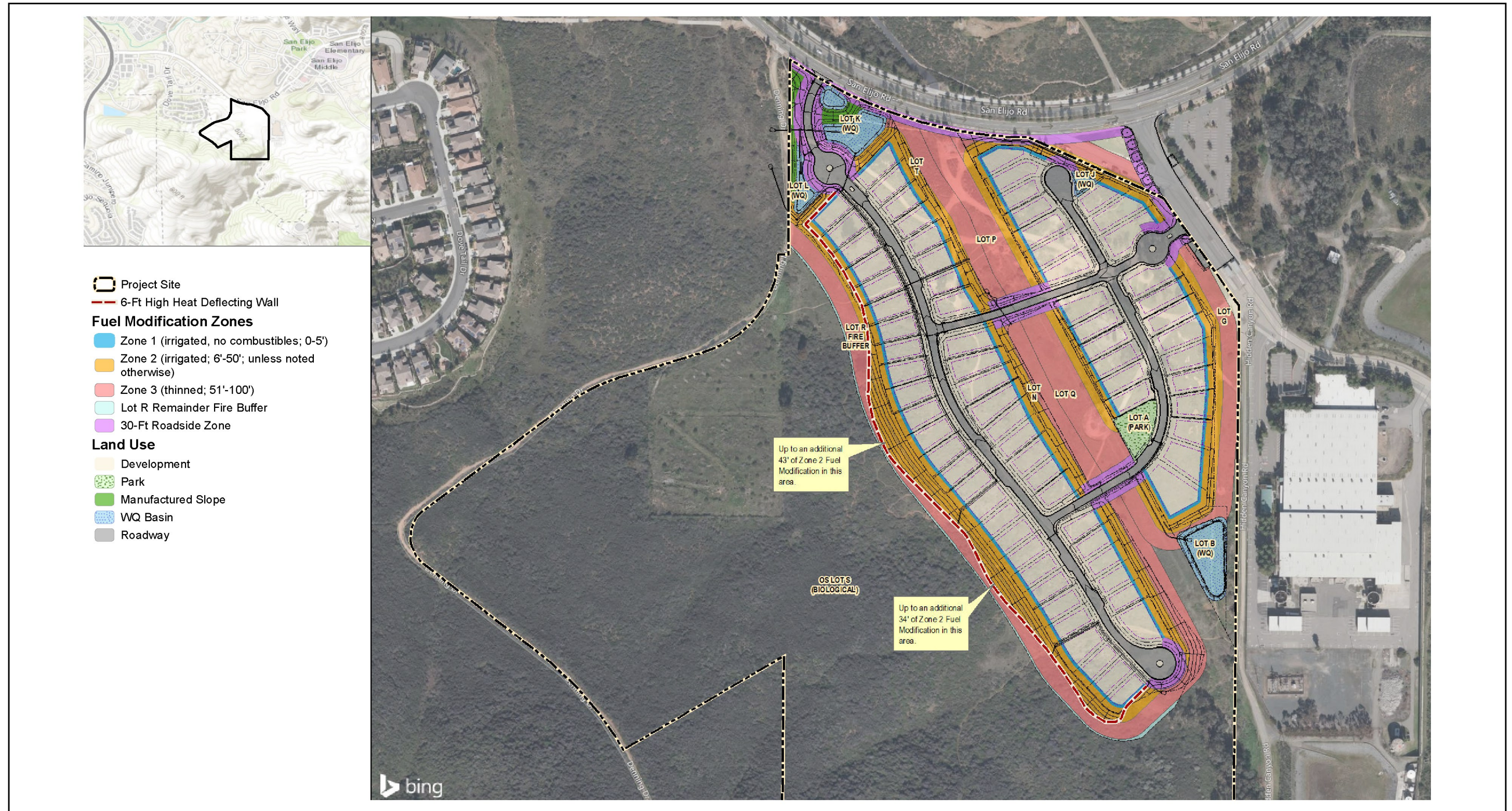
Fire History Map



Source(s): Dudek (April 2021)

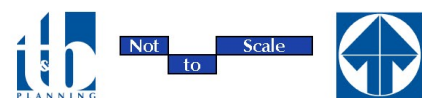
Figure 3.13-4





Source(s): Dudek (February 2022)

Figure 3.13-5



4.0 OTHER CEQA CONSIDERATIONS

This chapter addresses other considerations required pursuant to State California Environmental Quality Act (CEQA) Guidelines Sections 15126.2 and 15128. This chapter addresses significant effects from the Project that cannot be mitigated to less than significant, significant irreversible environmental changes, and growth-inducing impacts.

4.1 Effects Found Not to be Significant During the EIR Scoping Process

The CEQA Guidelines Section 15128 requires that an environment impact report (EIR) “...contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.” As discussed in Section 1.0, *Project Description, Location, and Environmental Setting*, of this EIR and as identified in the Notice of Preparation (NOP) for this EIR included in *Appendix A*, the County determined that each of the 20 topical issues identified in Appendix G of the CEQA Guidelines should be evaluated in the EIR.

Additionally, CEQA Guidelines Section 15063 requires preparation of an initial study following preliminary review of a project to determine if this project may have a significant effect on the environment; however, Section 15063 states “If the Lead Agency can determine that an EIR will clearly be required for the project, and Initial Study is not required.” The County of San Diego, as Lead Agency determined an EIR would be required for the Project; thus, an initial study was not prepared and each of the 20 topical issues identified in Appendix G of the CEQA Guidelines were evaluated in the EIR.

4.2 Significant Environmental Effects of the Project That Cannot Be Mitigated to Less than Significant

The CEQA Guidelines require that an Environmental Impact Report (EIR) disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines Section 15126(b)). As identified through the topical issues analysis provided in EIR Section 2.0, *Environmental Analysis*, the Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after the consideration of compliance with applicable federal, State and local regulations and implementation of the Project-level mitigation measures identified in this EIR. The significant impacts that cannot be mitigated to a level below thresholds of significance consist of the following:

- **Global Climate Change (Project and Cumulative Impact).** The Project would result in GHG emissions of 763 MT CO₂e per year, and 3.58 MT CO₂e per capita per year, based on a population of 213 (2.8 persons per household multiplied by 76 residences). This would exceed the 2029 GHG efficiency metric threshold calculated for the Project to be 3.07 MT CO₂e per service population per year. As such, the Project would have a cumulatively considerable significant impact on global climate change.
- **Land Use Planning (Project and Cumulative Impact).** The Project would be inconsistent with the City of San Marcos General Plan Mobility Element Policy M-1.4. As such, the Project would result in a significant impact related to City of San Marcos General Plan Mobility Element policy consistency. Upon implementation, and as stated in Section 2.5, the

improvements identified as part of M-TRANS-1 and M-TRANS-2 would achieve consistency with the City of San Marcos General Plan Mobility Element Policy M-1.4. However, because the mitigation requires the implementation of improvements in the City of San Marcos and the County of San Diego as the Lead Agency for this EIR does not have control over the nature and timing of improvements that would occur in the City of San Marcos, the County cannot assure that the required improvements would be in place at the time of Project occupancy; therefore, the Project would result in a significant and unmitigable land use and planning impact until the required improvements are in place.

- **Transportation (Project and Cumulative Impact).** The Project would, however, contribute vehicles to three intersections and one roadway segment that are calculated to operate below LOS D standards, which would be inconsistent with the City of San Marcos Mobility Element Policy M-1.4. Additionally, the Project's residential land use is calculated to generate a VMT per Resident of 24.1 miles, which exceeds the significance threshold of 16.07 miles. Thus, the Project's impacts would be significant on a direct and cumulatively considerable basis.

Upon implementation, and as stated in Section 2.5, the improvements identified as part of M-TRANS-1 and M-TRANS-2 would achieve consistency with the City of San Marcos General Plan Mobility Element Policy M-1.4. However, because the mitigation requires the implementation of improvements in the City of San Marcos and the County of San Diego as the Lead Agency for this EIR does not have control over the nature and timing of improvements that would occur in the City of San Marcos, the County cannot assure that the required improvements would be in place at the time of Project occupancy; therefore, the Project would result in a significant and unmitigable transportation impact until the required improvements are in place.

In regard to reducing VMT, none of the measures provided in the Project's Transportation Impact Study (Appendix L1) are readily quantifiable because it is not possible to accurately predict human behavior responses to VMT reduction strategies. As determined by the Project's LTA, none of the measures applicable for the Project are quantifiable measures. Additionally, none of the measures applicable for the Project are feasible measures with the exception of short-term bicycle racks on site, which would be implemented on the Project site. Because the none of the applicable TDM measures can be demonstrated to reduce the VMT per resident to a less than 16.07 miles, the Project is considered to have a significant and unmitigated VMT impact.

4.3 Significant Irreversible Environmental Changes

Section 15126.2(d) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project and states:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or non-use thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irrecoverable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project will result in significant irreversible environmental changes if the following occurs:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).”

Determining whether the Project may result in significant irreversible effects requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. There are no non-renewable resources present at the Project site; therefore, conversion of the land from its current state to residential uses would not degrade or destroy non-renewable resources in such a way that there would be little possibility of restoring them.

Construction and long-term operation of the Project would require the commitment and reduction of non-renewable and/or slowly renewable resources, including petroleum fuels and natural gas (for vehicle emissions, construction, lighting, heating, and cooling of structures) as well as lumber, sand/gravel, steel, copper, lead, and other metals (for use in building and roadway construction and utility infrastructure). Other resources that are slow to renew and/or recover from environmental stressors would also be impacted by Project implementation; these include air quality (through the combustion of fossil fuels and production of greenhouse gases) and water supply (through the increased potable water demands for drinking, cleaning, landscaping, and general maintenance needs). The Project is required by law to comply with federal, State, and local building requirements addressing energy conservation. Compliance with these requirements reduces a building operation’s energy volume that is produced by fossil fuels. A more detailed discussion of energy consumption is provided in EIR Section 3.4, *Energy Use*. The consumption of non-renewable resources to construct and operate the Project over the long-term would likely commit subsequent generations to the same use of the land and similar patterns of energy consumption. It is improbable that the Project would revert to permanently undeveloped conditions due to the large capital investment that would already have been committed. However, the Project is not expected to reduce the availability of any natural resources as a result of long-term operational activities.

The County of San Diego General Plan and zoning ordinance anticipate that development within the Project site would eventually support residential uses in accordance with the underlying zoning classification and land use designations. Implementation of the Project would commit the Project to residential uses. These uses are compatible with the existing and planned uses that surround the Project site. The Project and its environmental effects would not compel or commit surrounding properties to land uses other than those that are existing today or those that are planned by the General Plan and the zoning ordinance. For this reason, the Project would not result in a significant, irreversible change to nearby, off-site properties.

EIR Section 3.6, *Hazards and Hazardous Materials*, provides an analysis of the Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage to the environment. As concluded in the analysis, compliance with federal, State, and local regulations related to hazardous materials would be required of all contractors working at the Project site during the Project's construction and of all occupants that occupy the Project's buildings. As such, construction and long-term operation of the Project would not cause significant irreversible damage to the environment that could result if hazardous materials were released from the site, including damage that may result from upset or accident conditions.

