Appendix C: Supporting Documentation - Environmental Setting and Analysis

Table of Contents

Tables

Appendix C-0 Introduction

This appendix presents relevant information about existing resources and other values that may be affected by the Proposed Project and alternatives. In accordance with the NEPA and BIA implementing guidelines (59 IAM 3-H), this section describes the existing environment of the area affected by the project alternatives as well as the environmental consequences for each project alternative. The full environmental analysis, including regulatory context and applicable mitigation measures, is provided in the corresponding sub-appendices as follows:

- Appendix C-1: Land Resources
- Appendix C-2: Water Resources
- Appendix C-3: Air Quality
- Appendix C-4: Biological Resources
- Appendix C-5: Cultural and Paleontological Resources
- Appendix C-6: Socioeconomic Conditions
- Appendix C-7: Transportation and Circulation
- Appendix C-8: Land Use
- Appendix C-9: Public Services
- Appendix C-10: Noise
- Appendix C-11: Hazardous Materials
- Appendix C-12: Visual Resources
- Appendix C-13: Other Reasonably Foreseeable Impacts

Direct impacts are caused by an action and occur at the same time and place while indirect impacts are caused by the action and occur later in time or further in distance but are still reasonably foreseeable. Note that the term “effects” is used synonymously with the term “impacts.” For impacts identified in each environment section that are deemed potentially significant or significant, measures to mitigate are presented individually in **Section C-1** to **C-12**.

Appendix C-1 Land Resources

C1-1 REGULATORY SETTING

C1-1.1 Federal

Clean Water Act

The CWA prohibits sediment and erosion discharge into navigable waters of the United States and establishes water quality goals. For land held in trust, the USEPA requires a NPDES CGP if a project will disturb one or more acres of soil. A site-specific SWPPP is required under this permit. For more information on the CWA, see **Section C2-1** below.

International Building Code

The International Code Council (ICC) promulgates an IBC through the ICC Code Development Process. The current version of the IBC is the 2024 edition, known as the ICC IBC-2024. The IBC is a tool to preserve public health and safety to provide safeguards from hazards associated with the built environment (ICC IBC, 2024). It established minimum building design standards and requirements to protect public health, safety, and general welfare on lands under Federal jurisdiction.

C1-1.2 State and Local

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act; formerly the Alquist-Priolo Special Studies Zone Act), signed into law December 1972 after the 1971 San Fernando earthquake, requires the delineation of zones along active and potentially active faults in California. The California Geological Survey (CGS) defines an “active” fault as one that exhibits evidence of activity during the last 11,000 years. Faults that exhibit evidence of Quaternary activity (within the last 1.6 million years) are considered to be “potentially active.” The purpose of the Alquist-Priolo Act is to regulate development on or near fault traces to reduce the hazard of fault rupture and to prohibit the location of most off-Reservation structures for human occupancy across these traces.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was enacted in 1990 to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. This act requires a state geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within the portions of those zones where they have jurisdiction.

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 requires all jurisdictions to incorporate mapped mineral resources designations approved by the California Mining and Geology Board within their general plans. The Surface Mining and Reclamation Act was enacted to limit new development in areas with significant mineral deposits. The California DOC's Office of Mine Reclamation and the California Mining and Geology Board are jointly charged with ensuring proper administration of the act's requirements. The California Mining and Geology Board circulates regulations to clarify and interpret the act's provisions and also serves as a policy and appeals board.

San Diego County General Plan

The San Diego County General Plan Conservation and Open Space Element outlines the County's goals and policies related to land resources, including mineral resources and unique geological formations. The County maintains a policy of preserving unique geological resources and minimizing impacts of development on these resources. Additionally, the general plan has a balanced policy of preserving natural mineral resources while responsibly extracting resources and preserving ongoing mineral extraction operations. The safety element of the general plan provides goals and policies related to public safety, including emergencies related to seismic events. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan in incorporated into the general plan by reference. Per the general plan policies, the land use designations within the County and citing of public facilities were designed to consider exposure of peoples to natural disaster.

C1-2 ENVIRONMENTAL SETTING

Geological Setting

San Diego County has a diverse geography resulting from past volcanic activity and is generally comprised of three geological regions: the coastal plain, Peninsular Ranges, and the Salton trough (County of San Diego, 2022). The Subject Property is situated within the Peninsular Ranges Geomorphic Province, which consists of a succession of mountain ranges interspersed with northwest-trending valleys (CGS, 2002). The geology surrounding the Project Area is primarily comprised of Cretaceous plutonic rocks, including granitic, dioritic, and gabbroic rocks from the batholith of southern California, while the Upper Cretaceous rocks are composed of marine turbidites and continental fan deposits.

A geotechnical investigation was conducted in December 2018 and included exploration of subsurface conditions and infiltration testing. This study is included as **Appendix G**. Based off of published geological mapping, the Project Site is underlain by old alluvial floodplain deposits. During the geotechnical investigation, the boreholes confirmed this by finding materials consisting of fill, old alluvial floodplain deposits, and granitic rock.

According to the County's General Plan (County of San Diego, 2022), there are small-scale unique geological resources in the County, such as natural bridge rock outcrops, the Scripps Formation,

unique stratified exposed cliff faces, and the volcanic plug that is Round Mountain. No unique geological resources occur within the Subject Property.

The State of California has eight active volcanoes situated within its borders, with seven north of the County and one northeast. Within a 10-mile radius, a volcanic eruption can damage buildings and infrastructure through high-speed flows of hot ash and rock, lava flows, and landslides. Low-laying areas as far as 50 miles or more can be affected by ash, debris, and melted ice mudflows, known as lahars. The Subject Property is over 100 miles southeast of the nearest volcanic field, the Coso Volcanic Field. The nearest potentially active volcano is the Salton Buttes, which is over 80 miles east of the Subject Property. The most recent eruption was about 1,800 years ago (USGS, 2025a).

Topography

The Subject Property is located within a valley between ridges at the northern end of the Peninsular Ranges and is relatively flat with elevations at approximately 1,300 feet amsl. The Subject Property is located in Woods Valley, bounded by Bear Ridge to the south, Moosa Canyon Creek just north and east of the Property at elevations of approximately 1350 feet amsl, and there is an undeveloped and steeply sloped knoll to the north and east that rises to elevations of approximately 1675 feet amsl. Moosa Creek is the closest perennial channel located approximately 580 feet north of the Subject Property along the base of the hills. In addition, in the adjacent Native Oaks Golf Course Property, there are man-made ponds, riparian areas, channels, and wetlands.

Seismic Conditions

All of San Diego County is located within Seismic Zone 4, which is the highest Seismic Zone and is subject to ground shaking. Ground shaking is the primary seismic hazard in the County (County of San Diego, 2022). Seismic Zone 4 areas have a one in ten chance that an earthquake with an active peak acceleration level of 0.4g (4/10 the acceleration of gravity) will occur within the next fifty years (USGS, 2022a).

A fault is a fracture in the Earth's crust that is accompanied by displacement between the two sides of the fault. An active fault is a fracture that has shifted in the last 10,000 to 12,000 years or in the Holocene Period, a potentially active fault is one that has been active in the past 1.6 million years or in the Quaternary Period. Active faults in the region include segments of the Elsinore, Rose Canyon, and San Jacinto fault zones, with the Elsinore Fault located closest at approximately 18 miles northeast of the Subject Property (County of San Diego, 2022). The Elsinore and San Jacinto faults run through the eastern portion of the County and can generate damaging earthquakes (California Earthquake Authority [CEA], 2025). The Elsinore fault system is to the northeast, the San Jacinto fault system to the southeast, and the Rose Canyon fault system is to the southwest of the Subject Property (USGS, 2025b).

Soil Types and Characteristics

As shown on **Figure 6** of **Appendix A**, soils mapped by NRCS within the Subject Property include Clayey alluvial land and Visalia sandy loam, 0 to 2 percent slopes (USDA, 2025). The majority of

the Subject Property include the clayey alluvial land soils, while just the northeastern corner of the property contains Visalia sandy loam.

The borehole testing conducted in the geotechnical investigation found in **Appendix G** confirms the soils mapped by NRCS. The borehole samples found fill, old alluvial floodplain deposits, and granitic rock. The fill consisted of clayey or silty sand that extended to just below the ground surface. The old alluvial floodplain deposits consisted of clayey sand and silty, clayey sand with variable amounts of gravel extending to depths up to 16 feet below ground surface. The weathered granitic rock is found under the old alluvial floodplain deposits and is moderately to very hard.

Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil. The clayey alluvial land soils are not hydric soils, but the Visalia sandy loam located in the northeastern corner of the property can consist of 1 to 32% hydric soils, which is approximately 14.5 percent of the property (USDA, 2025). Drainage class is a measure of the frequency and duration of wet periods under conditions similar to those in which the soil developed. The soils on the Subject Property are moderately well drained to well drained (USDA, 2025).

Corrosivity pertains to a soil-induced electrochemical or chemical action that corrodes concrete or steel. Clayey alluvial land soils are not rated for corrosivity, but Visalia sandy loam has a low risk of corrosion of steel and a moderate risk of corrosion to concrete (USDA, 2025). Expansive soils are largely comprised of clays, which may increase in volume when water is absorbed and shrink when dried; this property is measured using linear extensibility. Expansive soils are of concern because they can cause building foundations to rise during the rainy season and fall during the dry season, causing structural distortion. Visalia sandy loam exhibits low linear extensibility and Clayey alluvial land exhibits high linear extensibility; therefore, these soils have low to high shrink-swell potential, respectively (USDA, 2025).

Soil Hazards

Soil erosion is the wearing and removal of soil materials from the ground surface and the transportation of these soil materials resulting in deposition elsewhere. Mechanisms of soil erosion include stormwater runoff and wind as well as human activities. Examples of activities that can cause erosion include changes in drainage patterns and removal of vegetation. Factors that influence erosion include physical properties of the soil, topography (slope), and annual rainfall and peak intensity. Soil erosion hazard areas include those areas with slopes of 20 percent or greater and that are classified as having severe or very severe erosion potential by the USDA NRCS. The soil erosion hazard at the Subject Property is considered to be low (USDA, 2025).

Liquefaction occurs when loose, saturated, and relatively cohesionless soil deposits temporarily lose strength from seismic shaking. The primary factors controlling the onset of liquefaction include intensity and duration of strong ground motion, characteristics of subsurface soil, on-site stress conditions, and the depth to groundwater. Liquefaction occurs where groundwater is less than 50 feet below the surface. Liquefaction is not known to have occurred historically in San Diego County but has occurred in the Imperial Valley due to earthquakes with a magnitude of 6 or higher (County of San Diego, 2007a). The Subject Property is located in one of the potential

locations for liquefaction as shown on Figure 4 in the "Guidelines for Determining Significance in Geologic Hazards" (County of San Diego, 2007a), but due to the relatively dense nature of the materials beneath the Subject Property, the potential for liquefaction and dynamic settlement to occur is low (**Appendix G**).

Areas susceptible to landslides are comprised of weak soils on sloping terrain. Heavy rains or strong seismic shaking events can induce landslides. Landslides can be induced by weather or other conditions, such as heavy rains or strong seismic shaking events. According to the USGS Landslides Hazards Program, the Subject Property is located within an area designated as having a low incidence of landslides (USGS, 2025c). The geotechnical investigation included in **Appendix G** did not find any evidence of landslides or slope instabilities during the field investigation. The potential for landslides or slope instabilities to occur at the Project Site is low.

Mineral Resources

A search of the USGS Mineral Resources Data System found no known mineral resources within the Subject Property. The Valley Center Borrow Pit, a granite production facility, is located approximately 2 miles north of the Subject Property just north of Valley Center Road. There are three additional prospects or occurrences (La Condado Mine, Monarch Mine, and White Oak Mine) located approximately 2 miles east, 2.5 miles southwest, and 2 miles west, respectively, of the Subject Property (USGS, 2025d).

C1-3 IMPACT ASSESSMENT

C1-3.1 Assessment Criteria

Impacts to land resources would be significant if the alternative changes topography so that it is noticeable to the casual observer or causes an adverse effect, such as landslides. Seismic conditions would be adversely affected if the alternative substantially increases the occurrence of seismic events or increases the risks from seismic events. Impacts to soils would be significant if the project significantly increases soil erosion. Mineral resources would be significantly affected if the project reduces the regional availability of commercial mineral resources or increases the cost of extracting mineral resources.

C1-3.2 Alternative A – Proposed Project

Topography

The Subject Property is relatively level. Construction would involve some grading and earthwork for development of the commercial developments; however, because these areas are already disturbed, the amount of grading and earthwork required will be minimal. The changes in topography due to the grading activities would not equate to a major change to the existing topography. The grading activities proposed during construction would largely preserve the existing site topography, and impacts would be less than significant and no mitigation measures are warranted.

Seismic Conditions

As described above, there are active faults in the region and the Subject Property will likely experience ground shaking in the future and therefore would be prone to seismic induced hazards (e.g. liquefaction) typical of the area. Seismic shaking could cause structural damage of buildings at the Subject Property; however, as noted in **Appendix B-2.6**, the Proposed Project would adhere to the provisions of the IBC, requiring the use of appropriate building techniques and materials to help reduce the potential risk of structure damage. In addition, **Appendix G** recommends types of footings to use for foundations and stability when referring to wind or seismic forces and seismic earth pressures. Use of these provisions would allow ground shaking-related hazards to be managed from a geologic, geotechnical, and structural standpoint such that risks to the health or safety of workers or members of the public would be reduced. Therefore, impacts from potential seismic conditions and seismic induced hazards would be less than significant and no mitigation measures are warranted.

Soil Hazards

Grading activities during construction would result in exposure of soil, increasing the risk of erosion and associated hazards, but grading and earthwork would be minimal due to the flat topography within the Project Site. Erosion risk will be addressed through standard erosion and sedimentation control BMPs during construction, as shown in **EA Table 2-1**. These measures are included as BMPs under the NPDES CGP from the USEPA. Development of the Proposed Project would comply with the requirements within the USEPA NPDES CGP, which includes using the adopted existing SWPPP that includes soil erosion prevention BMPs. If a new USEPA NPDES CGP is required once the land is taken into trust, a SWPPP would likely be required with similar provisions as those of the existing SWPPP. With implementation of these BMPs, the potential for erosion during construction would be less than significant and no mitigation measures are warranted.

Mineral Resources

As stated in **Section C1-2**, there are no known mineral resources within the Subject Property. Therefore, the Proposed Project would have no impact on mineral resources and no mitigation measures are warranted.

C1-3.3 Alternative B – No Action Alternative

Under the No Action Alternative, there would be no development constructed on the Subject Property. The Subject Property would remain as it is, and land resources would not be adversely impacted. Any future development of the Subject Property would be required to adhere to local, state, and federal ordinances and planning documents.

C1-4 MITIGATION MEASURES

There are no mitigation measures for land resources.

Appendix C-2 Water Resources

C2-1 REGULATORY SETTING

C2-1.1 Federal

Executive Order 11988

EO 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Specifically, EO 11988 states that agencies shall first determine whether the proposed action will occur in a floodplain. EO 11988 defines a floodplain as an area that has a one percent or greater chance of flooding in any given year. Second, if an agency proposes to allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the only practicable alternative action requires siting in a floodplain, the agency shall minimize potential harm to or within the floodplain.

Clean Water Act

CWA (33 USC § 1251-1376), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The USEPA is delegated as the administrative agency under the CWA. Relevant sections of the CWA are as follows.

- Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity that may result in a discharge to Waters of the U.S., to obtain certification from the USEPA for on-trust land activities, or the state for off-Reservation activities, that the discharge will comply with other provisions of the CWA.
- Section 402 establishes the NPDES, a permitting system for the discharge of any pollutant (except for dredged or fill material) into Waters of the U.S. Each NPDES permit contains limits on concentrations of pollutants discharged to surface waters to prevent degradation of water quality and protect beneficial uses.

General NPDES Permit for Construction

In 1990, an amendment to the CWA directed the NPDES permitting program to address non-point source pollution from construction activities. Construction activities include clearing, grading, excavation, stockpiling, and reconstructing existing facilities involving removal and replacement of existing foundations or other hardscapes. Construction projects disturbing one or more acres of soil must be covered under the NPDES CGP process. For tribal projects on land held in trust by the federal government, the tribe proposing the project must apply for coverage under the USEPA's NPDES CGP. Project proponents are required to submit to the USEPA a

complete Notice of Intent (NOI) to comply with the permit. A complete NOI package consists of an NOI form, site map, and fee. The USEPA's NPDES CGP also requires the development and implementation of a SWPPP. The SWPPP contains a site map showing the construction site perimeter, existing and proposed buildings, lots and roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the site. The SWPPP must list BMPs that will be implemented during construction and operation to address stormwater runoff rates and quality. SWPPP BMPs include the following categories:

- Site planning considerations, such as preservation of existing vegetation;
- Vegetation stabilization through methods such as seeding and planting;
- Physical stabilization through use of dust control and stabilization measures;
- Diversion of runoff by utilizing earth dikes and temporary drains and swales;
- Velocity reduction through measures such as slope roughening/terracing; and
- Sediment trapping/filtering through use of silt fences, straw bales and sand bag filters, and sediment traps and basins.

Safe Drinking Water Act

Under the mandate of the SDWA, the USEPA sets legally enforceable National Primary Drinking Water Regulations (primary standards) that apply to public water systems. These standards are established to protect human health by limiting the levels of contaminants in drinking water. The USEPA also defines National Secondary Drinking Water Regulations (secondary standards) for contaminants that cause cosmetic and aesthetic effects, but not for health effects. The USEPA recommends that these secondary standards be met but does not require systems to comply with them.

The USEPA does not oversee the construction and permitting of groundwater wells, but requires that public health standards, such as an effectively installed sanitary seal, are in place, and recommends that water systems be installed to meet California Department of Public Health Standards. The USEPA will also primarily establish monitoring and operational requirements, which will typically be specific to the project area. Both primary and secondary drinking water standards are expressed as either Maximum Contaminant Levels, which define the highest level of a contaminant allowed in drinking water, or Maximum Contaminant Level Goals, which define the level of a contaminant below which there is no known or expected risk to health. Monitoring requirements typically include total coliform, nitrate, inorganic chemicals, volatile organic chemicals, non-volatile synthetic organic chemicals, secondary drinking water standard constituents, and general chemistry (including alkalinity, hardness, and minerals). The frequency of sampling varies and may be reduced over time.

Federal Emergency Management Agency

The Disaster Relief Act of 1974 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 created FEMA, which is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies.

FEMA is also responsible for distributing Flood Insurance Rate Maps (FIRMs), which are used in the National Flood Insurance Program. These maps identify the locations of special flood hazard areas, including 100-year floodplains.

C2-1.2 State and Local

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act provides the basis for surface water and groundwater quality regulation within California. The act established the authority of the California State Water Resources Control Board (SWRCB) and the nine RWQCBs. The act requires the State, through the SWRCB and the RWQCBs, to designate beneficial uses of surface waters and groundwater and specify water quality objectives designed to protect those uses. These water quality objectives are presented in the Regional Water Quality Control Plans. The surface water quality standards for State of California include both narrative and numerical water quality objectives to keep California's waters swimmable, fishable, drinkable, and suitable for use by industry, agriculture, and the citizens of the state.

Sustainable Groundwater Management Act

The intent of the California SGMA (Water Code § 10720 et seq.) is to "enhance local management of groundwater consistent with rights to use or store groundwater… [and] to preserve the security of water rights in the state to the greatest extent possible consistent with the sustainable management of groundwater." The SGMA states that "any local agency or combination of local agencies overlying a groundwater basin may elect to be a groundwater sustainability agency for that basin" (Water Code § 10723). A groundwater sustainability agency will be formed within each groundwater basin to prepare and implement a plan for long-term groundwater sustainability. The Subject Property is not underlain by a designated groundwater basin.

San Diego County General Plan

The Conservation and Open Space element of the County's General Plan identifies goals and policies of the County as it relates to water resources. According to the general plan, the purpose of the general plan as it relates to water resources is to "conserve and efficiently use water and protect the groundwater aquifer, water bodies, and water courses, which include reservoirs, rivers, streams, and the watersheds located throughout the region." This includes all facets of water resource management, from flooding, stormwater, drinking water, surface waters, and groundwater. Goals include balanced and integrated water management with protection and maintenance of water resources.

C2-2 ENVIRONMENTAL SETTING

C2-2.1 Surface Water

The Subject Property is located within the Moosa Canyon Watershed (USEPA, 2025). The primary surface water feature within the vicinity of the Subject Property is Moosa Canyon Creek, which is located approximately 0.11 miles north of the Subject Property, and Moosa Canyon Creek, South Fork which is located 0.25 miles to the west of the Subject Property. There is evidence of an old ephemeral watercourse that used to traverse the site from south to north (USFWS, 2025, **Figure 5, of Appendix A**). This old watercourse was redirected into a graded channel located east of the Subject Property and then running west to a storm drainage channel through the center of the Subject Property to Valley Center Rd. This east-west drainage channel (and a minor tributary to this drainage channel) was undergrounded prior to the Tribe's purchase of the property. This work was done consistent with a CWA Section 404 permit (SPL-2020-00093-DSG) and Section 401 Certification (R9-2021-0183). Other surface water features that are located just north and east of the Subject Property are located in the Native Oaks Golf Club and consist of ephemeral channels, intermittent channels, man-made ponds, and wetlands. The surface water quality standards for the State of California include both narrative and numerical water quality objectives to keep California's waters swimmable, fishable, drinkable, and suitable for use by industry, agriculture, and the citizens of the State. Both Moosa Canyon Creek and the South Fork Moose Canyon are listed on the California 303(d) list of impaired water bodies (USEPA, 2025). Moose Canyon Creek is listed for bacteria and other microbes, and nitrogen and/or phosphorus levels.