Lastly, an increased commitment of public services (e.g., police and fire) would also be required. However, as discussed in EIR Section 3.10, *Public Services*, the Project would not require or result in the unplanned construction of new or alteration of existing fire or police protection facilities to maintain an adequate level of service to the Project site, and no physical environmental impacts would result.

4.4 Growth Inducing Effects

State CEQA Guidelines Section 15126.2 (e) requires an EIR to discuss the ways in which a proposed project could directly or indirectly foster economic or population growth, or the construction of additional housing in the surrounding environment. For example, direct growth inducement would result if a proposed project involved construction of new housing. Indirect growth might occur if a project were to establish substantial new permanent employment opportunities or stimulate the expansion of additional utilities or public services into unserved areas.

Similarly, a proposed project would indirectly induce growth if it would remove an obstacle to additional development, such as removing a constraint on a required public service or utility. A project proposing to extend roadways into an area that was previously inaccessible and/or undeveloped would be considered growth-inducing. Additionally, expansion of existing roadway capacities could potentially be growth-inducing as a result of improved accessibility.

Under CEQA, growth inducement is not necessarily considered detrimental, beneficial, or of little significance to the environment. The growth inducing potential of a project could be considered significant if it fosters growth or results in a concentration of population in excess of what is assumed in adopted master plans, land use plans, or projections made by regional planning agencies, such as the San Diego Association of Governments (SANDAG). Additionally, a project could be considered growth inducing if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans or policies.

The following discusses the characteristics and consequences of the proposed Project that may encourage and facilitate other activities that could result in significant individual or cumulative effects on the environment. This analysis does not assume that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment (State CEQA Guidelines 15126.2 (d)).

4.4.1 Population Growth

SANDAG provides growth projections for the San Dieguito Community Planning Area for the years 2025, 2035, and 2050. For the years 2025 and 2035, SANDAG projects a total population of 37,584 and 37,733, respectively. By 2050, SANDAG projects a total population of 36,988.

The Project would result in the development of 76 dwelling units and approximately 213 residents. As shown in Table 1-4, *Project Density Calculation*, the Project site is allowed a maximum of 64 dwelling units. Pursuant to State law, the Project includes a Density Bonus Permit to allow for a 20% increase in the maximum allowable number of residential dwelling units in exchange for reserving 5% of the dwelling units on-site for “Low” Income Affordable Housing (defined as 50% to 80% of the Area Median Income [AMI]). Approval of the Project’s Density Bonus Permit would allow for an increase in the maximum allowable dwelling units from 64 dwelling units to 76 single-family dwelling units in exchange for reserving seven units restricted for “Low” Income Affordable Housing. Pursuant to California Government Code Sections 65915 through 65918, any increases in density under the State Density Bonus Law are consistent with the General Plan. Thus, although the Project proposes 76 dwelling units, the Project is considered consistent with the land use designations applied to the site by the County of San Diego General Plan. The Project implements growth and development anticipated by the General Plan and would not change existing regulations pertaining to land development.

While the Project would increase the number of residential dwelling units in the County, this change would generally be in response to population growth forecasts and the resulting County-wide demand for housing. For the San Dieguito Community Planning Area, where the Project is located, forecasts by SANDAG show an increase of 1,379 single-family dwelling units from 2020 to 2035 and an additional 504 single-family dwelling units from 2035 to 2050 (SANDAG 2013). The 76 single-family dwelling units proposed by the Project would be consistent with this population forecast. Because the Project is consistent with the existing land use designation and would not generate population growth beyond the levels assumed for the region, the Project would not conflict with any population projections for the region and would, therefore, also be consistent with the Regional Plan. (Helix, 2023c)

Therefore, because the intensity proposed for the Project would be consistent with the County General Plan, and because the Project would not include infrastructure sized only for this Project and would not provide infrastructure improvements which could lead to growth beyond what is currently allowed for by the existing County General Plan, no significant growth would be induced as a result of the Project. Accordingly, the Project is not considered to be growth inducing pursuant to CEQA Guidelines Section 15126.2(d).

4.4.2 Economic Growth

Growth inducement can be measured via economic growth, which considers a range of demands for temporary and permanent employees, to an increase in the overall revenue base for an area, to a new demand for supporting services such as retail, restaurant, and entertainment uses.

During Project construction, a number of design, engineering, and construction-related jobs would be created. This would last until Project construction is completed. This would be an indirect, growth-inducing effect of the Project.

As further described in EIR Section 1.0, *Project Description, Location, and Environmental Setting*, for purposes of analysis in this EIR, it is anticipated the Project would result in the development of 76 dwelling units. It is estimated that this development could generate up to 213 new residents. As discussed above, the Project would not exceed the growth projections for the County or the region. The

Project is considered consistent with the land use designations applied to the site by the General Plan. Further, it is expected that the short-term construction jobs and new positions during operation would be filled by workers who already reside in the local area or region.

As development occurs on-site, Project residents would seek shopping, entertainment, employment, home improvement, auto maintenance, and other economic opportunities in the surrounding area. The Project is located near existing employment and retail areas, which would help serve the employment and shopping needs of the future residents. However, the increased demand for such economic goods and services could encourage the creation of new businesses and/or the expansion of existing businesses that address these economic needs. This growth may be experienced in the areas in proximity to the Project site that are either currently undeveloped or underutilized. However, this type of growth is already anticipated in the County of San Diego General Plan, and as identified on Table 1-3, *List of Cumulative Projects*, is already being proposed. Therefore, implementation of residential uses allowed by the Project would support existing uses in the area and could encourage or facilitate the growth envisioned in the County of San Diego General Plan.

4.4.3 Removal of Obstacles to Growth

The elimination of either physical or regulatory obstacles is a growth-inducing impact. The sections below discuss physical obstacles and regulatory obstacles to growth.

A physical obstacle to growth typically involves the lack of public services and infrastructure. A project would trigger growth if it would result in infrastructure with excess capacity or if it would remove an obstacle to growth in an area, such as providing infrastructure, including roadways, that were previously not available.

The Project would result in the completion of roadway improvements to provide access to the site and new roadways built on site would serve the Project but would not provide additional capacity to induce unplanned growth. Additionally, the Project would not involve development that would establish an essential unplanned public service or utility/service system. The Project site and surrounding areas are already served by essential public services and an extensive network of utility/service systems and other infrastructure necessary to accommodate or allow the existing conditions and planned growth.

The existing and planned utility/service systems in the roadways adjacent to or near the Project site can serve the development proposed within the Project area with connections to these existing facilities. The utility infrastructure installed as part of the Project would be sized and located expressly to serve the on-site uses, and would not, therefore, induce unplanned growth in the Project vicinity.

The Project involves the development of residential uses, consistent with the land use designations for the Project site identified in the County of San Diego General Plan. The proposed residential uses would be developed in accordance with applicable County development standards. The Project implements growth and development anticipated by the County of San Diego General Plan and would not change existing regulations pertaining to land development. Therefore, the Project is not considered to be growth inducing with respect to the removal of obstacles to growth.

5.0 ALTERNATIVES

5.1 Rationale For Alternative Selection

Section 15126.6(a) of the State CEQA Guidelines requires the discussion of “a reasonable range of alternatives to a project, or the location of a 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 Project was determined to result in potentially significant and unmitigated direct and/or cumulative impacts for greenhouse gas emissions, land use (related to transportation impacts), and transportation/ traffic. The Project was also determined to have significant (or potentially significant) direct, indirect and/or cumulative but mitigated impacts to air quality, biological resources, cultural resources, and noise.

Section 15126.6(f) of the CEQA Guidelines states that “the range of alternatives in an EIR is governed by the ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.” The State CEQA Guidelines provide several factors that should be considered in regard to the feasibility of an alternative. Those factors include: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated).

This EIR analyzes a total of four alternatives; the No Project/No Development Alternative, as well as a total of three full development alternatives, are evaluated in Subsections 4.3 through 4.5 of this chapter, and briefly summarized below.

The CEQA Guidelines require the evaluation of a No Project Alternative. The discussion of the No Project Alternative may proceed along two lines:

1. If the project is a development proposal, the No Project Alternative is the circumstance under which the project does not proceed, and
2. When the project is the revision of an existing land use or regulatory plan, the No Project Alternative is the continuation of the existing plan.

In the case of the Project described in this EIR, both types of No Project Alternative apply and are discussed. The first No Project Alternative is the circumstance under which the Project does not proceed. The second No Project Alternative is addressed as the General Plan Consistent alternative described below. The No Project/No Development Alternative allows retention of the site as it currently exists and thereby avoids both construction-period and long-term unmitigable or unmitigated impacts (i.e., to greenhouse gas emissions, land use, and transportation/traffic) associated with development of the Project.

The No Project/Development Pursuant to Existing Land Use Alternative would be consistent with the General Plan and would not include a Density Bonus Permit for Affordable housing. This Alternative would allow for development across the entire Project site and would impact steep slopes and sensitive biological resources, to a greater extent than the Project. Under the Project, steep slopes and most of the sensitive biological resources would be preserved within open space easements.

The Property Specific Request (PSR) Alternative was included to disclose the impacts that would occur if the PSR plan for the site were to be implemented on-site instead of the Project. The PSR Alternative evaluates development of 364 multi-family dwelling units and would not include a Density Bonus Permit for Affordable housing. This Alternative assumes development would occur in the same development footprint as the Project, and that clustering of development to avoid impacts to biological resources would occur.

The Reduced Development Alternative was included to disclose the impacts that would occur if the Project's development footprint and dwelling unit number were reduced by 20%. While residential uses would continue to be developed on-site, the reduced development area would reduce physical impacts and would potentially reduce impacts due to the number of dwelling units proposed as part of the Project. Under this alternative, the Project site would be developed with 61 dwelling units (a reduction of 15 dwelling units as compared to the 76 units proposed by the Project), within a development area of 16.78 acres (a reduction of 4.2 acres as compared to the 20.98 development area proposed by the Project). Given the reduced density that would occur under this Alternative, a Density Bonus Permit would not be pursued.

These alternatives represent a reasonable range of alternatives, as defined in the State CEQA Guidelines, because they present feasible alternate development patterns that would reduce significant impacts associated with the Project. These alternatives are compared to the impacts of the Project (with an overview of Project and alternative impacts provided in Table 4-1, *Comparison of Project and Alternative Impacts*, and are assessed relative to their ability to meet the basic objectives of the Project.

5.1.1 Project Objectives

The underlying purpose of the Project is to accommodate a portion of the projected population growth and housing needs in San Diego County by developing a residential community, consistent with the General Plan land use designation in a manner that is sensitive to the environment and complementary of surrounding land uses. As described in Subchapter 1.1 of this EIR, the Project includes the following overall objectives.

- To efficiently develop an underutilized property with residential uses consistent with the site's General Plan land use designation.
- To establish a residential development in the unincorporated community of San Dieguito, San Diego County in a manner that is sensitive to the environment and complementary of surrounding land uses.
- To develop a residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration to minimize alterations to natural landforms where practical.
- To increase and diversify the available housing supply in unincorporated San Diego County by providing residential homes that will be marketable within the evolving economic profiles of nearby communities.
- To provide on-site park space for use by Project residents and trail access for use by Project residents and residents of surrounding communities.
- To ensure compatibility of design between on-site land uses and surrounding properties.