C2-2.2 Drainage

Drainage from the Subject Property drains to the northwest to an existing 18-inch RCP culvert with a headwall that was constructed as part of the widening of Valley Center Road or to an existing 18-inch RCP culvert located near the northwest corner of the Subject Property that conveys runoff beneath the existing private service road to an existing graded channel that runs south to north to the existing culvert crossing located at the intersection of Sunday Drive and Valley Center Road. The remainder of the Subject Property drains to the same existing graded channel that runs south to north. Additional details can be found in the Drainage Study that was completed in January 2022 and the Engineering Plans that were completed in July 2022 and updated May 2025 (Alidade, 2022a and Alidade, 2022b).

C2-2.3 Flooding

The FEMA is responsible for predicting the potential for flooding in most areas. FEMA routinely performs this function through the update and issuance of FIRMs, which depict various levels of predicted inundation. FIRM map number 06073C0810G shows that the Subject Property is within Zone X as seen on **Figure 7** of **Appendix A**, which designates areas of minimal flood hazard outside of the 500-year floodplain (FEMA, 2025). Just north of Subject Property along Moosa Canyon Creek and within the Native Oaks Golf Club are FEMA Zones of A, which is a special flood hazard

area within the 100-year floodplain, and AE, which is a high-risk area with a 1% annual chance of flooding within the 100-year floodplain (FEMA, 2025).

C2-2.4 Groundwater

The Subject Property is not underlain by a designated groundwater basin, and the nearest groundwater basin is the San Luis Rey Valley (No. 9-007) located approximately 6 miles northeast of the Subject Property (SGMA, 2024). The geotechnical investigation included as **Appendix G**, conducted borehole samples and encountered groundwater at a depth of 31 feet. In addition, infiltration testing was performed on the site and found infiltration rates in some test locations were greater than 0.5 inches per hour. As discussed further in **Section 3.9**, the VCMWD would supply potable water to the Subject Property and vicinity. The VCMWD does not utilize groundwater as a potable water supply (VCMWD, 2021).

C2-3 IMPACT ASSESSMENT

C2-3.1 Assessment Criteria

Impacts to water resources would be significant if runoff from the Subject Property causes local flooding. Groundwater impacts would be significant if development were to adversely affect local water supply either by reducing the availability of potable water or increasing the demand for domestic water to the point where the existing water supply system would need to be expanded. Water quality would be significantly affected if wastewater or runoff generated by the project adversely impacts water quality standards of receiving water bodies or groundwater.

C2-3.2 Alternative A – Proposed Project

Stormwater, Drainage, and Flooding

Stormwater collection would involve a mixture of collection via drains, multiple biofiltration basins, and underground treatment. The Proposed Project would be subject to water quality treatments, including bioretention, infiltration basins, vegetated swales, chamber systems, filter strips, and others. A drainage study was completed in 2022, and the project has been designed to meet County requirements. Currently, there is an existing CGP for stormwater discharges, the Tribe will continue to comply with the conditions of the permit and SWPPP while the property is in fee. Once the Subject Property is transferred into trust status, the USEPA will have jurisdiction over stormwater discharges. The SWPPP conditions would likely remain the same.

All grading and earthmoving activities would occur outside of the FEMA-designated 100- and 500-year floodplains. As such, floodplain impacts from Alternative A would not occur. The site is previously disturbed and drainage is conveyed to existing culverts and graded channel. With the implementation of the identified BMPs in **EA Table 2-1**, impacts related to stormwater runoff quality, rates, and flooding during operation of Alternative A would be less than significant and no mitigation measures are warranted.

Surface Water and Groundwater Resource Availability

A connection to the VCMWD water system will be utilized for the Proposed Project. VCMWD would supply San Luis Rey Indian Water Rights Settlement waters (from the Colorado River) pursuant to a wheeling agreement with the Tribe (VCMWD, 2019). Thus, the increase in water required for the Proposed Project would not impact groundwater extraction. BMPs in **EA Table 2-1** also ensure that Alternative A utilizes low-flow water appliances, faucets, and toilets to reduce the potable water demand. Alternative A would result in an increase in impervious surfaces within the Subject Property, which will not significantly affect groundwater recharge as stormwater would continue to be routed through the onsite drainage facilities that convey water to multiple bioretention basins and then off-site to existing drainage facilities. Per the Drainage Study, there would be a slight increase in runoff from the Proposed Project to Moosa Creek, an existing box culvert, and the existing storm drain, but such a minor increase will not impact the conveyance of the public storm drain system or any inlets connected to the system during a 100-year peak flooding event or any flooding event smaller than that. Therefore, the impact to groundwater and associated surface water features would be less than significant and no mitigation measures are warranted.

Water Quality

Due to the previously disturbed nature of the Subject Property and the flat topography, minimal grading will be required. Construction impacts under Alternative A will include some ground-disturbing activities that could lead to erosion of topsoil. Regulated construction activities in excess of one acre are required to apply for coverage under the NPDES CGP, which requires preparation of a SWPPP. A SWPPP was prepared prior to the ground disturbance and grading that has occurred on the site. The SWPPP includes BMPs to reduce potential surface water contamination during storm events. Should the property be acquired in trust, CWA jurisdiction will transfer from the state to the USEPA and a new CGP is expected to be needed. The new CGP can be expected, however, to include a SWPPP with similar conditions and BMPs as the existing SWPPP. The BMPs in the SWPPP would minimize adverse impacts to the local and regional watershed from construction activities associated with Alternative A by reducing erosion, reducing the risk of soil contamination from construction materials (e.g., fuel, fertilizer, paint), and by preventing movement of loose soil into waterways. In addition to these BMPs that are a part of the SWPPP, dust suppression BMPs identified to protect air quality would further prevent fugitive dust or loose soil from dispersing offsite. These BMPs can be seen in **EA Table 2-1**. With implementation of the SWPPP and the identified BMPs, impacts to surface water quality from construction activities would be less than significant and no mitigation measures are warranted.

During operation the biofiltration basins would assist in removing pollutants from stormwater runoff by using a combination of vegetated plants, soil, and microorganisms. All inlets would be protected with a solids removing filter/filter fabric, and grate inlets will be protected with solids removing filters and hydrocarbon booms to reduce operational pollutants. Wastewater produced under Alternative A could have a significant effect if untreated wastewater were to enter the environment. Wastewater generated from Alternative A would be collected and treated via the connection to the VCMWD sanitary sewer connection. With the implementation of BMPs in **EA**

Table 2-1, potential impacts to water quality would be less than significant and no mitigation measures are warranted.

C2-3.3 Alternative B – No Action Alternative

Under Alternative B, the Subject Property would remain in its current state. There would be no new impacts to water resources, and current water uses and drainage would continue. No adverse impacts to water resources would occur under the No Action Alternative.

C2-4 MITIGATION MEASURES

There are no mitigation measures for water resources.

Appendix C-3 Air Quality

C3-1 REGULATORY SETTING

C3-1.1 Federal

Clean Air Act of 1970

The CAA (42 USC Chapter 85) is the federal legislation for the protection of air quality. The CAA gives the USEPA authority to regulate air quality by promulgating standards and levels for air quality and enforcing those standards and levels on federal, state, and tribal land. The CAA requires the USEPA to regulate HAPs, which are those pollutants that are known or suspected of causing cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.

The Federal CAA of 1970, as amended, establishes air quality standards for several CAPs: ozone (O_3), carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). These pollutants are termed "criteria" pollutants because the USEPA has established specific concentration threshold criteria based upon specific medical evidence of health effects or visibility reduction, soiling, nuisance, and other forms of damage. These NAAQS are divided into primary and secondary standards. Primary standards are designed to protect public health, and secondary standards are intended to protect public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. NAAQS and California Ambient air quality standards (CAAQS) are presented in **Table C3-1.**

Areas are designated attainment, nonattainment, or maintenance by the USEPA depending on whether the area is below or exceeds the established NAAQS. Nonattainment areas must take steps towards attainment within a specified timeframe. Once an area reaches attainment for a particular criteria pollutant, it is re-designated to attainment with a maintenance designation. A maintenance designation indicates that the area has met the standard but must be supported by a state-prepared Maintenance Plan that demonstrates how the area will continue to comply with the NAAQS. The CAA places most of the responsibility on states to achieve compliance with the NAAQS. States, municipal statistical areas, and counties that contain areas of nonattainment are required to develop a State Implementation Plan (SIP), which outlines policies and procedures designed to bring the state into compliance with the NAAQS.

Table C3-1: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards Concentration	National Standards Primary	National Standards Secondary
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m^3)	–	Same as primary standard
Ozone (O_3)	8 hours	0.070 ppm (137 µg/m^3)	0.075 ppm (147 µg/m^3)	
Respirable particulate matter (PM_{10})	24 hours	50 µg/m^3	150 µg/m^3	Same as primary standard
Respirable particulate matter (PM_{10})	Annual arithmetic mean	20 µg/m^3	–	
Fine particulate matter ($PM_{2.5}$)	24 hours	–	35 µg/m^3	Same as primary standard
Fine particulate matter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	12 µg/m^3	15 µg/m
Carbon monoxide (CO)	8 hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
Carbon monoxide (CO)	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
Carbon monoxide (CO)	8 hours (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
Nitrogen Dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as primary standard
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	–
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	0.030 ppm (for certain areas) [h]	–
Sulfur Dioxide (SO_2) [9]	24 hours	0.04 ppm (105 µg/m^3)	0.14 ppm (for certain areas)	–
Sulfur dioxide (SO_2)	3 hours	–	–	0.5 ppm (1,300 µg/m^3)
Sulfur dioxide (SO_2)	1 hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	–
Lead (Pb)	30-day	1.5 µg/m^3	–	–

Pollutant	Averaging Time	California Standards Concentration	National Standards Primary	National Standards Secondary
	average			
Lead (Pb)	Calendar quarter	–	1.5 µg/m^3 (for certain areas)	Same as primary standard
Lead (Pb)	Rolling 3-month average	–	0.15 µg/m3	
Visibility-reducing particles	8 hours	See footnote [1]	No national standards	No national standards
Sulfates	24 hours	25 µg/m3	No national standards	No national standards
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m^3)	No National Standards	No National Standards
Vinyl Chloride	24 hours	0.01 ppm (26 µg/m^3)	No National Standards	No national standards

Notes: µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; ppb = parts per billion; ppm = parts per million

[1] In 1989, the Air Resources Board converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively

Source: CARB, 2024

Ozone

Photochemical reactions involving reactive organic gases (ROG)/volatile organic compounds (VOC) and nitrogen oxides (NO_X) resulting from the incomplete combustion of fossil fuels are the largest source of ground-level O_3. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, O_3 is primarily a summer air pollution problem. As a photochemical pollutant, O_3 is formed only during daylight hours under appropriate conditions. However, it is destroyed throughout the day and night. O_3 is considered a regional pollutant as the reactions forming it take place over time and are often most noticeable downwind from the sources of the emissions. The SDAB is designated as nonattainment for O_3 by the USEPA (USEPA, 2025a).

Particulate Matter 2.5

Particle pollution is a mixture of microscopic solids and liquid droplets suspended in air. This pollution, also known as $PM_{2.5}$, is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, soil or dust particles, and allergens (such as fragments of pollen or mold spores). The size of particles is directly linked to their potential for causing health problems. Particles smaller than 2.5 µm pose the greatest problems because they can be inhaled deep into the lungs. Exposure to such particles can affect respiratory system function. The SDAB is designated as in attainment for $PM_{2.5}$ by the USEPA (USEPA, 2025a).

Carbon Monoxide

CO is not readily dispersed throughout the atmosphere; therefore, it is considered a localized air quality issue as it is close to the emission source. CO emissions generally cause an acute (short-term) health threat. CO is a pollutant of concern at major signalized intersections (greater than 100,000 vehicles per day) that exhibit prolonged vehicle idling times. The SDAB is designated as maintenance for CO by the USEPA (USEPA, 2025a).

Hazardous Air Pollutants

In addition to the above-listed CAPs, HAPs are a group of chemical pollutants which can cause adverse effects to human health and/or the environment. The USEPA has developed a list of over 188 airborne chemicals that it considers HAPs. Sources of HAPs include industrial processes, such as petroleum refining and chrome plating operations; commercial operations, such as gasoline stations and dry cleaners; cigarette smoke; and motor vehicle exhaust. Cars and trucks release at least 40 different HAPs. The most important, in terms of health risk, are DPM, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Health effects of HAPs can include cancer, birth defects, and neurological damage.

HAPs are less pervasive in the urban atmosphere than CAPs but are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. The majority of the estimated health risk from HAPs can be attributed to relatively few compounds. The most important HAPs are found in DPM. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. Diesel exhaust contains a variety of harmful gases and over 40 other cancer-causing substances, and the visible emissions in diesel exhaust are PM that includes carbon particles or “soot.” Exposure to DPM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Due to the controversy surrounding DPM, an assessment of the potential impacts of DPM releases has been included in **Section C3-3**.

Federal General Conformity

Under the General Conformity Rule, updated in 2010, the lead agency with respect to a federal action is required to demonstrate that the proposed federal action conforms to the applicable SIP before the action is taken. There are two phases to demonstrate general conformity:

- The Conformity Review process, which entails an initial review of the federal action to assess whether a full conformity determination is necessary.
- If necessary, the Conformity Determination process, which requires that a proposed federal action be demonstrated to conform to the applicable SIP.

The Conformity Review requires the lead agency to compare estimated emissions to applicable general conformity levels (40 CFR 93.153 [b][1] and [2]), which can be seen in **Table C3-2** and **Table C3-3**. If the emission estimates from step one are below the applicable threshold(s), then a general conformity determination is not necessary and the full Conformity Determination is not required. If emission estimates are greater than the applicable threshold(s), the lead agency must conduct a Conformity Determination.

Table C3-2: 40 CFR 93.153 [b][1] Emission Rates for Nonattainment Areas (NAAs)

Pollutant	Tons per Year
Ozone (VOC's or NOX):	
Serious NAA's	50
Severe NAA's	25
Extreme NAA's	10
Other ozone NAA's outside ozone transport region	100
Other ozone NAA's inside an ozone transport region:	
VOC	50
NOx	100
Carbon Monoxide: all maintenance areas	100
SO_2 or NO_2: All NAAs	100
PM_{10}:	
Moderate NAA's	100
Serious NAAs	70
$PM_{2.5}$ (direct emissions, SO_2, NO_X, VOC, and Ammonia):	
Moderate NAA's	100
Serious NAAs	70
PD: all NAA's	25

Source: 40 CFR 93.153 [b][1].

Table C3-3: 40 CFR 93.153 [b][2] Emission Rates for Maintenance Areas

Pollutant	Tons per Year
Ozone (NO_X), SO_2 or NO_2:	
All maintenance areas	100
Ozone (VOC's)	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide: All maintenance areas	100
PM_{10}: All maintenance areas	100
$PM_{2.5}$ (direct emissions, SO_2, NOx, VOC, and Ammonia)	100
All maintenance areas	100
Pb: All maintenance areas	25

Source: 40 CFR 93.153 [b][2]

Federal Class I Areas

The CAA designates all international parks, national wilderness areas, and memorial parks larger than 5,000 acres and national parks larger than 6,000 acres as "Class I areas." The CAA prevents significant deterioration of air quality in Class I areas under the Prevention of Significant Deterioration (PSD) Program. The PSD Program protects Class I areas by allowing only a small increment of air quality deterioration in these areas by requiring assessment of potential impacts on air quality related values of Class I areas.

Any major source of emissions within 100 kilometers (62.1 miles) from a federal Class I area is required to conduct a pre-construction review of air quality impacts on the area(s). A "major source" for the PSD Program is defined as a facility that will emit (from direct stationary sources) 250 tons per year (tpy) of regulated pollutant. For certain industries, these requirements apply to facilities that emit (through direct stationary sources) 100 tpy or more of a regulated pollutant. Mobile sources (e.g., vehicle emissions) are by definition not stationary sources and are therefore not subject to the PSD program.

Tribal New Source Review

The Tribal Minor NSR permitting program was established by the USEPA under the CAA. The minor NSR program applies to both new minor sources and minor modifications to both major and minor projects in attainment and nonattainment areas. Common sources associated with commercial land uses include gas stations, emergency generators, and natural gas-fired boilers, water heaters and space heaters. A permit under the minor NSR program would be required on tribal trust land if stationary source emissions of regulated pollutants would exceed the thresholds presented in 40 CFR 49.153, Table 1 (presented in **Table C3-4**). This permit serves as a preconstruction permit containing limitations and other restrictions specifying the construction, modification, and operation of a minor source.

Table C3-4: Tribal Minor New Source Review Thresholds

Pollutant	Emissions Thresholds for Nonattainment Areas (tpy)	Emissions Thresholds for Attainment Areas (tpy)
NOx	5	10
ROG	2	5
PM	5	10
PM_{10}	1	5
$PM_{2.5}$	0.6	3
CO	5	10
SO_2	5	10
Pb	0.1	0.1

Source: 40 CFR 49.153.

C3-1.2 State and Local

California Clean Air Act of 1988

The California Air Resources Board (CARB) oversees air quality planning and control throughout California. CARB is primarily responsible for ensuring implementation of the California Clean Air Act (CCAA), responding to the CAA requirements, and regulating emissions from motor vehicles and consumer products in the State. CARB has established emissions standards for vehicles sold in California and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The CCAA establishes ambient air quality standards for the state (CAAQS) and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same six criteria pollutants as the CAA and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride. They are generally more stringent than the NAAQS and, in the case of PM_{10} and NO_2, are far more stringent.

CAAQS are health-based to protect the health and welfare of the populace with a reasonable margin of safety. These pollutants include ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, sulfates, lead, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

San Diego Air Pollution Control District

At the local level, the SDAPCD regulates air pollutant emissions within the County. The SDAPCD is responsible for preparing plans to attain ambient air quality standards, adopting and enforcing rules for air pollution sources, and issuing permits for stationary sources. SDAPCD rules most relevant to the Proposed Project are briefly described below:

Rule 51 – Nuisance: Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or tend to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property.

Rule 55 – Fugitive Dust: Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.

Rule 67.0.1 – Architectural Coatings: Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 67.7 – Cutback and Emulsified Asphalts: Requires manufacturers, distributors, and end users of cutback and emulsified asphalt materials for the paving, construction, or maintenance of parking lots, driveways, streets, and highways to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC evaporation content.

Rule 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks: Prohibits the transfer of gasoline into stationary underground storage tanks unless SDAPCD standards for vapor recovery and pollution control are met.

Rule 61.4.1 – Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks: Prohibits the transfer of gasoline from underground storage tanks into vehicle fuel tanks unless SDAPCD standards for vapor recovery and pollution control are met (CARB, 2025).

C3-2 ENVIRONMENTAL SETTING

C3-2.1 Regional Meteorology

The Subject Property is located within the northern portion of the San Diego Air Basin (SDAB), which is coincident with San Diego County. The climate of the SDAB, as with all of Southern California, is largely dominated by the strength and position of the semi-permanent high-pressure system over the Pacific Ocean, known as the Pacific High. This high-pressure ridge over the West Coast often creates a pattern of late-night and early-morning low clouds, hazy afternoon sunshine, daytime onshore breezes, and little temperature variation year-round. The climatic classification for San Diego is a Mediterranean climate, with warm, dry summers and mild, wet winters (County of San Diego, 2007b).

C3-2.2 Air Quality

San Diego County's climate and meteorology contribute to regional air quality challenges. A subsidence inversion, caused by high pressure over the Pacific, traps pollutants close to the surface and limits vertical mixing. During summer, weak pressure gradients further limit horizontal dispersion of pollutants in the mixed layer below the subsidence inversion. Poorly dispersed anthropogenic emissions combined with strong sunshine leads to photochemical reactions, which results in the creation of ozone at this surface layer – the county's primary air pollutant of concern. Common coastal wind patterns carry emissions offshore at night and return them inland the following day. Under certain conditions, this circulation also transports polluted air masses from the Los Angeles basin into San Diego County, contributing to elevated ozone concentrations (County of San Diego, 2007b).

Attainment Status

The Subject Property is currently within the jurisdictional area of the SDAPCD. The SDAPCD regulates air pollutant emissions from stationary sources within San Diego County, including the Subject Property. However, once the Subject Property is taken into federal trust, air quality would be under the jurisdiction of the USEPA.

To determine conformance with the NAAQS, states are responsible for providing ambient air monitoring data to the USEPA. The USEPA then determines, using the violation criteria, if the results of the monitoring data indicate compliance with the NAAQS. The USEPA classifies areas in compliance with the NAAQS as being in "attainment." Areas that do not meet the NAAQS are

classified as being in "nonattainment" by the USEPA. Maintenance areas are those that have been redesignated from nonattainment to attainment and are subject to a Maintenance Plan prepared by the state, which demonstrates how the area will continue to meet the NAAQS.

As shown in **Table C3-5**, San Diego County, where the Subject Property is located, is designated nonattainment for ozone and attainment (maintenance) for CO under federal air quality standards. The County meets federal standards or is unclassifiable for all other criteria pollutants.