- To establish development phasing that results in a logical, coordinated buildout of a new residential community.

5.1.2 Alternatives Considered but Rejected from Further Study

Alternative Location

In accordance with CEQA Guidelines Section 15126.6(f)(2), an alternative project site location should be considered if development of another site is feasible, and if development of another site would avoid or substantially lessen significant impacts of the proposed project. Factors that may be considered when identifying an alternative site location include the size of the site, its location, the General Plan (or Community Plan) land use designations, and availability of infrastructure. CEQA Guidelines Section 15126.6(f)(2)(A) states that a key question in looking at an off-site alternative is "...whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location." Further, CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

An effort was made to identify an alternative location for the Project. The selection criteria were developed to identify potential alternative project sites that would be fairly easy to acquire, and large enough to accommodate the proposed uses. When looking for the alternative sites, the following criteria were used:

- Alternative site had to be within the identified market area
- Land had to be privately owned
- Alternative site had to feasibly accomplish most of the basic objectives of the project

The Project objectives require that the Project be sited in an area within San Dieguito, San Diego County in a manner that is sensitive to the environment and complementary of surrounding land uses and consistent with the site's General Plan land use designation.

No other similarly sized, undeveloped, property was known to be available for development within the County zoned for single-family residential uses within San Dieguito. Specific to the San Dieguito area, given the residential nature of the area and high vehicle miles traveled (VMT), if a property were to become available, development would be likely to result in impacts similar to those identified for the Project. This includes the issues of aesthetics, biological resources, cultural resources, greenhouse gas emissions, noise, and transportation/traffic.

Therefore, an alternative location was considered but rejected because: (1) it is unlikely that an alternative site in the County would substantially reduce significant environmental effects relative to the Project given the size of the parcel and type of development; and (2) the property was purchased with the intention of developing the site with residential uses, consistent with the General Plan land use designation. Therefore, the need for additional evaluation of an off-site alternative was rejected from further consideration.

Mixed-Use Project

As described in Section 1.0, *Project Description, Location, and Environmental Setting*, the Project site is zoned Rural Residential (RR) and Open Space (S80). The purpose of the RR zones is to provide appropriate regulations for the development of single dwelling units. Based on the current zoning, it is appropriate to consider an alternative that involves residential development at the Project site. Therefore, a Mixed-Use Project Alternative would involve development of the Project site with residential and commercial mixed uses.

The Project includes development of 76 single-family dwelling units and is consistent with the General Plan and zoning designations for the site, which allow for single-family development. Development of a mixed-use development project would not be consistent with the existing General Plan and zoning designations for the site. Therefore, the Mixed-Use Project Alternative is not viable for analysis as mixed-uses are not allowed on-site.

As noted previously, an alternative can be eliminated from detailed consideration in an EIR based on failure to meet most of the basic project objectives and the inability to avoid significant environmental impacts. The Mixed-Use Project Alternative would not meet the Project's objectives to design a residential development in a manner that is sensitive to the environment and complementary and compatible with surrounding land uses. Additionally, it is unlikely that a mixed-use development on-site would meet the Project's objectives for that takes environmental opportunities into consideration as effectively as the Project, due to the additional roadway and parking area that would be needed for the mixed-use component. Furthermore, the Mixed-Use Project Alternative would not avoid the Project's significant impact related to conflicting with transportation plans and would likely not avoid the Project's significant environmental impact related to greenhouse gas emissions. The Mixed-Use Project Alternative would have the potential to reduce the Project's VMT-related significant impacts; however, given the Project's location in a high VMT area, including a mixed-use component may not reduce impacts to below a level of significant.

Further analysis of a Mixed-Use Project Alternative is not required in this EIR.

5.2 Analysis of the No Project/No Development Alternative

5.2.1 No Project/No Development Alternative Description and Setting

Under the No Project/No Development Alternative, the Project site would remain in its current condition. The native and non-native habitat throughout the site would remain intact. The above-ground transmission line that currently bisects the property, the informal dirt trails would continue to exist. The Project residential uses would not be constructed; nor would supporting infrastructure such as improved road elements, and other utility upgrades. In addition, the Project-proposed public trail parking and connection and HOA-maintained landscaped areas would not be created.

5.2.2 Comparison of the Effects of No Project/No Development Alternative to the Project

The anticipated environmental effects resulting from the No Project/No Development Alternative are described below, along with comparisons of these impacts to the Project (refer to Table 4-1).

Biological Resources

The No Project/No Development Alternative would avoid the significant direct impacts to biological resources identified for the Project. In summary, specific biological impacts identified for the Project, which would be avoided by this alternative include loss of sensitive habitat, impacts to sensitive plant and animal species, impacts to non-wetland waters of the State, and displacement of nesting migratory birds during their breeding season. It should be noted that under the No Project/No Development Alternative, no on- or off-site preservation of biological resources would occur. The No Project/No Development Alternative would be expected to generally retain biological resources in their existing condition; therefore, there would be no direct impacts and overall impacts to biological resources associated with this alternative would be less than with the Project.

Cultural Resources

As discussed in detail in Subsection 2.2, no known significant impacts would occur within the Project site. As a result, no known impacts associated with the Project would occur. Unknown subsurface resources could be present, but because no grading activities (which might uncover unknown resources) at all would occur on the Project site with the No Project/No Development Alternative, no significant impacts to cultural resources would occur. When compared to the Project, impacts to cultural resources could be less under this alternative.

Global Climate Change

The elimination of development on, or new uses of, the Project site would result in no new greenhouse gas (GHG) emissions impacts. The site would remain empty and would therefore not have homes placed upon it. As discussed in detail in Subsection 2.3, implementation of the Project would result in significant and unavoidable impacts due to GHG emissions. Under the No Project/No Development Alternative, no significant impacts due to global climate change would occur. When compared to the Project, impacts due to global climate change would be less under this alternative and the Project's significant and avoidable impact would not occur.

Land Use Planning

Under the No Project/No Development Alternative, the Project site would remain undeveloped. However, this alternative would potentially increase land use inconsistencies by not realizing the full vision for the area as outlined in the General Plan. This would occur because the alternative would not effectively fulfill policies for residential development on-site compared to the Project. Significant land use impacts are anticipated with the Project as a result of conflict with City of San Marcos General Plan Policy M.1-4, and none would occur under this alternative.

Noise

The lack of current activities on the site results in a lack of site-generated noise that could affect off-site sensitive noise receptors. Accordingly, no significant noise effects would occur as a result of the No Project/No Development Alternative. This alternative would therefore avoid the potentially significant but mitigable construction noise impacts to the adjacent Loma San Marcos development and operational noise impacts identified for the site, relative to unshielded HVAC mechanical systems,

and noise impacts to homes facing or adjacent to San Elijo Road. When compared to the Project, impacts to noise would be less under this alternative.

Tribal Cultural Resources

Under the No Project/No Development Alternative, no development would occur on the Project site. There are no tribal cultural resources on-site and no impacts to such resources would result from implementation of the Project or this alternative.

Transportation

No existing trips are associated with this disturbed, but undeveloped, parcel, and therefore no significant transportation/traffic impacts would occur with implementation of the No Project/No Development Alternative. This alternative would thus avoid the conservatively identified significant (but unmitigated) direct and cumulative transportation impacts within the City of San Marcos. Furthermore, this alternative would avoid the significant and unavoidable VMT impacts that would occur with implementation of the Project. When compared to the Project, impacts to transportation/traffic would be less under this alternative.

Aesthetics and Visual Resources

Under the No Project/No Development Alternative, the Project site would continue to appear as a disturbed, but primarily undeveloped, area. The Project's less-than-significant aesthetic impacts would not occur. When compared to the Project, impacts to aesthetics would be less under this alternative.

Agricultural Resources

Under the No Project/No Development Alternative, the Project site would continue to appear as a disturbed, but primarily undeveloped, area. As described in Subsection 3.2, no agricultural uses occur on-site, the Project site does not contain designated Farmland, and is not zoned for agricultural uses. Development under the Project would not result in any significant impacts to agricultural resources. The Project's less-than-significant agricultural resources impacts would not occur. When compared to the Project, impacts to agricultural resources would be less under this alternative.

Air Quality

The elimination of development on, or new uses of, the Project site would result in no new air quality impacts. As discussed in Subsection 3.3, the Project would result in less than significant air quality impacts. When compared to the Project, impacts to air quality would be less under this alternative.

Energy Use

The No Project/No Development Alternative would not consume any energy as the site would remain undeveloped. As discussed in Subsection 3.4, the Project would result in less than significant impacts due to energy use. When compared to the Project, impacts to air quality would be less under this alternative.

Geology, Soils, and Paleontological Resources

The No Project/No Development Alternative would not result in any development on-site or related grading, and there would be no associated impacts related to geology, soils, or paleontological resources. However, the Project site would remain subject to existing geologic hazards under this alternative (e.g., seismic ground shaking). The potential geology, soils, and paleontological resource impacts resulting from the Project in Subsection 3.5 would be avoided with this alternative; however, these Project impacts would be less than significant with adherence to applicable regulatory/industry standards and recommendations in the site-specific geotechnical investigation. Therefore, this alternative would not avoid any significant impacts related to geology, soils, and paleontological resources, since the Project's impacts are less than significant.

Hazards and Hazardous Materials

As the No Project/No Development Alternative would not result in any development on site, the alternative would not result in potential impacts related to health and safety. With adherence to applicable regulatory requirements, the Project would pose a less than significant hazard to the public or the environment related to health and safety. Therefore, this alternative would not avoid any significant impacts related to health and safety since the Project's impacts are less than significant.

Hydrology and Water Quality

As the No Project/No Development Alternative would not result in any development, existing hydrology and drainage patterns of the Project site would remain the same. The Project would include the installation of a storm drain and water quality system which would discharge to the same locations as existing conditions, retaining existing drainage patterns. Moreover, the 100-year flow rates with the Project would be less than existing conditions and hydrology impacts would be less than significant. Therefore, this alternative would not avoid any significant hydrology impacts resulting from the Project since the Project's impacts are less than significant.

Mineral Resources

Under the No Project/No Development Alternative, no development would occur on-site. As discussed in Subsection 3.8, the Project does not contain any mineral resources and is not designated as an area with significant mineral resources and impacts were determined to be less than significant. The Project's less-than-significant impacts to mineral resources would not occur. When compared to the Project, impacts to mineral resources would be similar to the Project.

Population and Housing

The No Project/No Development Alternative would not include any land uses that would increase population; thus, no impact would occur. Impacts related to population and housing would be less than significant for the Project, which includes the development of residential uses, consistent with the General Plan. Therefore, this alternative would not avoid any significant impacts from the Project related to population and housing since the Project's impacts are less than significant.

Public Services

No development would occur under the No Project/No Development Alternative that would increase population, resulting in a need to expand public services and facilities. Impacts related to demand for these services also would be less than significant for the Project and there would be no need for new or expanded public facilities and no associated physical impacts associated with implementation of such facilities. Therefore, this alternative would not avoid any significant impacts from the Project related to public services and facilities since the Project's impacts are less than significant.

Recreation

No development would occur under the No Project/No Development Alternative that would increase population, resulting in a need to expand recreation facilities. Impacts related to demand for recreation facilities also would be less than significant for the Project and there would be no need for new or expanded recreation facilities and no associated physical impacts associated with implementation of such facilities. Therefore, this alternative would not avoid any significant impacts from the Project related to public services and facilities since the Project's impacts are less than significant.

Utilities and Service Systems

As the No Project/No Development Alternative would not include development on the Project site, it would not result in demand for water, sewer, or solid waste disposal services. The Project's impacts to public utilities and generation of solid waste would be less than significant with adherence to regulatory requirements. Therefore, this alternative would not avoid any significant impacts from the Project related to public utilities since the Project's impacts are less than significant.

Wildfire

The Project site is within an area designated as a Very High Fire Hazard Severity Zone (VHFHSZ). As the No Project/No Development Alternative would not implement development on the Project site, it would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan or increase any risks related to wildfire. The Project would result in development within the Project site, but consistent with the existing development on site, would comply with regulations addressing development in a VHFHSZ, including but not limited to requirements associated with brush management, and building design/materials, water supply, and emergency/fire access. Impacts related to wildfire also would be less than significant under this alternative and with the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to wildfire since the Project's impacts are less than significant.

5.2.3 Summary of No Project/No Development Alternative Analysis

The No Project/No Development Alternative would avoid the Project's significant GHG, land use (related to transportation impacts), and transportation impacts. Because there would be no construction activities under this alternative, this alternative would have reduced impacts related to air quality, biological resources, cultural resources, and noise. However, the Project's impacts related to these topical issues would be less than significant with adherence to Mitigation Measures, applicable regulatory requirements, and/or compliance with the County's standard conditions. This alternative would have similar impacts to the Project (no impacts or less than significant impacts) with regard to

aesthetics and visual resources, agricultural resources, air quality, energy use, geology and soils, hazards and hazardous materials, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire. This alternative would be less effective than the Project with regard to fulfilling the goals and policies of the General Plan and San Dieguito Community Plan related to increasing residential development. This alternative would not result in impacts to hydrology/drainage; however, the Project would reduce the amount of runoff from the Project site compared to existing conditions.

The No Project/No Development Alternative would not: efficiently develop an underutilized property with residential uses consistent with the site's General Plan land use designation; establish a residential development in the unincorporated community of San Dieguito, San Diego County in a manner that is sensitive to the environment and complementary of surrounding land uses; residential community with a design that takes topographic, geologic, hydrologic, and environmental opportunities and constraints into consideration; increase and diversify the available housing supply in unincorporated San Diego County; provide on-site park space for use by Project residents and trail access; ensure compatibility of design between on-site land uses and surrounding properties; or establish development phasing that results in a logical, coordinated buildout of a new residential community. It would, therefore, not meet any of the basic Project objectives listed above in Section 4.1.1.

5.3 Analysis of No Project/Development Pursuant to Existing Land Use Alternative

5.3.1 No Project/Development Pursuant to Existing Land Use Alternative Description and Setting

Under the No Project/No Development Pursuant to Existing Land Use Alternative, the Project site would be developed with 63 dwelling units across the entire 89.23-acre Project site pursuant to the existing General Plan and zoning designations. This Alternative would include development across the entire Project site and would not include any clustering of development to avoid sensitive biological resources, as is proposed under the Project and an Administrative Permit that would allow for clustering of the development. The Project includes a Density Bonus Permit, which includes development of seven Affordable dwelling units on-site in exchange for a density bonus on-site. Under this Alternative, a Density Bonus Permit would not be proposed; therefore, the seven Affordable dwelling units proposed as part of the Project would not be included under the analysis of this Alternative.

5.3.2 Comparison of the Effects of the No Project/Development Pursuant to Existing Land Use Alternative to the Project

The anticipated environmental effects resulting from the No Project/Development Pursuant to Existing Land Use Alternative are described below, along with comparisons of these impacts to the Project (refer to Table 4-1).

Biological Resources

The No Project/Development Pursuant to Existing Land Use Alternative would not cluster development of the site to avoid sensitive biological resources; thus, significant direct impacts to biological resources would be increased as compared to the Project. Under this alternative, impacts to sensitive habitat, sensitive plant and animal species, non-wetland waters of the State, and displacement of nesting migratory birds during their breeding season would be increased due to greater impacts on-

site. Therefore, this alternative would increase impacts as compared to the Project and would not avoid any significant impacts to biological resources, since the Project's impacts are less than significant.

Cultural Resources

As discussed in detail in Subsection 2.2, no known significant impacts to cultural resources would occur within the Project site. As a result, no known impacts associated with the Project would occur. The No Project/Development Pursuant to Existing Land Use Alternative would increase the area of impact to the entire 89.23-acre Project site. Thus, if surface cultural resources are found in the expanded impact area, impacts would be increased as compared to the Project. Unknown subsurface resources could also be present on-site and could occur both with the Project and this alternative. However, when compared to the Project, impacts to cultural resources would be increased under this alternative due to the increased impact area.

Global Climate Change

Under the No Project/ Development Pursuant to Existing Land Use Alternative, GHG emissions would be increased compared to the Project primarily due to the increase in construction area. Operationally, GHG emissions under this alternative would be reduced compared to the Project due to the reduction in the number of dwelling units and reductions in trip generation. As discussed in detail in Subsection 2.3, implementation of the Project would result in significant and unavoidable impacts due to GHG emissions. Although impacts would be reduced under the No Project/Development Pursuant to Existing Land Use Alternative as compared to the Project, impacts would remain significant and unavoidable due to the number of dwelling units and associated trip generation. When compared to the Project, impacts due to global climate change would be reduced slightly under alternative; however, impacts would remain significant and unavoidable. This alternative would not avoid any significant impacts related to GHG emissions.

Land Use Planning

Under the No Project/Development Pursuant to Existing Land Use Alternative, the Project site would be developed with 63 dwelling units in accordance with the County of San Diego General Plan. Development on-site would be consistent with the existing land use designation and zoning for the site. Although the amount of development under this alternative would be less than with the Project, this alternative would not conflict with General Plan policies. Consistent with the Project, this alternative would not involve any land uses that would conflict with local and regional planning programs relevant to development at the Project site. Significant land use impacts are anticipated with the Project as a result of conflict with City of San Marcos General Plan Policy M.1-4, and impacts would continue to be significant and unavoidable under this alternative. Therefore, this alternative would not avoid any significant land use or planning impacts.

Noise

The No Project/Development Pursuant to Existing Land Use Alternative would have increased construction activities compared to the Project, with increased construction activities on the western and southern portions of the Project site. However, the construction-related noise levels would be similar to those associated with construction of the Project and would be less than significant. Similar to the Project, operational activities associated with this alternative have the potential to generate noise,

and it is expected that noise from on-site operations under this alternative would be similar to noise generated by the Project and would be less than significant. Due to the slight reduction in trip generation, this alternative would generate slightly less traffic-related noise on off-site roadways; however, the Project's impacts were determined to be less than significant. This alternative would therefore have similar potentially significant but mitigable construction noise impacts to the adjacent Loma San Marcos development and operational noise impacts identified for the site, relative to unshielded HVAC mechanical systems, and noise impacts to homes facing or adjacent to San Elijo Road. Therefore, this alternative would not avoid any significant noise impacts since the Project's impacts are less than significant.

Tribal Cultural Resources

Under the No Project/Development Pursuant to Existing Land Use Alternative, development would occur on the entire Project site. However, there are no tribal cultural resources on-site and no impacts to such resources would result from implementation of the Project or this alternative.

Transportation

The No Project/Development Pursuant to Existing Land Use Alternative includes development of the Project site with 63 dwelling units. Although trip generation would be slightly reduced as compared to the Project, the conservatively identified significant (but unmitigated) direct and cumulative transportation impacts within the City of San Marcos would continue to occur under this alternative. Furthermore, this alternative would not avoid the significant and unavoidable VMT impacts that would occur with implementation of the Project. When compared to the Project, impacts to transportation would be reduced; however, impacts would remain significant and unavoidable. Therefore, this alternative would not avoid any significant transportation impacts.

Aesthetics and Visual Resources

Under the No Project/Development Pursuant to Existing Land Use Alternative, the Project site would be developed with 63 dwelling units over the entire Project site, which would alter the visual character of the site. This alternative would introduce new development in the western and southern portions of the Project site, which is currently undeveloped and would remain undeveloped with implementation of the Project. However, similar to the Project, this alternative would not introduce architectural features that would detract from the existing visual character of the area. The No Project/Development Pursuant to Existing Land Use Alternative would include grading and development on the entire Project site, and the slopes and vegetation would be disturbed, resulting in an impact due to the removal of features that contribute to the visual character of the community. Similar to the Project, this alternative would have no impact on designated public scenic views. Therefore, this alternative would not avoid any significant impacts from the Project related to visual effects and neighborhood character since the Project's impacts are less than significant. When compared to the Project, impacts to aesthetics would be less under this alternative, but would be increased due to the impacts to slopes and trees that would remain undisturbed with implementation of the Project.

Agricultural Resources

Under the No Project/ Development Pursuant to Existing Land Use Alternative, the entire Project site would be developed with 63 dwelling units. As described in Subsection 3.2, no agricultural uses occur

on-site, the Project site does not contain designated Farmland, and is not zoned for agricultural uses. Development under the Project would not result in any significant impacts to agricultural resources. When compared to the Project, impacts to agricultural resources would be similar under this alternative.

Air Quality

The No Project/Development Pursuant to Existing Land Use Alternative would involve construction on the entire Project site and the development of 63 dwelling units. The amount of grading activities would be increased as compared to the Project. Therefore, this alternative would result in increased construction-related air pollutant emissions compared to the Project, which would result in potentially significant air quality impacts during construction. Both the Project and the alternative would involve an increase in residential uses at the Project site; however, air pollutant emissions resulting from this alternative would be reduced compared to the Project due to the reduction in dwelling units on the site and associated reduction in trip generation. Any operations at the Project site under this alternative or with the Project would be conducted in adherence to applicable regulations and would have less than significant impacts to sensitive receptors. Similar to the Project, development under this alternative would be consistent with the Regional Air Quality Strategy (RAQS) and would not result in any emissions that would violate any air quality standards or increase emissions of any criteria pollutants. Furthermore, under both the Project and this alternative, sensitive receptors would not be subject to substantial pollutant concentrations, nor would significant odors be generated. When compared to the Project, impacts to air quality would be less under this alternative due to the reduced number of dwelling units proposed. As impacts would be less than significant under this Project and the No Project/Development Pursuant to Existing Land Use Alternative, this alternative would not avoid any significant air quality impacts.

Energy Use

The No Project/Development Pursuant to Existing Land Use Alternative would result in increased energy use associated with the construction and operation of 63 dwelling units on-site. The increase in energy use would be reduced as compared to the Project due to the overall reduction in development intensity under this alternative. The Project would comply with applicable regulations for energy conservation and would not result in any significant energy impacts. This alternative and the Project would result in similar less than significant energy impacts. Therefore, this alternative would not avoid any significant impacts related to energy since the Project's impacts are less than significant.