Table C3-5: San Diego County NAAQS Attainment Status

Pollutant	NAAQS
Ozone (8-hour)	Nonattainment (Severe)
PM_{10}	Unclassified
$PM_{2.5}$	Attainment
Carbon Monoxide	Attainment (Maintenance)
Nitrogen Dioxide	Attainment
Sulfur Dioxide	Attainment
Lead	Attainment

Source: USEPA, 2025a; SDAPCD, 2025
PM_{10}: Particulate matter with diameters that are generally 10 micrometers and smaller
$PM_{2.5}$: Particulate matter with diameters that are generally 2.5 micrometers and smaller

Sensitive Receptors

Sensitive receptors are generally defined as land uses that house or attract people who are susceptible to adverse effects from air pollution emissions and, as such, should be given special consideration when evaluating air quality impacts from projects. Sensitive receptors include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent homes, parks and recreational facilities, and residential areas are examples of sensitive receptors. The nearest sensitive receptors to the Subject Property include several single-family homes located adjacent to the eastern and western borders of the southern portion of the property.

C3-3 IMPACT ASSESSMENT

C3-3.1 Assessment Criteria

Development and operation of the Proposed Project would emit CAPs, and HAPs. This section presents the methodology used to assess the affected environment and to evaluate the potential air quality effects of the project alternatives. Adverse impacts to ambient air quality could result if either construction or operation would result in violations of the CAA provisions, or if emissions would impede the ability of the State to meet the NAAQSs.

C3-3.2 Methodology

Construction Analysis

Construction of Alternative A was assumed to begin in May 2026 and continue for a duration of approximately 18 months. Construction activities would include land clearing, grading, building construction, and site improvements for parking and circulation. Effects on air quality during construction were evaluated by estimating the quantity of each CAP emitted over the duration of the construction period. Particulate matter (PM_{10} and $PM_{2.5}$) are the pollutants of concern resulting during earth-moving and fine grading activities. VOCs, NO_X, SO_2, CO, and DPM emissions would be emitted from heavy equipment due to the combustion of diesel fuel. Construction-related emissions were quantified using the California Emissions Estimator Model (CalEEMod) Version 2022.1 Emissions results are summarized below and included in **Appendix H**.

Operation Analysis

Annual operation emissions for the alternatives were calculated using CalEEMod, with detailed modeling inputs included in **Appendix H**. Operational vehicle trips were sourced from **Appendix F**.

Hazardous Air Pollutants

Construction activities would result in short-term emissions of HAPs, specifically DPM, from off-road heavy-duty diesel equipment exhaust and diesel-fueled haul trucks. Commercial operations typically associated with HAPs include dry cleaners and gasoline fueling stations. Gasoline fueling stations release benzene, ethylbenzene, toluene, xylenes, and naphthalene during gasoline transfer, venting, and refueling. Under Alternative A, the development of 12 fuel pumps could result in HAP emissions during fueling operations. Construction and operational related HAP emissions are addressed within the emissions discussion below.

Federal General Conformity

Conformity regulations apply to federal actions that would cause emissions of CAPs above certain levels to occur in locations designated as nonattainment or maintenance areas for the emitted pollutants. As discussed in **Section C3-2**, the Subject Property is located in an area that is designated nonattainment for ozone and attainment (maintenance) for CO under federal air quality standards. All other pollutants are designated attainment or unclassifiable. If project emissions are equal to or exceed applicable levels for any CAP provided in 40 CFR §93.153 (b)(1) and (2), then a federal general conformity determination analysis would be required. Stationary sources are exempt under conformity regulations and therefore not subject to *de minimis* levels. The requirement for a conformity determination for Alternative A is discussed below.

Federal Class I Areas

The nearest Class I area is Agua Tibia Wilderness, approximately 14 miles from the Subject Property (USEPA, 2025b). As detailed below, the Proposed Project would not emit 250 tpy of any regulated pollutant; therefore, no additional PSD program analysis is required.

Tribal New Source Review

NSR is a preconstruction permitting program for stationary sources under the CAA. Common commercial sources include gasoline dispensing stations, emergency generators, and natural gas-fired boilers, water heaters, and space heaters. Gasoline dispensing facilities in Indian Country are subject to regulation under the NSR program. Alternative A proposes the development of 12 fuel pumps; therefore, the Tribe would be required to obtain an NSR permit for any sources that exceed the thresholds identified in **Table C3-4**.

C3-3.3 Alternative A – Proposed Project

Construction Emissions

Construction of Alternative A would result in the temporary generation of emissions from the use of heavy-duty diesel construction equipment and worker and vendor vehicle trips. Because preliminary grading of the Subject Property has already been completed, only minor grading for individual building pads would be required with balanced cut and fill assumed. As such, there would be negligible emissions associated with hauling trips required for material import or export. Further, the air quality analysis assumed CalEEMod default values for grading; therefore, results are conservative given that preliminary grading has already taken place. Fugitive dust, the dominant source of PM_{10} and $PM_{2.5}$ emissions, is generated when vehicles and equipment disturb soil and other friable materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_X emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Painting, worker commute trips, and asphalt paving are dominant sources of VOC emissions. Such air quality effects generally would be temporary and localized. Construction emissions were estimated using CalEEMod, with detailed output files included in **Appendix H**. The estimated construction emissions are summarized in **Table C3-6**.

Table C3-6: Construction Emissions of Criteria Pollutants (tons/year) – Alternative A

Emissions	NO_X	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
2026	0.97	0.11	1.29	< 0.005	0.15	0.08
2027	0.91	0.30	1.31	< 0.005	0.06	0.04
Maximum Year Emissions	0.97	0.30	1.29	< 0.005	0.15	0.08
De minimis Level	25	25	100	N/A	N/A	N/A
Exceed Level?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: N/A = Not Applicable. *De minimis* levels are only applicable for projects in nonattainment and maintenance areas.
Source: **Appendix H**

As shown in **Table C3-6**, emissions of individual criteria pollutants from the construction of Alternative A would not exceed applicable *de minimis* levels; therefore, a conformity determination is not required for these pollutants during construction. Construction emissions would be reduced with implementation of standard construction BMPs described in **Appendix B** including, but not limited to, site watering, street sweeping, limits on vehicle speeds, and minimization of vehicle idling. These BMPs would control the production of fugitive dust (PM_{10} and $PM_{2.5}$) and reduce emissions of criteria pollutants, and DPM. This would reduce the overall quantity of these emissions and dust that could disperse off-site and negatively affect neighboring areas. Therefore, construction of Alternative A would not result in significant effects on regional air quality, and no mitigation measures are warranted.

Hazardous Air Pollutants

Construction-related activities would result in the generation of HAPs, specifically DPM from diesel-powered equipment exhaust, with the potential to affect nearby sensitive receptors. However, construction would be temporary, lasting only 18 months, which is a relatively short duration compared to the long-term exposure periods (e.g., 30 years or more) typically associated with health risk impacts from HAPs. Further, because only portions of the Subject Property would be disturbed at a time and construction equipment would operate intermittently and in different locations, DPM emissions would not be concentrated in one area or persist for extended time periods. Given the temporary nature of construction and the relatively short duration of potential exposure, the likelihood of any one sensitive receptor experiencing prolonged exposure to HAP emissions is low. Furthermore, emissions of $PM_{2.5}$ from construction, as shown in **Table C3-6**, are minor, and DPM, which is a subset of $PM_{2.5}$, is also highly dispersive. Implementation of construction BMPs described in **Appendix B** would further reduce emissions of DPM, a subset of $PM_{2.5}$. As such, construction-related HAP emissions are not expected to pose a health risk to nearby residents. Construction of Alternative A would not result in significant effects on regional air quality, and no mitigation measures are warranted.

Operation Emissions

Buildout and operation of Alternative A would result in the generation of mobile emissions from patron, employee, and delivery vehicles, as well as stationary-source emissions from combustion of natural gas in heating units, and other equipment. The estimated operational emissions are provided in **Table C3-7.** Detailed calculations of vehicle and area emissions are included in **Appendix H**.

Table C3-7: Operation Emissions of Criteria Pollutants (tons/year) – Alternative A

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Annual Emissions	6.58	4.93	47.5	0.12	11.4	2.95
De minimis Levels	25	25	100	N/A	N/A	N/A
Exceed Level?	No	No	No	N/A	No	No

Notes: N/A = Not Applicable. *De minimis* levels are only applicable for projects in nonattainment and maintenance areas.
Source: **Appendix H**.

The Tribe would be required to apply for coverage under the NSR program for the operation of any stationary sources, including the 12 gasoline fueling pumps. Compliance with the NSR program would require emission limitations and monitoring and reporting requirements. As shown in **Table C3-7**, emissions of individual criteria pollutants from the operation of Alternative A would not exceed applicable *de minimis* levels; therefore, a conformity determination is not required for these pollutants during operation. Operation of Alternative A would not result in significant effects on regional air quality, and no mitigation measures are warranted.

Hazardous Air Pollutants

Operational activities related to the 12 gasoline fueling pumps would result in the release of HAPs, including benzene, ethylbenzene, toluene, xylenes, and naphthalene from gasoline vapors. However, the gasoline pumps would be permitted by the USEPA under the minor NSR program, which requires Stage I emissions controls for underground storage tanks and relies on onboard refueling vapor recovery systems to control vapors from vehicle refueling. In addition, minor NSR permits require gas stations to minimize vapor releases, perform UST testing and inspections, maintain records, and meet reporting requirements. Compliance with vapor recovery requirements for vehicles and USTs would reduce potential impacts from VOC emissions to a less-than-significant level. With implementation of BMPs and adherence to the NSR permitting program, Alternative 1 would not result in significant adverse impacts associated with the regional air quality environment. With compliance with minor NSR permit requirements and implementation of the BMPs described in **Appendix B** - including adherence to applicable building standards and use of energy and water saving appliances - air quality impacts from operation of Alternative A would be less than significant and no mitigation measures are warranted.

C3-3.4 Alternative B – No Action Alternative

Under the No Action Alternative, the Subject Property would remain as it is and none of the construction or operational air quality impacts identified for Alternative A would occur. There would be no impact.

C3-4 MITIGATION MEASURES

There are no mitigation measures for air quality.

Appendix C-4 Biological Resources

C4-1 REGULATORY SETTING

C4-1.1 Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects species at risk of extinction and provides for conservation of the ecosystems on which they depend. USFWS and the National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) share responsibility for implementing FESA. Generally, USFWS manages terrestrial and freshwater species, while NOAA is responsible for marine and anadromous species. Section 9 (§ 1538) prohibits the "take" of a listed species by anyone, including private individuals and state and local agencies. Threatened and endangered species on the federal list (50 CFR Sections 17.11 and 17.12) are protected from take.