Geology, Soils, and Paleontological Resources

The Project site is subject to seismic ground shaking, and the No Project/Development Pursuant to Existing Land Use Alternative would involve construction of 63 dwelling units on an undeveloped site. The dwelling units would be implemented in accordance with existing building standards and other building regulations. Therefore, this alternative would have similar less than significant impacts as the Project related to seismic ground shaking. With adherence to state and local building code requirements, adherence to regulatory requirements, and adherence to recommendations outlined in the site-specific geotechnical report, the Project and this alternative would not result in any significant impacts associated with geology, soils, or paleontological resources. Further, development at the Project site would be subject to the same geotechnical constraints and similar recommendations to address these constraints. As with the Project, potential impacts related to geology, soils, and

paleontological resources would be less than significant with this alternative. Therefore, this alternative would not avoid any significant impacts related to geology, soils, and paleontological resources since the Project's impacts are less than significant.

Hazards and Hazardous Materials

With adherence to applicable regulations, the Project would have no impact or a less than significant impact related to hazards and hazardous materials. As with the Project, the No Project/Development Pursuant to Existing Land Use Alternative would operate in compliance with applicable regulations and would have a less than significant impact related to transport, use and disposal of hazardous materials; and, release of hazardous materials and hazardous emissions. Additionally, consistent with the Project, this alternative would have no impact or a less than significant impact related to emissions near a school, its location on a hazardous materials site, emergency response/evacuation, and wildland fires. Therefore, this alternative would not avoid any significant impacts related to hazards and hazardous materials since the Project's impacts are less than significant.

Hydrology and Water Quality

The No Project/Development Pursuant to Existing Land Use Alternative would result in development of 63 dwelling units on the Project site. Therefore, existing hydrology and drainage patterns at the Project site would be modified similar to the Project under this alternative. The Project would include the installation of a storm drain and water quality system which would discharge to the same locations as existing conditions, retaining existing drainage patterns. Moreover, the 100-year flow rates with the Project would be less than existing conditions and hydrology impacts would be less than significant. Therefore, this alternative would not avoid any significant hydrology impacts resulting from the Project since the Project's impacts are less than significant.

Mineral Resources

Under the No Project/Development Pursuant to Existing Land Use Alternative, the Project site would be developed with 63 dwelling units. As discussed in Subsection 3.8, the Project does not contain any mineral resources and is not designated as an area with significant mineral resources and impacts were determined to be less than significant. When compared to the Project, impacts to mineral resources would be similar to the Project. Therefore, this alternative would not avoid any significant mineral resources impacts resulting from the Project since the Project's impacts are less than significant.

Population and Housing

The No Project/Development Pursuant to Existing Land Use Alternative would develop the Project site with 63 dwelling units, which would increase population on-site. Impacts related to population and housing would be less than significant for the Project, which includes the development of residential uses, consistent with the General Plan. When compared to the Project, impacts to population and housing would be similar to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to population and housing since the Project's impacts are less than significant.

Public Services

The No Project/Development Pursuant to Existing Land Use Alternative would develop the Project site with 63 dwelling units, which would increase population on-site, resulting in a need to expand public services and facilities. Impacts related to demand for these services also would be less than significant for the Project and there would be no need for new or expanded public facilities and no associated physical impacts associated with implementation of such facilities. When compared to the Project, impacts to public services would be similar to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to public services since the Project's impacts are less than significant.

Recreation

The No Project/Development Pursuant to Existing Land Use Alternative would develop the Project site with 63 dwelling units, which would increase population on-site, resulting in a need to expand recreation facilities. Impacts related to demand for recreation facilities also would be less than significant for the Project and there would be no need for new or expanded recreation facilities and no associated physical impacts associated with implementation of such facilities. When compared to the Project, impacts to recreation would be similar to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to recreation since the Project's impacts are less than significant.

Utilities and Service Systems

As the No Project/Development Pursuant to Existing Land Use Alternative would include development of 63 dwelling units on the Project site, it would result in demand for water, sewer, and solid waste disposal services. The Project's impacts on public utilities and generation of solid waste would be less than significant with adherence to regulatory requirements. When compared to the Project, impacts to utilities and service systems would be similar to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to utilities and service systems since the Project's impacts are less than significant.

Wildfire

The Project site is within an area designated as a VHFHSZ. The No Project/ Development Pursuant to Existing Land Use Alternative would implement development on the Project site and would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan or increase any risks related to wildfire. Both the Project and this alternative would be required to comply with regulations addressing development in a VHFHSZ, including but not limited to requirements associated with brush management, and building design/materials, water supply, and emergency/fire access. Impacts related to wildfire also would be less than significant under this alternative and with the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to wildfire since the Project's impacts are less than significant.

5.4 Analysis of the Property Specific Request (PSR) Alternative

5.4.1 PSR Alternative Description and Setting

In 2018, the County considered a General Plan Amendment and zoning changes to allow for increased density on certain properties, which were known as “Property Specific Requests (PSRs).” On September 12, 2018, the PSR General Plan Amendment was put on hold due to litigation against the County’s 2018 Climate Action Plan (CAP). The PSR General Plan Amendment and Rezone was formally discontinued by the County on February 25, 2021. Although the PSR was discontinued by the County, the PSR Alternative evaluates development of the Project site if the PSR were implemented by the County. Under the PSR Alternative, the Project site would be developed with 364 multi-family dwelling units by changing the General Plan designation from Semi-Rural to Village and zoning designation from SR-1 to a combination of General Commercial (with mixed use zoning at two dwelling units per acres) VR-10.9, and SR-0.5. This Alternative assumes development would occur in the same development footprint as the Project, and that clustering of development to avoid impacts to biological resources would occur. The Project includes a Density Bonus Permit, which includes development of seven Affordable dwelling units on-site in exchange for a density bonus on-site. Under this Alternative, a Density Bonus Permit would not be proposed; therefore, the seven Affordable dwelling units proposed as part of the Project would not be included under the analysis of this Alternative.

5.4.2 Comparison of the Effects of the PSR Alternative to the Project

The anticipated environmental effects resulting from the PSR Alternative are described below, along with comparisons of these impacts to the Project (refer to Table 4-1).

Biological Resources

The PSR Alternative would continue to cluster development of the site to avoid sensitive biological resources; thus, significant direct impacts to biological resources would be the same as compared to the Project. Under this alternative, impacts to sensitive habitat, sensitive plant and animal species, non-wetland waters of the State, and displacement of nesting migratory birds during their breeding season would have similar less-than-significant impacts as the Project. Therefore, this alternative would have the same impacts as compared to the Project and would not avoid any significant impacts to biological resources, since the Project’s impacts are less than significant.

Cultural Resources

As discussed in detail in Subsection 2.2, no known significant impacts to cultural resources would occur within the Project site. As a result, no known impacts associated with the Project would occur. The PSR Alternative would impact the same area as the Project and would have the same impacts as the Project to known cultural resources. Unknown subsurface resources could also be present on-site and could occur both with the Project and this alternative. However, when compared to the Project, impacts to cultural resources would be similar under this alternative.

Global Climate Change

Under the PSR Alternative, GHG emissions would be increased compared to the Project primarily due to the increase in construction. Operationally, GHG emissions under this alternative would be

increased compared to the Project due to the increase in the number of dwelling units and increases in trip generation. As discussed in detail in Subsection 2.3, implementation of the Project would result in significant and unavoidable impacts due to GHG emissions. Under the PSR Alternative, impacts would remain significant and unavoidable due to the increased number of dwelling units and associated trip generation. When compared to the Project, impacts due to global climate change would be increased under alternative and impacts would remain significant and unavoidable. This alternative would not avoid any significant impacts related to GHG emissions.

Land Use Planning

Under the PSR Alternative, the Project site would be developed with 364 dwelling units and a General Plan Amendment and Zone Reclassification would be required for implementation. With a General Plan Amendment and Zone Reclassification, development on-site would be consistent with the land use designation and zoning for the site. This alternative would not conflict with General Plan policies related to increasing density and housing in the County. However, because trip generation would be increased as compared to the Project, the conservatively identified significant (but unmitigated) direct and cumulative impacts due to conflict with City of San Marcos General Plan Policy M.1-4 would continue to occur under this alternative and would potentially be increased due to the increased number of trips on San Marcos roadways. This Alternative would include land uses that would conflict with local and regional planning programs relevant to development at the Project site due to the increased number of dwelling units proposed. However, as the increase in dwelling units would be incremental and population forecasts for the region would not be exceeded, it is anticipated impacts would be less than significant. Significant land use impacts are anticipated with the Project as a result of conflict with City of San Marcos General Plan Policy M.1-4, and impacts would be potentially increased under this alternative. Therefore, this alternative would not avoid any significant land use or planning impacts.

Noise

The PSR Alternative would have increased construction activities compared to the Project. However, the construction-related noise levels would be similar to those associated with construction of the Project and would be less than significant. Similar to the Project, operational activities associated with this alternative have the potential to generate noise, and it is expected that noise from on-site operations under this alternative would be similar to noise generated by the Project and would be less than significant. Due to the increase in trip generation, this alternative would generate more traffic-related noise on off-site roadways. This alternative would therefore have similar potentially significant but mitigable construction noise impacts to the adjacent Loma San Marcos development and operational noise impacts identified for the site, relative to unshielded HVAC mechanical systems, and noise impacts to homes facing or adjacent to San Elijo Road. Therefore, this alternative would not avoid any significant noise impacts since the Project's impacts are less than significant.

Tribal Cultural Resources

Under the PSR Alternative, development would occur on the same impact area as the Project. However, there are no tribal cultural resources on-site and no impacts to such resources would result from implementation of the Project or this alternative.

Transportation

The PSR Alternative includes development of the Project site with 364 dwelling units. Although trip generation would be increased as compared to the Project, the conservatively identified significant (but unmitigated) direct and cumulative transportation impacts within the City of San Marcos would continue to occur under this alternative and would potentially be increased due to the increased number of trips on San Marcos roadways. Furthermore, while increasing density reduces VMT, this alternative would not avoid the significant and unavoidable VMT impacts that would occur with implementation of the Project. When compared to the Project, impacts to transportation would be increased on local roadways and potentially reduced for VMT; however, impacts would remain significant and unavoidable. Therefore, this alternative would not avoid any significant transportation impacts.

Aesthetics and Visual Resources

Under the PSR Alternative, the Project site would be developed with 364 dwelling units, which would alter the visual character of the site. This alternative would introduce new multi-story development on the Project site, which is currently undeveloped. However, similar to the Project, this alternative would not introduce architectural features that would detract from the existing visual character of the area. The PSR Alternative would include grading and development on the same impact area as the Project, and the slopes and vegetation would be preserved similar to the Project, resulting in a less-than-significant impact due to the removal of features that contribute to the visual character of the community. Similar to the Project, this alternative would have no impact on designated public scenic views. Therefore, this alternative would not avoid any significant impacts from the Project related to visual effects and neighborhood character since the Project's impacts are less than significant. When compared to the Project, impacts to aesthetics would be similar under this alternative.

Agricultural Resources

Under the PSR Alternative, the Project site would be developed with 364 dwelling units. As described in Subsection 3.2, no agricultural uses occur on-site, the Project site does not contain designated Farmland, and is not zoned for agricultural uses. Development under the Project would not result in any significant impacts to agricultural resources. When compared to the Project, impacts to agricultural resources would be similar under this alternative.