Pursuant to the requirements of the FESA, a federal agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present on a project site and whether a project is likely to jeopardize the continued existence of any species that is federally listed as endangered or threatened, species that are formally proposed for listing, and species that are listed as candidate species under the FESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536(a)).

Magnuson-Stevens Act and Sustainable Fisheries Act

The Magnuson–Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) is the primary law that governs marine fisheries management in U.S. federal waters. First passed in 1976, the Magnuson-Stevens Act fosters the long-term biological and economic sustainability of marine fisheries. The Sustainable Fisheries Act of 1996 (Public Law 104-297) amended the Magnuson-Stevens Act to establish new requirements for fishery management councils to identify and describe Essential Fish Habitat (EFH) and to protect, conserve, and enhance EFH for the benefit of fisheries. EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. The Sustainable Fisheries Act also established a federal EFH consultation process that advises federal agencies to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH. Consultation is required if a federal agency has authorized, funded, or undertaken a proposed activity and if the action will adversely affect EFH.

Migratory Bird Treaty Act

Migratory birds are protected under the federal MBTA of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Under the MBTA, indirect impacts to nesting birds are not considered "take".

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act was originally enacted in 1940 to protect bald eagles and was later amended to include golden eagles (16 USC Subsection 668-668). This act prohibits take, possession, and commerce of bald and golden eagles and associated parts, feathers, nests, or eggs with limited exceptions. The definition of take is the same as the definition under the FESA. In 2007, the bald eagle was federally delisted under FESA. However, the provisions of the act remain in place for protection of bald and golden eagles.

Clean Water Act - Sections 404 and 401

Any project that involves discharge of dredged or fill material into navigable waters of the U.S. must first obtain authorization from the USACE, under Section 404 of the CWA. Projects on trust land requiring a 404 permit under the CWA also require a Section 401 certification from USEPA for trust land. These two agencies also administer the NPDES general permits for construction activities disturbing one acre or more.

C4-1.2 State and Local

California Endangered Species Act

The California Endangered Species Act (CESA) declares that deserving plant or animal species will be given protection by the State because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. The CESA established that it is State policy to conserve, protect, restore, and enhance State listed species and their habitats. Under State law, plant and animal species may be formally listed by the California Fish and Game Commission. CESA authorizes that private entities may take listed species under the FESA and CESA, pursuant to a federal incidental take permit issued in accordance with Section 10 of the FESA, if the California Department of Fish and Wildlife (CDFW) certifies that the incidental take statement or incidental take permit is consistent with CESA (California Fish & Game Code § 2080.1[a]).

California Fish and Game Code

The California Fish and Game Code defines "take" (Section 86) and prohibits take of a species listed under the CESA (California Fish and Game Code § 2080), or otherwise special status (California Fish and Game Code §§ 3511, 4700, and 5050). Section 2081(b) and (c) of the CESA allows CDFW to issue an incidental take permit for a State listed species if specific criteria outlined in Title 14 CCR §§ 783.4(a), (b) and CDFW Code § 2081(b) are met. The CDFW Code § 3503 states

that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by the code. Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the taxonomic order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the U.S. Secretary of the Interior under provisions of the MBTA. If a project is planned in an area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFW cannot provide take authorization under the CESA.

Native Plant Protection Act of 1977

The Native Plant Protection Act of 1977 and implementing regulations in Section 1900 et seq. of the California Fish and Game Code designate special-status plant species and provide specific protection measures for identified populations. CDFW administers the Native Plant Protection Act.

San Diego County General Plan

The Conservation and Open Space Element of the County's general plan identifies the County's goals and policies related to management of sensitive biological resources in the County. County policies include establishment of an inter-connected preserve system, promote long-term sustainable ecosystems, and protect wetlands.

San Diego County Multiple Species Conservation Plan

In August 1998, the County published the Multiple Species Conservation Plan (MSCP), which encompasses significant portions of the eastern part of the County. The goal of the MSCP was to identify species and habitats critical for preservation and to streamline the permitting process for development impacts to species or habitats regulated by CDFW and/or USFWS. The MSCP area is broken into three subareas: North County MSCP, East County MSCP, and South County MSCP. To date, the South County MSCP subarea plan has been completed and adopted. The Subject Property falls just outside the North County MSCP. Although a subarea plan has not been formally developed for this area, it still falls within the scope of the overall MSCP.

C4-2 ENVIRONMENTAL SETTING

C4-2.1 Methodology

Acorn Environmental biologist Kimberlina Gomez conducted biological resources surveys of the Project Site on July 9, 2025, to identify habitat types, federally listed species, suitable habitat for federally listed species, potentially occurring waters of the U.S., and other sensitive biological resources on the Project Site. A variable-intensity pedestrian survey focusing on identifying listed species and categorizing habitat types was conducted across the Project Site. Fauna and flora observed were recorded in a field notebook and identified to the lowest possible taxon; observed

species are listed in **Appendix D**. Survey efforts emphasized the search for federally listed species with potential to occur in the vicinity of the Project Site. Habitat types on the Project Site were mapped on aerial photographs and information on habitat conditions and the suitability of habitats to support listed species was also recorded. The following sources of information were reviewed:

- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription to CDFW (CNDDB, 2025)
- California Native Plant Society (CNPS) Rare Plant Inventory (CNPS, 2025)
- USGS 7.5 degree-minute topographic quadrangles of the Project Site and vicinity
- Aerial photography of the Project Site
- USFWS Information for Planning and Consultation (IPaC) list (USFWS, 2025a)
- USFWS Critical Habitat for Threatened and Endangered Species (USFWS, 2025b)
- USFWS National Wetlands Inventory (NWI) mapper (NWI, 2025)

C4-2.2 Habitat Types

The Subject Property consists of ruderal/developed habitat (**Figure 8** of **Appendix A**). Representative photographs of the Project Site are included in **Appendix D**. The USFWS NWI map identified one aquatic feature within the Subject Property, a Riverine traveling from the northwest corner and existing in the southeast corner. No aquatic features were observed within the Subject Property. Habitats are further discussed below.

C4-2.3 Wetlands and Waters of the U.S.

No aquatic features are located within the Subject Property. NWI identified a riverine feature as transversing the site, traveling from the northwest corner and exiting in the southeast. This feature or remnants of this feature were not observed at the time of the survey. In compliance with Section 404, the previous land over of the Project Site obtained a Sectio n 404 permit for the fill of the Riverine feature identified by NWI. At the time of the survey, this feature was not present.

While there are lower points of elevation throughout the Subject Property, this was the result of ground disturbing activities and naturally occurring drainage patterns. Stormwater generally flows to the northwest where it is collected and transported into an existing channel.

C4-2.4 Federally-Listed Species

No federally listed plant or animal species were observed during surveys conducted within the Subject Property, and no federally listed plant or animal species are reported to occur on the site according to the queries of biological databases.

The following federally-listed species can occur in the region according to the USFWS' IPaC Trust Resource Report System (Attachment A of **Appendix D**):

- Coastal California Gnatcatcher (*Polioptila californica californica*) – Threatened
- Least Bell's Vireo (*Vireo bellii pusillus*) – Endangered
- Southwestern Pond Turtle (Actinemys *pallida*) - Proposed Threatened

- Western Spadefoot (*Spea hammondii*) – Proposed Threatened
- Monarch Butterfly (*Danaus plexippus*) – Proposed Threatened
- Nevin's Barberry (*Berberis nevinii*) - Endangered
- San Diego Ambrosia (*Ambrosia pumila*) - Endangered
- San Diego Thornmint (*Acanthomintha ilicifolia*) – Threatened
- Willowy Monardella (*Monardella viminea*) – Endangered

C4-3 IMPACT ASSESSMENT

C4-3.1 Assessment Criteria

Each alternative is analyzed to determine if construction or operation would result in direct significant impacts to biological resources. A project would have a significant adverse impact if the development or operation would result in the loss of sensitive or critical habitat; have a substantial adverse effect on species with special status under the FESA; have a substantial adverse effect on habitat necessary for the future survival of such species, including areas designated as critical habitat by the USFWS; result in a take of migratory bird species as defined by the MBTA; and/or have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means.

C4-3.2 Alternative A – Proposed Project

Habitats

As described in **Appendix B2**, Alternative A would consist of minimal earthwork and grading, due to the areas already being previously disturbed. Habitat types throughout the entire 8.46-acre Subject Property consist of ruderal/developed, as shown in **Figure 8** of **Appendix A**. Habitat on the Subject Property have been converted from its natural state, and established vegetation communities are lacking. The Subject Property is generally devoid of plants, aside from small clumps of weedy forbs and annual grasses. Dominant vegetation includes field bindweed (*Convolvulvus arvensis*), shortpod mustard (*Hirschfeldia incana*), and wild oat (*Avena sp.*). A complete list of plant species observed is included as **Appendix D**. Operation of Alternative A would not involve activities that would result in ongoing conversion of sensitive habitat. Therefore, impacts to sensitive habitats would not occur and no mitigation measures are warranted.

Wetlands and Waters of the U.S.

There are no aquatic features that may be considered waters of the U.S. located within the Subject Property. The nearest aquatic habitat to the Subject Property is Moosa Canyon Creek is located approximately 600 feet north.

Construction of Alternative A would not involve direct impacts to any aquatic habitats and would not result in filling, excavation, re-routing, or other impacts to features with potential to be

considered waters of the U.S. Indirect impacts from potential discharge of pollutants to surface water during construction are addressed in **Section C-2**. With adherence to the NPDES permitting program and implementation of a SWPPP that includes BMPs listed in **EA Table 2-1**, indirect impacts to waters of the U.S. from construction activities would be less than significant and no mitigation measures are warranted.

Federally Listed Species

No federally listed plant or animal species were observed during surveys conducted within the Subject Property. No federally listed plant or animal species are reported to occur in the Subject Property according to queries of biological databases. Implementation of the Proposed Project will have no effect on Coastal California Gnatcatcher, Least Bell's Vireo, Southwestern Pond Turtle, Western Spadefoot, Monarch Butterfly, Nevin's Barberry, San Diego Ambrosia, San Diego Thornmint, and Willowy Monardella.

Construction and operation of Alternative A would not directly convert habitat for special-status species and would not result in indirect impacts because the area is already disturbed and surrounded by nearby development. Potential direct and indirect impacts to sensitive or federally listed species habitat as a result of Alternative A would be less than significant.

Nesting Migratory Birds

The project site contains minimally suitable habitat for nesting and migratory birds. Small ornamental trees are located in the central eastern boundary of the project site. These trees are young and offer minimally suitable habitat for nests. The Subject Property is subject to ongoing ground disturbing activities. These factors make the potential for nesting birds/raptors unlikely; however, if trees are removed during the general nesting season (February 15 to September 1) there is a potential to impact protected bird species that may be nesting in said trees. **Mitigation Measure BIO-1** requires a survey prior to tree removal if the removal is scheduled to occur during the general nesting season. If an active nest of a protected species is identified, a qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed. Implementation of **Mitigation Measure BIO-1** would minimize the potential to harm nesting birds/raptors. Impacts would be less than significant after mitigation.