Air Quality

The PSR Alternative would involve construction on the Project site and the development of 364 dwelling units. The amount of grading activities would be the same as compared to the Project. Therefore, this alternative would result in increased construction-related air pollutant emissions compared to the Project due to the increased density. Both the Project and the alternative would involve an increase in residential uses at the Project site; however, air pollutant emissions resulting from this alternative would be increased compared to the Project due to the increase in dwelling units on the site and associated increase in trip generation. Any operations at the Project site under this alternative or with the Project would be conducted in adherence to applicable regulations and would have less than significant impacts to sensitive receptors. Similar to the Project, development under this alternative would be consistent with the Regional Air Quality Strategy (RAQS) and would not result in any emissions that would violate any air quality standards or increase emissions of any criteria pollutants.

Furthermore, under both the Project and this alternative, sensitive receptors would not be subject to substantial pollutant concentrations, nor would significant odors be generated. When compared to the Project, impacts to air quality would be increased under this alternative due to the increased number of dwelling units proposed. As impacts would be less than significant under this Project and the PSR Alternative, this alternative would not avoid any significant air quality impacts.

Energy Use

The PSR Alternative would result in increased energy use associated with the construction and operation of 364 dwelling units on-site. The increase in energy use would be increased as compared to the Project due to the increase in development intensity under this alternative. The Project would comply with applicable regulations for energy conservation and would not result in any significant energy impacts. This alternative and the Project would result in similar less than significant energy impacts. Therefore, this alternative would not avoid any significant impacts related to energy since the Project's impacts are less than significant.

Geology, Soils, and Paleontological Resources

The Project site is subject to seismic ground shaking, and the PSR Alternative would involve construction of 364 dwelling units on an undeveloped site. The dwelling units would be implemented in accordance with existing building standards and other building regulations. Therefore, this alternative would have similar less than significant impacts as the Project related to seismic ground shaking. With adherence to state and local building code requirements, adherence to regulatory requirements, and adherence to recommendations outlined in the site-specific geotechnical report, the Project and this alternative would not result in any significant impacts associated with geology, soils, or paleontological resources. Further, development at the Project site would be subject to the same geotechnical constraints and similar recommendations to address these constraints. As with the Project, potential impacts related to geology, soils, and paleontological resources would be less than significant with this alternative. Therefore, this alternative would not avoid any significant impacts related to geology, soils, and paleontological resources since the Project's impacts are less than significant.

Hazards and Hazardous Materials

With adherence to applicable regulations, the Project would have no impact or a less than significant impact related to hazards and hazardous materials. As with the Project, the PSR Alternative would operate in compliance with applicable regulations and would have a less than significant impact related to transport, use and disposal of hazardous materials; and release of hazardous materials and hazardous emissions. Additionally, consistent with the Project, this alternative would have no impact or a less than significant impact related to emissions near a school, its location on a hazardous materials site, emergency response/evacuation, and wildland fires. Therefore, this alternative would not avoid any significant impacts related to hazards and hazardous materials since the Project's impacts are less than significant.

Hydrology and Water Quality

The PSR Alternative would result in development of 364 dwelling units on the Project site. Therefore, existing hydrology and drainage patterns at the Project site would be modified similar to the Project under this alternative. The Project would include the installation of a storm drain and water quality

system which would discharge to the same locations as existing conditions, retaining existing drainage patterns. Moreover, the 100-year flow rates with the Project would be less than existing conditions and hydrology impacts would be less than significant. Therefore, this alternative would not avoid any significant hydrology impacts resulting from the Project since the Project's impacts are less than significant.

Mineral Resources

Under the PSR Alternative, the Project site would be developed with 364 dwelling units. As discussed in Subsection 3.8, the Project does not contain any mineral resources and is not designated as an area with significant mineral resources and impacts were determined to be less than significant. When compared to the Project, impacts to mineral resources would be similar to the Project. Therefore, this alternative would not avoid any significant mineral resources impacts resulting from the Project since the Project's impacts are less than significant.

Population and Housing

The PSR Alternative would develop the Project site with 364 dwelling units, which would increase population on-site. Impacts related to population and housing would be less than significant for the Project, which includes the development of residential uses, consistent with the General Plan. When compared to the Project, impacts to population and housing would be increased compared to the Project. However, the incremental increase in population would be anticipated to be less than significant. Therefore, this alternative would not avoid any significant impacts from the Project related to population and housing since the Project's impacts are less than significant.

Public Services

The PSR Alternative would develop the Project site with 364 dwelling units, which would increase population on-site, resulting in a need to expand public services and facilities. The PSR Alternative would be required to pay impact fees to ensure adequate service would be provided under this alternative and impacts would be less than significant. Impacts related to demand for these services also would be less than significant for the Project and there would be no need for new or expanded public facilities and no associated physical impacts associated with implementation of such facilities. When compared to the Project, impacts to public services would be increased compared to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to public services since the Project's impacts are less than significant.

Recreation

The PSR Alternative would develop the Project site with 364 dwelling units, which would increase population on-site, resulting in a need to expand recreation facilities. The 364 dwelling units would be required to be consistent with the Parkland Dedication Ordinance (PLDO) which may require construction of additional public on-site recreational facilities. Impacts related to demand for recreation facilities also would be less than significant for the Project and there would be no need for new or expanded recreation facilities and no associated physical impacts associated with implementation of such facilities. When compared to the Project, impacts to recreation would be increased compared to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to recreation since the Project's impacts are less than significant.

Utilities and Service Systems

As the PSR Alternative would include development of 364 dwelling units on the Project site, it would result in demand for water, sewer, and solid waste disposal services. The Project's impacts on public utilities and generation of solid waste would be less than significant with adherence to regulatory requirements. When compared to the Project, impacts to utilities and service systems would be increased compared to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to utilities and service systems since the Project's impacts are less than significant.

Wildfire

The Project site is within an area designated as a VHFHSZ. The PSR Alternative would implement development on the Project site and would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan or increase any risks related to wildfire. Both the Project and this alternative would be required to comply with regulations addressing development in a VHFHSZ, including but not limited to requirements associated with brush management, and building design/materials, water supply, and emergency/fire access. Impacts related to wildfire also would be less than significant under this alternative and with the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to wildfire since the Project's impacts are less than significant.

5.5 Analysis of the Reduced Development Area Alternative

5.5.1 Reduced Development Area Alternative Description and Setting

Under the Reduced Development Area Alternative, the Project's development footprint and dwelling unit number would be reduced by 20%. Under this alternative, the Project site would be developed with 61 dwelling units (a reduction of 15 dwelling units as compared to the 76 units proposed by the Project), within a development area of 16.78 acres (a reduction of 4.2 acres as compared to the 20.98 development area proposed by the Project). While residential uses would continue to be developed on-site, the reduced development area would reduce physical impacts and would potentially reduce impacts due to the number of dwelling units proposed as part of the Project. Given the reduced density that would occur under this Alternative, a Density Bonus Permit would not be pursued.

The anticipated environmental effects resulting from the Reduced Development Area Alternative are described below, along with comparisons of these impacts to the Project (refer to Table 4-1).

Biological Resources

The Reduced Development Area Alternative would cluster development of the site to avoid sensitive biological resources and would reduce the impact area by 20%; thus, significant direct impacts to biological resources would be reduced as compared to the Project. Under this alternative, impacts to sensitive habitat, sensitive plant and animal species, non-wetland waters of the State, and displacement of nesting migratory birds during their breeding season would be reduced due to the reduced impact area on-site. Therefore, this alternative would reduce impacts as compared to the Project and would not avoid any significant impacts to biological resources, since the Project's impacts are less than significant.

Cultural Resources

As discussed in detail in Subsection 2.2, no known significant impacts to cultural resources would occur within the Project site. As a result, no known impacts associated with the Project would occur. The Reduced Development Area Alternative would reduce the area of impact by 20% to 16.78 acres as compared to the Project. Unknown subsurface resources could also be present on-site and could occur both with the Project and this alternative. However, when compared to the Project, impacts to cultural resources would be increased under this alternative due to the increased impact area.

Global Climate Change

Under the Reduced Development Area Alternative, GHG emissions would be reduced compared to the Project primarily due to the 20% reduction in construction area and dwelling unit count. Operationally, GHG emissions under this alternative would be reduced compared to the Project due to the reduction in the number of dwelling units and reductions in trip generation. As discussed in detail in Subsection 2.3, implementation of the Project would result in significant and unavoidable impacts due to GHG emissions. Although impacts would be reduced under the Reduced Development Area Alternative as compared to the Project, impacts would remain significant and unavoidable due to the number of dwelling units and associated trip generation. When compared to the Project, impacts due to global climate change would be reduced slightly under alternative; however, impacts would remain significant and unavoidable. This alternative would not avoid any significant impacts related to GHG emissions.

Land Use Planning

Under the Reduced Development Area Alternative, the Project site would be developed with 61 dwelling units in accordance with the County of San Diego General Plan. Development on-site would be consistent with the existing land use designation and zoning for the site. Although the amount of development under this alternative would be less than with the Project, this alternative would not conflict with General Plan policies. Consistent with the Project, this alternative would not involve any land uses that would conflict with local and regional planning programs relevant to development at the Project site. Significant land use impacts are anticipated with the Project as a result of conflict with City of San Marcos General Plan Policy M.1-4, and impacts would similarly be significant and unavoidable under this alternative. Therefore, this alternative would not avoid any significant land use or planning impacts.

Noise

The Reduced Development Area Alternative would have reduced construction activities compared to the Project. The construction-related noise levels would be reduced as compared to those associated with construction of the Project and would be less than significant. Similar to the Project, operational activities associated with this alternative have the potential to generate noise, and it is expected that noise from on-site operations under this alternative would be slightly reduced to noise generated by the Project and would be less than significant. Due to the slight reduction in trip generation, this alternative would generate slightly less traffic-related noise on off-site roadways; however, the Project's impacts were determined to be less than significant. This alternative would therefore have similar potentially significant but mitigable construction noise impacts to the adjacent Loma San Marcos development and operational noise impacts identified for the site, relative to unshielded HVAC

mechanical systems, and noise impacts to homes facing or adjacent to San Elijo Road. Therefore, this alternative would not avoid any significant noise impacts since the Project's impacts are less than significant.

Tribal Cultural Resources

Under the Reduced Development Area Alternative, development would occur on 16.78 acres of the Project site. However, there are no tribal cultural resources on-site and no impacts to such resources would result from implementation of the Project or this alternative.

Transportation

The Reduced Development Area Alternative includes development of the Project site with 61 dwelling units. Although trip generation would be slightly reduced as compared to the Project, the conservatively identified significant (but unmitigated) direct and cumulative transportation impacts within the City of San Marcos would continue to occur under this alternative. Furthermore, this alternative would not avoid the significant and unavoidable VMT impacts that would occur with implementation of the Project. When compared to the Project, impacts to transportation would be reduced; however, impacts would remain significant and unavoidable. Therefore, this alternative would not avoid any significant transportation impacts.

Aesthetics and Visual Resources

Under the Reduced Development Area Alternative, the Project site would be developed with 61 dwelling units, which would alter the visual character of the site. However, similar to the Project, this alternative would not introduce architectural features that would detract from the existing visual character of the area. The Reduced Development Area Alternative would include grading and development on 16.78 acres of the Project site, and the slopes and vegetation would be preserved similar to the Project, resulting in a less-than-significant impact due to the removal of features that contribute to the visual character of the community. Similar to the Project, this alternative would have no impact on designated public scenic views. Therefore, this alternative would not avoid any significant impacts from the Project related to visual effects and neighborhood character since the Project's impacts are less than significant. When compared to the Project, impacts to aesthetics would be similar under this alternative.

Agricultural Resources

Under the Reduced Development Area Alternative, the entire Project site would be developed with 61 dwelling units. As described in Subsection 3.2, no agricultural uses occur on-site, the Project site does not contain designated Farmland, and is not zoned for agricultural uses. Development under the Project would not result in any significant impacts to agricultural resources. When compared to the Project, impacts to agricultural resources would be similar under this alternative.

Air Quality

The Reduced Development Area would involve construction on the entire Project site and the development of 61 dwelling units. The amount of grading activities would be decreased by 20% as

compared to the Project. Therefore, this alternative would result in decreased construction-related air pollutant emissions compared to the Project, which would result in potentially significant air quality impacts during construction. Both the Project and the alternative would involve an increase in residential uses at the Project site; however, air pollutant emissions resulting from this alternative would be reduced compared to the Project due to the reduction in dwelling units on the site and associated reduction in trip generation. Any operations at the Project site under this alternative or with the Project would be conducted in adherence to applicable regulations and would have less than significant impacts to sensitive receptors. Similar to the Project, development under this alternative would be consistent with the Regional Air Quality Strategy (RAQS) and would not result in any emissions that would violate any air quality standards or increase emissions of any criteria pollutants. Furthermore, under both the Project and this alternative, sensitive receptors would not be subject to substantial pollutant concentrations, nor would significant odors be generated. When compared to the Project, impacts to air quality would be less under this alternative due to the reduced number of dwelling units proposed. As impacts would be less than significant under this Project and the Reduced Development Area Alternative, this alternative would not avoid any significant air quality impacts.

Energy Use

The Reduced Development Area Alternative would result in increased energy use associated with the construction and operation of 61 dwelling units on-site. The increase in energy use would be reduced as compared to the Project due to the 20% reduction in development intensity under this alternative. The Project would comply with applicable regulations for energy conservation and would not result in any significant energy impacts. This alternative and the Project would result in similar less than significant energy impacts. Therefore, this alternative would not avoid any significant impacts related to energy since the Project's impacts are less than significant.

Geology, Soils, and Paleontological Resources

The Project site is subject to seismic ground shaking, and the Reduced Development Area Alternative would involve construction of 61 dwelling units on an undeveloped site. The dwelling units would be implemented in accordance with existing building standards and other building regulations. Therefore, this alternative would have similar less than significant impacts as the Project related to seismic ground shaking. With adherence to state and local building code requirements, adherence to regulatory requirements, and adherence to recommendations outlined in the site-specific geotechnical report, the Project and this alternative would not result in any significant impacts associated with geology, soils, or paleontological resources. Further, development at the Project site would be subject to the same geotechnical constraints and similar recommendations to address these constraints. As with the Project, potential impacts related to geology, soils, and paleontological resources would be less than significant with this alternative. Therefore, this alternative would not avoid any significant impacts related to geology, soils, and paleontological resources since the Project's impacts are less than significant.

Hazards and Hazardous Materials

With adherence to applicable regulations, the Project would have no impact or a less than significant impact related to hazards and hazardous materials. As with the Project, the Reduced Development Area Alternative would operate in compliance with applicable regulations and would have a less than significant impact related to transport, use and disposal of hazardous materials; and, release of hazardous materials and hazardous emissions. Additionally, consistent with the Project, this alternative

would have no impact or a less than significant impact related to emissions near a school, its location on a hazardous materials site, emergency response/evacuation, and wildland fires. Therefore, this alternative would not avoid any significant impacts related to hazards and hazardous materials since the Project's impacts are less than significant.

Hydrology and Water Quality

The Reduced Development Area Alternative would result in development of 61 dwelling units on the Project site. Therefore, existing hydrology and drainage patterns at the Project site would be modified similar to the Project under this alternative. The Project would include the installation of a storm drain and water quality system which would discharge to the same locations as existing conditions, retaining existing drainage patterns. Moreover, the 100-year flow rates with the Project would be less than existing conditions and hydrology impacts would be less than significant. Therefore, this alternative would not avoid any significant hydrology impacts resulting from the Project since the Project's impacts are less than significant.

Mineral Resources

Under the Reduced Development Area Alternative, the Project site would be developed with 61 dwelling units. As discussed in Subsection 3.8, the Project does not contain any mineral resources and is not designated as an area with significant mineral resources and impacts were determined to be less than significant. When compared to the Project, impacts to mineral resources would be similar to the Project. Therefore, this alternative would not avoid any significant mineral resources impacts resulting from the Project since the Project's impacts are less than significant.

Population and Housing

The Reduced Development Area Alternative would develop the Project site with 61 dwelling units, which would increase population on-site. Impacts related to population and housing would be less than significant for the Project, which includes the development of residential uses, consistent with the General Plan. When compared to the Project, impacts to population and housing would be similar to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to population and housing since the Project's impacts are less than significant.

Public Services

The Reduced Development Area Alternative would develop the Project site with 61 dwelling units, which would increase population on-site, resulting in a need to expand public services and facilities. Impacts related to demand for these services also would be less than significant for the Project and there would be no need for new or expanded public facilities and no associated physical impacts associated with implementation of such facilities. When compared to the Project, impacts to public services would be slightly reduced as compared to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to public services since the Project's impacts are less than significant.

Recreation

The Reduced Development Area Alternative would develop the Project site with 61 dwelling units, which would increase population on-site, resulting in a need to expand recreation facilities. Impacts related to demand for recreation facilities also would be less than significant for the Project and there would be no need for new or expanded recreation facilities and no associated physical impacts associated with implementation of such facilities. When compared to the Project, impacts to recreation would be slightly reduced as compared to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to recreation since the Project's impacts are less than significant.

Utilities and Service Systems

As the Reduced Development Area Alternative would include development of 61 dwelling units on the Project site, it would result in demand for water, sewer, and solid waste disposal services. The Project's impacts on public utilities and generation of solid waste would be less than significant with adherence to regulatory requirements. When compared to the Project, impacts to utilities and service systems would be slightly reduced as compared to the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to utilities and service systems since the Project's impacts are less than significant.

Wildfire

The Project site is within an area designated as a VHFHSZ. The Reduced Development Area Alternative would implement development on the Project site and would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan or increase any risks related to wildfire. Both the Project and this alternative would be required to comply with regulations addressing development in a VHFHSZ, including but not limited to requirements associated with brush management, and building design/materials, water supply, and emergency/fire access. Impacts related to wildfire also would be less than significant under this alternative and with the Project. Therefore, this alternative would not avoid any significant impacts from the Project related to wildfire since the Project's impacts are less than significant.

5.5.2 Comparison of the Effects of the Reduced Development Area Alternative to the Project

5.6 Environmentally Superior Alternative

The CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No Project Alternative is identified as the environmentally superior alternative, another environmentally superior alternative must be identified.

Based on the analysis presented in Subsections 2.1 through 2.6 of this EIR, the Project would result in potentially significant impacts related to GHG emissions, land use (related to transportation), and transportation and Project-level mitigation measures are required to reduce this potentially significant impact to a less than significant level. For all other topics, the Project, which would be implemented in compliance with applicable regulations and the City's standard conditions, would result in no impact or a less than significant impact. The Project would not result in any significant and unavoidable

impacts; therefore, no alternative is needed to reduce or avoid such impacts. Therefore, for purposes of this discussion, for an alternative to be superior to the Project, it would need to reduce VMT impacts.

Table 4-1 provides a comparison of the overall environmental impacts for the described alternatives. The No Project/No Development Alternative is identified as the environmentally superior alternative. The No Project Alternative does not meet the objectives of the Project as outlined in Section 4.1.1.

Of the remaining alternatives, the environmentally superior alternative is the PSR Alternative. This alternative would reduce the Project's significant impacts related to GHG emissions, land use (due to transportation), and transportation. Impacts related to the following topical issues would be similar to the Project: land use, transportation, biological resources, energy, geology and soils, health and safety, historical resources, hydrology, paleontological resources, population and housing, tribal cultural resources, water quality, and wildfire. This alternative would meet most of the Project objectives, but not to the same extent as the Project, due primarily to the increased density on-site.

5.7 Summary of Alternatives

Table 4-1, below, summarizes the potential impacts identified for alternatives in comparison with those identified for the Project. The table addresses each of the full-build alternatives (i.e., those alternatives that would result in substantially different development patterns and uses as a whole for the Project property).

Table 5-1 Comparison of Project and Alternative Impacts

Environmental Topic	Proposed Project	No Project/No Development	No Project/Development Pursuant to Existing Land Use Alternative	PSR	Reduced Development Area
Biological Resources	SM	Less	More	Less	Less
Cultural, Tribal Cultural, and Paleontological Resources	SM	Less	More	Less	Less
Global Climate Change	SU	Less	Less	More	More
Land Use	SU	Less	Less	More	Less
Noise	SM	Less	Less	Less	Less
Transportation	SU	Less	More	More	More
Aesthetics and Visual Resources	N	Less	More	Less	Less
Agricultural Resources	N	Less	Less	Less	Less
Air Quality	N	Less	Less	Less	Less
Energy Use	N	Less	Less	Less	Less
Geology and Soils	N	Less	Less	Less	Less
Hazards and Hazardous Materials	N	Less	Less	Less	Less
Hydrology and Water Quality	N	Less	Less	Less	Less
Mineral Resources	N	Less	Less	Less	Less
Population and Housing	N	Less	Less	Less	Less
Public Services	N	Less	Less	More	Less
Recreation	N	Less	Less	More	Less
Utilities and Service Systems	N	Less	Less	More	Less
Wildfire	N	Less	Less	Less	Less

SM = significant but mitigable impacts; SU = significant and unmitigated impacts; N = no significant impacts

6.0 LIST OF EIR PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

This Environmental Impact Report (EIR) was prepared under the direction of the County of San Diego Department of Planning and Developmental Services (PDS) located at 5510 Overland Avenue, 2nd Floor, San Diego, California 92123. The following professional staff assisted PDS in the preparation of this EIR

6.1 Persons and Agencies Consulted

County of San Diego

Department of Planning and Development Services
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7.0 LIST OF MITIGATION MEASURES

The following proposed mitigation measures would minimize potentially significant environmental impacts resulting from implementation of the Questhaven Project. The significance of impacts following implementation of the proposed mitigation measures are discussed at the end of each section in Chapter 2.0, *Significant Environmental Effects of the Proposed Project*.