Critical Habitat

There is no designated critical habitat within or adjacent to the Subject Property. The nearest designated critical habitat is for coastal California gnatcatcher, in two locations, approximately two miles to the south of the Subject Property. Implementation of the Proposed Project will have no effect on designated critical habitat for any federally listed species, and this impact is less than significant and no mitigation measures are warranted.

C4-3.3 Alternative B – No Action Alternative

Under the No Action Alternative, no development would occur within the Subject Property. As such, there would be no significant direct or indirect impacts to the biological resources within or in the vicinity of the Subject Property.

C4-4 MITIGATION MEASURES

The following mitigation measures apply to Alternative A:

BIO-1: Potentially nesting migratory birds and other birds of prey in accordance with the federal MBTA

If tree removal occurs during the general nesting season (February 15 to September 1), a preconstruction nest survey shall be conducted within the proposed construction area within 7 days of initiating removal. If active nests are identified, a qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed. The buffer shall be established using construction fencing, flagging, or similar. The buffer shall remain in place until after the nesting season or until the biologist has determined the nest is no longer active.

Appendix C-5 Cultural and Paleontological Resources

C5-1 REGULATORY SETTING

C5-1.1 Federal

National Historic Preservation Act

Section 106 of the NHPA, as amended, and its implementing regulations found in 36 CFR Part 800 require federal agencies to identify cultural resources that may be affected by actions involving federal lands, funds, or permitting. The BIA must comply with Section 106 for the proposed trust acquisition. The significance of the resources must be evaluated using established criteria outlined in 36 CFR 60.4, as described below. If a resource is determined to be a historic property, Section 106 of the NHPA requires that effects of the federal undertaking on the resource be determined. A historic property is defined as:

> *…any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property… (NHPA Sec. 301[5])*

Section 106 of the NHPA prescribes specific criteria for determining whether a project would adversely affect a historic property, as defined in 36 CFR 800.5. An impact is considered adverse when prehistoric or historic archaeological sites, structures, or objects that are listed on or eligible for listing in the National Register of Historic Places are subjected to the following:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property that causes its deterioration; and
- Transfer, lease, or sale of the property out of federal control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

If the historic property will be adversely affected by the undertaking, then prudent and feasible measures to resolve adverse impacts must be taken. The SHPO must be provided an opportunity to review and comment on these measures prior to project implementation.

Native American Graves Protection and Repatriation Act

The NAGPRA, 25 USC 3001 et seq., provides a process for museums and federal agencies to return Native American cultural items – human remains, funerary objects, sacred objects, or objects of cultural patrimony – to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and Tribal lands, and penalties for noncompliance and illegal trafficking.

Archaeological Resources Protection Act of 1979

The ARPA of 1979 (ARPA; Public Law 96-95; 16 USC 470aa-mm) provides for the protection of archaeological resources and sites that are on public and Indian lands and fosters increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979. ARPA also establishes a permit process for archaeological excavation on federal and Indian lands, a process for prosecuting cases of damage and removal of archaeological resources as well as trafficking artifacts.

Paleontological Resources Preservation Act

Paleontological resources are defined as the traces or remains of prehistoric plants and animals. Such remains often appear as fossilized or petrified skeletal matter, imprints, or endocasts, and reside in sedimentary rock layers. Paleontological resources are considered important for their scientific and educational value. Fossil remains of vertebrates are considered significant. Invertebrate fossils are considered significant if they function as index fossils. Index fossils are those that appear in the fossil record for a relatively short and known period of time. This allows geologists to interpret the age range of the geological formations in which they are found.

The Paleontological Resources Preservation subtitle of the Omnibus Public Land Management Act, 16 USC 470aaa to aaa-11 requires the USDA and DOI to issue implementation regulations to provide for the preservation, management, and protection of paleontological resources on federal lands and ensure that these resources are available for current and future generations to enjoy as part of America's national heritage.

C5-1.2 State and Local

California State Law and Historic Preservation

State Office of Historic Preservation is a compilation of state statutes and regulations that govern the identification, designation, and protection of the State of California’s significant historical

resources. It is organized by statutes, followed by regulations, followed by guidance and administrative policies.

San Diego County General Plan

The Conservation and Open Space Element of the County's General Plan addresses both cultural and paleontological resources within the County. The County has identified the following goals related to cultural resources:

- Protection and Preservation of Archaeological Resources. Protection and preservation of the County's important archeological resources for their cultural importance to local communities, as well as their research and educational potential.
- Protection and Conservation of the Historical Built Environment. Protection, conservation, use, and enjoyment of the County's important historic resources.

Additionally, the general plan identifies the following goal related to paleontological resources:

- Educational and Scientific Uses. Paleontological resources and unique geologic features conserved for educational and/or scientific purposes

C5-2 ENVIRONMENTAL SETTING

This section summarizes information from a Cultural Resources Investigation prepared for the Tribe's adjacent Native Oaks Golf Club property, including an overview of the region's indigenous, ethnographic, and historical background (Natural Investigations Company, 2024).

C5-2.1 Indigenous Overview

There are three primary indigenous occupation eras within San Diego County including the Terminal Pleistocene/Early Holocene Period, the Middle Holocene Period, and the Late Holocene Period. Evidence of human occupation before 12,000 B.C. is lacking. The earliest reliably dated archaeological sites near the County are found on the Channel Islands, where the Daisy Cave site on San Miguel Island dates to 12,300 to 11,120 years ago and the Arlington Spring site on Santa Rosa Island dates to 13,300 years ago (Natural Investigations Company, 2024).

C5-2.2 Ethnographic Overview

The Subject Property lies within the traditional territory of the Luiseño, a Takic-speaking people whose language belongs to the Cupan group of the Takic subfamily within the broader Uto-Aztecan family. The Luiseño shared borders with the Cahuilla, Cupeño, Gabrielino, and Ipai, and their lands extended across approximately 1,500 square miles from the Southern California coast inland to Santiago Peak and the Elsinore Fault Valley. Settlements were commonly established in valley bottoms, along streams, or near coastal and mountain zones, often in strategic or sheltered locations with reliable access to water and resources. The Luiseño upheld strong concepts of private property, which extended beyond land to include homes, ritual objects, songs, and natural resources. Their territory's diverse ecological zones supported a wide range of subsistence practices, centered on major game, acorns, grass seeds, and other plant foods. Fire was utilized as

a crop management technique, while tools were diverse and either crafted locally or acquired through trade. Hunting activities involved both individual and group participation (Natural Investigations Company, 2024).

C5-2.3 Historic Overview

The Subject Property is located in modern-day Valley Center, San Diego County. Originally named Bear Valley, Valley Center earned its name due to the presence of one of the last grizzly bears in the County, residing in the area in 1866. By the 1870 Census, approximately 11 families, all reliant on agriculture and ranching, lived in the area, and by the 1880s, that number had grown to 30. During this period, the name transitioned from Bear Valley to Valley Center. In 1887, the first subdivision was established, prompting growth and development that brought schools, a church, cemetery, and post office to the community. Although Valley Center continued to grow through the following decades, it remained less developed than surrounding cities and retained an agricultural focus, with large tracts of undeveloped land. Agriculture continued to dominate the local economy through the 1900s, preserving Valley Center's identity as an agricultural enclave. The arrival of electricity in 1930 and the introduction of a more reliable irrigation water supply in 1995 further supported farming in the area (Natural Investigations Company, 2024).

C5-2.4 Paleontological Resources

An online search of the University of California Museum of Paleontology (UCMP) specimen records noted 565 microfossil specimens in San Diego County, with the majority from the La Jolla Sea Cliff, Murray Canyon, and Kelley Ranch areas (UCMP, 2025).

C5-3 IMPACT ASSESSMENT

C5-3.1 Assessment Criteria

A significant effect would occur if the implementation of a project alternative resulted in physical destruction, alteration, removal, neglect, or change in characteristics or reduction of integrity of historic features of a cultural resource. A significant effect to paleontological resources would occur if a project alternative resulted in damage or destruction of fossils that provide significant nonrenewable taphonomic, taxonomic, phylogenic, ecologic, or stratigraphic information.

C5-3.2 Methodology

A Cultural Resources Negative Findings Assessment was prepared for the Subject Property in August 2018 as part of the initial CEQA review of the property. The assessment evaluated the Subject Property for sensitive cultural resources and included a records search, pedestrian survey, and Sacred Lands File (SLF) search and subsequent Native American consultation. This section summarizes information from the assessment, which is included in confidential **Appendix I**.

C5-3.3 Alternative A – Proposed Project

Cultural Resources

No archeological or cultural resources were identified on the Subject Property during the Cultural Resources Negative Findings Assessment. An archaeological record search for the Subject Property and surrounding one-mile radius was completed at the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) on July 18, 2018. The records search did not identify any previously recorded archaeological or cultural resources within the Subject Property but did identify 64 resources and 40 prior studies within the surrounding one-mile radius, including six studies that intersected the property (see Table 1 of **Appendix I**).

A Phase I Intensive Pedestrian Survey of the Subject Property was conducted by a qualified archeologist on August 9, 2018, which did not identify any historic or prehistoric resources on the Subject Property. The survey found that the site to be moderately to severely disturbed from decades of grading and development, reducing the potential for surface cultural resources. Since the Assessment was prepared additional grading has occurred on the Subject Property further lowering the likelihood of intact buried cultural deposits.

The NAHC was contacted on July 18, 2018, requesting a search of their SLF for sensitive cultural resources on or near the Subject Property. Results were received on July 25, 2018, and were negative. During prior consultation under CEQA, letters were sent out to all tribes on the NAHC contact list on August 14, 2018, and four responses were received (see **Appendix I**). The Pauma Band of Luiseño Indians indicated they were unaware of cultural sites within the project area but requested a copy of the completed study; the San Luis Rey Band of Mission Indians also requested a copy of the report; the Agua Caliente Band of Cahuilla Indians deferred to other tribes in the region; and the Jamul Indian Village requested archaeological and geological technical reports as well as the related CHRIS file.

The BIA sent a Section 106 consultation letter to SHPO in which they received concurrence on July 24, 2025. Pursuant to 36 CFR 800 § 4(d)(1), SHPO does not object to a finding of no historic properties affected and has no further comments (**Appendix I**).

There remains an unlikely chance that previously unknown cultural resources could be encountered during ground-disturbing activities. As such, development of the Proposed Project has the potential to adversely affect previously unknown subsurface archaeological or cultural resources, including human remains, which would be considered a potentially significant impact. Mitigation measures for the protection and treatment of unanticipated discoveries of archaeological resources and/or human remains are presented in **Section C5-4**. With implementation of these measures, Alternative A would not result in significant adverse impacts to unknown archaeological resources.