7.1 Biological Resources

Mitigation Measures

- M-BIO-1** Prior to vegetation clearance and issuance of grading permits, the Project Applicant shall provide evidence that on- and off-site preservation of 44.2 acres of sensitive vegetation communities, off-site preservation of 0.2 acre of non-sensitive communities, and on- and off-site restoration of 5.9 acres (including creation of 21 water holding basins suitable for western spadefoot toad breeding) as shown in Table 7 and on Figure 6 of the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental has occurred.
- M-BIO-2** Prior to vegetation clearance and issuance of grading permits, temporary construction limits fencing with sign messaging indicating that the fencing shall not be crossed, shall be installed along the edges of the approved limits of physical disturbance where construction activities adjoin open space preservation areas. The positioning of the fencing shall be verified by a County-approved professional biologist prior to the commencement of ground-disturbing construction activities. The fencing shall be maintained in place over the duration of construction activities unless or until it is replaced with permanent open space fencing or another physical barrier.
- M-BIO-3** Prior to issuance of the first certificate of occupancy, open space fencing and signage shall be installed at the following locations: 1) at the interface of the Project site and the adjacent open space preserve; 2) at the southeast corner of the Project site where the site abuts non-preserve area; 3) at the trailhead entering the preserve from the southwest; and 4) around the off-site preserve area adjacent to an existing trail (refer to Figure 6 of the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental for specific locations). The remaining preserve area boundaries shall not be fenced as they are adjacent to Preserve Areas in the Draft NCMSCP (refer to Figure 2 the “Biological Technical Report for the Questhaven Tentative Map Project PDS2020-TM-5643” by Alden Environmental and have steep slopes with impenetrable vegetation, making fence installation unnecessary and infeasible.
- M-BIO-4** Prior to the issuance building permits, the County shall review the Project’s landscape plans and verify that only non-invasive plant species will be planted on the site (i.e.,

species not listed on the California Invasive Plant Council Inventory rated as Moderate or High).

- M-BIO-5** The Project's homeowners association (HOA) CC&Rs shall require that 1) landscaping is prohibited from including species listed Moderate or High on the California Invasive Plant Council Inventory; and 2) all domestic cats are required to remain indoors. The HOA shall be responsible for providing information to residents to protect the adjacent open space preserve as the need arises. A copy of the CC&Rs shall be provided to the County for verification prior to issuance of the first certificate of occupancy.
- M-BIO-6** Prior to issuance of grading permits, the Project Applicant shall obtain the appropriate permits/approvals from the regulatory agencies, including the CDFW and RWQCB for impacts to the jurisdictional non-wetland water of the State.
- M-BIO-7** Prior to vegetation clearance and issuance of grading permits, the Project Applicant shall translocate Orcutt's brodiaea corms from within the Project impact footprint to suitable habitat within the on-site preserve in accordance with a County-, CDFW-, and USFWS-approved translocation plan.
- M-BIO-8** If clearing of vegetation or grading activities will occur during the breeding season for the California gnatcatcher (CAGN) (February 15 to August 31) or nesting raptors such as the Cooper's hawk (January 15 to July 15), pre-construction survey(s) shall be conducted by a qualified biologist to determine whether these species occur within the construction footprint and/or adjacent areas potentially impacted by construction noise (i.e., 60 dB(A) hourly average or ambient, if greater). If it is determined at the completion of pre-construction surveys that active nests belonging to these sensitive species are absent from the construction limits and adjacent potential noise-impacted area, construction shall be allowed to proceed. If pre-construction surveys determine the presence of active nests belonging to these sensitive species occur within the construction limits or adjacent noise-impacted area, the biologist shall determine the physical area in which construction activities cannot occur to protect the nesting species, and one of two actions shall occur: (1) construction activities in the area delineated by the biologist shall be postponed until a qualified biologist determines the nest(s) is no longer active or until after the respective breeding season; or (2) construction activities shall be postponed until a temporary noise barrier or berm is constructed at the edge of the development footprint or other location determined appropriate and effective by the biologist and an acoustical engineer to ensure that noise levels in the occupied habitat are reduced to below 60 dB(A) hourly average or ambient, if greater. Decibel output shall be confirmed by a County-approved acoustical engineer and intermittent monitoring by a qualified biologist shall occur to ensure that the reduced noise levels are being maintained. Implementation of this measure shall also mitigate for potential noise impacts to nesting southern California rufous-crowned sparrows.

7.2 Cultural Resources

Mitigation Measures

M-CR-1: Prior to issuance of grading permits, the Project applicant shall enter into a Treatment Agreement and Preservation Plan with consulting tribe(s) and implement an Archaeological and Tribal Monitoring Program during earth disturbing activities. The Treatment Agreement and Preservation Plan and Archeological and Tribal Monitoring Program shall be provided to the County Archeologist for review and approval prior to issuance of the grading permit.

7.3 Noise

Mitigation Measures

M-N-1 Prior to the issuance of each residential building permit, the County shall review the proposed locations of HVAC units. For HVAC units located less than 35 feet from the nearest property line, a three-sided barrier blocking the line of sight to adjacent properties shall be required. The barrier, if required, shall have a minimum height of 5.5 feet or be 1.75 times the height of the HVAC units and shall be constructed of materials with a minimum weight of 2 pounds per square foot. The barrier shall be solid with no holes, perforations, or gaps.

M-N-2 Residential lots proposed within 400 feet of the San Elijo Road right-of-way (Lots 1 through 6 and 15 through 18 of Tentative Map 5643) shall have “noise protection easements” to mitigate vehicular noise levels from San Elijo Road. Such easements shall be shown on the final map or subsequent implementing tentative map, as applicable. The noise protection easements shall contain a restriction requiring that exterior noise levels not exceed 60 CNEL within the easement area of the lot. The restriction shall apply to the following minimum exterior use areas: 1) for lots less than 4,000 s.f. in area, the exterior area shall include 400 square feet; and 2) for lots larger than 4,000 s.f, the exterior area shall include 10 percent of the lot area. A noise study is required to be prepared and approved by the County Department of Planning and Development Services (PDS) prior to the issuance of building permits for these lots demonstrating that the residential lots within 400 feet of San Elijo Road would achieve these requirements. In the event that the noise study determines that one or more lots would not achieve the 60 CNEL noise limit within the minimum exterior use areas, the noise study shall identify noise attenuation measures that must be incorporated, such as the use of sound walls or berms, in order to achieve the exterior noise requirement of 60 CNEL within the minimum exterior use areas. The County shall require that the noise attenuation measures be installed and be verified as effective in meeting the 60 CNEL requirement by an acoustical engineer prior to the issuance of certificates of occupancy.

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- M-N-3** To achieve interior noise levels at or below 45 CNEL in a windows closed condition, all homes shall have mechanical ventilation (e.g., air conditioning) and standard windows with a minimum Sound Transmission Class (STC) rating of 27. The County shall verify that these features will be installed as part of the building permit plan check process.
- M-N-4** Prior to the issuance of a grading or blasting permit that would permit these activities within 50 feet of the adjacent EdenPark property line, a temporary noise barrier as described below or a functional equivalent as verified by a professional acoustical engineer shall be implemented to ensure that construction-related noise is maintained at or below 75 dBA Leq on the EdenPark property, which occurs to the immediate east of the Project site's northeastern boundary.
- a. A temporary 12-foot-high noise barrier shall be installed along the eastern property line of the Project site where it borders the EdenPark facility south of the roadway during grading and blasting activities. The barrier shall be of sufficient length to block the line of sight between EdenPark and the construction activities. The noise barrier shall be constructed of material with a minimum weight of 2 pounds per square foot with no gaps or perforations. The noise barrier may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. The noise barrier shall be installed prior to grading, rock drilling, or blasting activities within 50 feet of the eastern property line, and shall remain in place throughout the duration of grading, construction, and blasting activities on the site.

7.4 Transportation and Traffic

Mitigation Measures

- M-TRANS-1** Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to optimize the traffic signal timing at the intersection of Melrose Drive and San Elijo Road. Signal optimization could include reoptimizing cycle lengths and/or signal splits to better accommodate future traffic demand along the corridor. It is important to note that if signal optimization is implemented, adjacent intersections within the coordinated system should be taken into consideration. Additionally, prior to issuance of the first certificate of occupancy, the north leg of the intersection (Melrose Drive) shall be restriped to accommodate southbound dual left-turn lanes and a shared through-right lane. A striping plan shall be prepared to the satisfaction of the City Engineer.
- M-TRANS-2** Prior to issuance of the first certificate of occupancy, the Project Applicant shall be required to install a traffic signal at the intersection of Streete "E" and San Elijo Road. Additionally, prior to issuance of the first certificate of occupancy, the south leg of the

intersection (Street “E”) shall be reconfigured to include dual left-turn lanes and an exclusive right turn lane.

VMT

M-TRANS-3 The Project Applicant shall encourage reduction in VMT by: 1) providing end of trip bicycle facilities by providing a short term bicycle rack at neighborhood park; and 2) implementing commute trip reduction marketing by requiring the HOA to provide marketing materials to residents encouraging carpooling among residents of the community. The Project’s homeowner’s association (HOA) shall be responsible for providing information to residents about the benefits of VMT reduction as the need arises. A copy of the covenants, conditions, and restrictions (CC&Rs) shall be provided to the County prior to issuance of the first certificate of occupancy.

8.0 REFERENCES

8.1 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Questhaven EIR and are bound separately as Technical Appendices.

- Appendix A Notice of Preparation (NOP) and Written Comments on the NOP for Questhaven.
- Appendix B Alden Environmental, Inc. 2024. *Biological Technical Report*. May 6, 2024.
- Appendix C HELIX Environmental, Inc. 2023a. *Air Quality Technical Report*. June 2023.
- Appendix D Brian F. Smith and Associates. 2021a. *Cultural Resources Study for Questhaven 64 Project*. February 2021.
- Appendix E HELIX Environmental Planning, Inc. 2023b. *Energy Impact Assessment*. June 12, 2023.
- Appendix F1 Advanced Geotechnical Solutions, Inc. 2016. *Preliminary Geotechnical Investigation*. March 11, 2016.
- Appendix F2 Advanced Geotechnical Solutions, Inc. 2020. *Geotechnical Addendum*. November 19, 2020.
- Appendix F3 Advanced Geotechnical Solutions, Inc. 2024. *Soils of Statewide Significance*. April 18, 2024.
- Appendix F4 Brian F. Smith and Associates. 2021. *Paleontological Resource Assessment for the Questhaven 64 Project*. February 2021.
- Appendix G HELIX Environmental Planning, Inc. 2024. *Questhaven Project Greenhouse Gas Emissions Technical Report*. May 2024.
- Appendix H C Young Associates. 202. *Environmental Site Assessment*. June 9, 2020.
- Appendix I Excel Engineering. 2021. *Stormwater Quality Management Plan*. August 5, 2021.
- Appendix J Excel Engineering. 2021. *Hydrology/Hydraulics Study*. August 4, 2021.
- Appendix K Urban Crossroads, Inc. 2024. *Questhaven Residential Neighborhood Noise Impact Analysis*. April 3, 2024.
- Appendix L1 CR Associates. 2023. *Traffic Impact Study*. March 2023.
- Appendix L2 CR Associates. 2024. *Local Transportation Analysis*. April 2024.

Appendix M1 Dudek. 2024. *Questhaven Fire Protection Plan*. May 2024.

Appendix M2 Dudek. 2021. *Questhaven Conceptual Evacuation Plan*. April 2021

Appendix N Project Facility Availability Forms for Questhaven

8.2 DOCUMENTS AND WEBSITES CONSULTED

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