Paleontological Resources

No paleontological resources have been reported or observed on or in the vicinity of the Subject Property. Moreover, the Subject Property is highly disturbed due to previous development and grading. Therefore, Alternative A would not result in significant adverse impacts to known

paleontological resources. Although unlikely, previously unknown paleontological resources could be discovered during earth-moving activities. Mitigation measures are presented in **Section C5-4** for the treatment of unanticipated paleontological discoveries which would ensure that Alternative A would not result in significant adverse impacts to previously unknown paleontological resources.

C5-3.4 Alternative B – No Action Alternative

Under the No Action Alternative the Subject Property would not be placed in trust for the benefit of the Tribe and no development would occur. Therefore, there would be no impacts to cultural or paleontological resources.

C5-4 MITIGATION MEASURES

The following mitigation measures apply to Alternative A:

CUL-1: Inadvertent Discovery Protocols

During grading and other ground-disturbing activities, a qualified archaeologist and a Native American representative shall monitor the work due to the property's disturbance history and the presence of nearby recorded sites. In the event that a cultural or paleontological resource is inadvertently discovered during Project activities, work must be halted within 30 feet of the find and the qualified archaeologist (36 CFR § 61) notified immediately so that an assessment of its potential significance can be undertaken. Construction activities may continue in other areas but may not resume in the area of the find until the BIA provides written permission. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and would be discussed in consultation with the BIA, affiliated tribal organizations, and any other relevant regulatory agencies or invested parties, as appropriate.

CUL-2: Human Remains

If human remains are discovered during ground-disturbing activities on Tribal lands, the NAHC and BIA representative shall be contacted immediately. No further disturbance shall occur until the NAHC and BIA representative have made the necessary findings as to the origin and disposition. If the remains are determined to be of Native American origin, the BIA representative shall notify a Most Likely Descendant. The Most Likely Descendant is responsible for recommending the appropriate disposition of the remains and any grave goods.

Appendix C-6 Socioeconomic Conditions

C6-1 REGULATORY SETTING

There are no applicable regulations.

C6-2 ENVIRONMENTAL SETTING

C6-2.1 Demographics

Demographic data for San Diego County, Valley Center census-designated place (CDP), and the State of California is presented in **Table C6-1**. San Diego County had a population of approximately 3,276,208 residents in 2022 (**Table C6-1**). The Subject Property is within Valley Center, which had a population of approximately 10,087 in 2020. Additional socioeconomic data for the local, regional, and State area are summarized in **Table C6-1**. The Subject Property is located in Census Tract 191.06 as designated by the U.S. Census Bureau (U.S. Census Bureau, 2019a). **Table C6-2** presents demographic data and **Table C6-3** presents mean household income levels and household sizes for Census Tract 191.06 and adjacent census tracts.

Table C6-1: Socioeconomic Data

Census Data	San Diego County	Valley Center CDP	California State
Demographics			
Population April 1, 2010[1]	3,095,313	9,277	37,253,956
Population April 1, 2020[1]	3,298,634	10,087	39,538,223
Population Estimates July 1, 2022[1]	3,276,208	N/A	39,040,616
Population, 10-year growth	6.16%	8.03%	5.78%
Median household income (2022 dollars), 2018-2022[1]	$96,974	$104,115	$91,905
Persons in poverty[1]	10.7%	14.2%	12.2%
Race and Ethnicity[1]			
White alone	74.4%	66.7%	70.7%
Black or African American alone	5.6%	2.8%	6.5%
American Indian and Alaska Native alone	1.4%	1.2%	1.7%
Asian alone	13.1%	1.9%	16.3%
Native Hawaiian and Other Pacific Islander alone	0.6%	0.0%	0.5%
Two or more races	5.0%	21.1%	4.3%
Hispanic or Latino	35.0%	38.0%	40.3%

Census Data	San Diego County	Valley Center CDP	California State
White alone, not Hispanic or Latino	43.4%	49.8%	34.7%
Minority population[2]	56.6%	50.2%	65.3%
Employment[3,4,5]			
Employment June 2023	1,528,200	4,800	18,554,400
Unemployment Rate June 2023 (Not seasonally adjusted)	4.0%	2.2%	4.6%[7]
Housing[6]			
Housing units, 2020	1,228,505	3,327	14,392,140
Vacant units, 2020	69,741	175	916,517
Vacancy rate	5.7%	5.3%	6.4%

1. Source: U.S. Census Bureau, 2022a. 2. Calculated as 100% minus the *White alone, not Hispanic or Latino* percentage. 3. Source: U.S. Bureau of Labor Statistics, 2023. 4. Source: Employment Development Department, 2023a. 5. Source: Employment Development Department, 2023b. 6. Source: U.S. Census Bureau, 2020. Note that information is from 2020 Census State Redistricting Data. 7. Seasonally adjusted data

Table C6-2: 2019 Population Demographics by Census Tract

Race	191.06 (Subject Property)	191.01	191.03	191.05	191.07	201.03
Total Population[1]	**10,544**	6,925	5,682	5,716	2,067	10,191
Hispanic or Latino	**3,580**	1,683	1,471	1,020	549	2,502
Two or More Races	**906**	391	113	266	127	460
Native Hawaiian and Other Pacifica Islander	**4**	20	0	24	0	78
Asian	**386**	324	194	475	27	1,535
American Indian and Alaskan Native	**875**	1,345	0	18	236	70
Black or African American	**73**	226	43	39	19	134
White Alone, not Hispanic or Latino	**5,115**	3,156	3,869	3,963	1,193	5,526
Minority %[2]	**51.5%**	54.4%	31.9%	30.7%	42.2%	45.8%

Source: San Diego Association of Governments (SANDAG), 2023, U.S. Census Bureau, 2019a and U.S. Census Bureau, 2025. Subsequent to the publication of this data, the location of the Subject Property, which was recently located in Census Tract 191.06, is now located in Census Tract 191.11. To maintain consistency with data obtained from the U.S. Census Bureau, information from Census Tract 191.06 is listed herein.

1. Note that individual columns do not add to *Total Population* because of double counting in some categories.

2. Calculated as 100% less the White alone, not Hispanic or Latino percentage.

C6-2.2 Economy and Unemployment Data

As shown in **Table C6-3**, Valley Center had an estimated median household income of $104,115 in 2022, which was approximately 11.7% higher than the State average of $91,551. The median household income for Census Tract 191.06 in 2019 was $96,978, which was well above the established 2024 poverty threshold of $31,200 (**Table C6-3**). There were approximately 18,554,400 people employed in the State in 2023. The unemployment rate was approximately 4.6% statewide and approximately 4.0% and 2.2% for the County and Valley Center, respectively (**Table C6-1**).

Table C6-3: Household Income – Subject Property and Nearby Census Tracts

Census Tract or Location[1]	Median Household Income[4,5]	Average Household Size[1,2]	Poverty Threshold[3]
Subject Property			
191.06	$96,978[5]	3.68[2]	$31,200
Vicinity			
191.01	$95,164[5]	3.03[2]	$25,820
191.03	$102,768	3.03[2]	$25,820
191.05	$134,771	2.46	$20,440
191.07	$101,250	3.08	$25,820
201.03	$115,278[5]	3.02	$25,820
San Diego County	$98,928	2.70	$25,820
Valley Center CDP	$104,115	3.48	$25,820
California State	$91,551	2.82	$25,820

1. Source: U.S. Census Bureau, 2022c. Household size for San Diego County, Valley Center CDP and California State based off of years 2017-2021; 2. Source: U.S. Census Bureau, 2019c, Household size based off of years 2014-2018; 3. Source: U.S. Department of Health and Human Services, 2024. Average household size is conservatively rounded to the nearest person.; 4. Source: U.S. Census Bureau, 2022b. In 2022 Inflation Adjusted Dollars; 5. Source: U.S. Census Bureau, 2019b. In 2019 Inflation Adjusted Dollars.

C6-2.3 Housing

In 2020, the State was estimated to have approximately 14,392,140 housing units, of which approximately 916,517 units (6.4%) were vacant (**Table C6-1**), the County had approximately 1,228,505 housing units, of which approximately 69,741 (5.7%) were vacant, and Valley Center had approximately 3,327 housing units, of which approximately 175 (5.3%) were vacant (**Table C6-1)**.

C6-2.4 Property Taxes

A total of $125,950 in property taxes and special assessments were due for the Subject Property during the 2023-2024 fiscal year (**Table C6-4**). The San Diego County Treasurer-Tax Collector's Office collects more than $6 billion in County, city, school, and special district taxes, and the 2022-2023 property tax roll in the County was $6,569,133,623 (County of San Diego, 2024d).

Table C6-4: Assessed Property Taxes FY 2023 - 2024

Assessor Parcel Number	Assessed Property Taxes
189-012-84-00	$66,605
189-012-85-00	8,791
189-091-37-00	21,176
189-091-38-00	6,397
189-091-35-00	22,981
Total	*125,950*

Source: San Diego County Treasurer-Tax Collector, 2025.

C6-3 IMPACT ASSESSMENT

C6-3.1 Assessment Criteria

An impact associated with socioeconomic conditions would be considered significant if development were to lead to physical environmental impacts such as blight, which could result from negative effects to the economy or unemployment, overwhelming the local housing supply, or an increase in crime.

C6-3.2 Alternative A – Proposed Project

The economic activity from the Proposed Project would result in new jobs and additional economic activity. These are beneficial effects, but less than significant in the context of San Diego County and Valley Center. The Project's job creation may result in the in-migration of local households to the area, which could result in additional demand for housing. However, the number of jobs that would be created would be minor in the context of employment levels in the County and Valley Center, and only a small number of these jobs would result in in-migration of new employee households. For these reasons, the Proposed Project is not anticipated to have significant local or regional impacts on the economy, employment levels, or housing. The Tribe would no longer pay approximately $126,000 in property taxes for the Subject Property once it goes into federal trust, which represents approximately 0.002% of the total property tax collected by the County. This level of forgone property taxes is a less-than-significant impact.

C6-3.3 Alternative B – No Action Alternative

Under the No Action Alternative, the Tribe would not receive any of the benefits associated with development of the Subject Property. The Subject Property would not be brought into trust and would remain on the County's property tax rolls. No additional development would occur on the Subject Property.

C6-4 MITIGATION MEASURES

There are no mitigation measures for Socioeconomic conditions.

Appendix C-7 Transportation and Circulation

C7-1 REGULATORY SETTING

C7-1.1 State and Local

San Diego County General Plan

The San Diego County General Plan Mobility Element that aims to provide a balanced, multi-modal transportation system for the movement of people and goods within the unincorporated areas of the County. It includes a description of the County's transportation network, goals and policies that address the safe and efficient operation, maintenance, and management of the transportation network. The goals and policies strive for a balanced multimodal transportation system with adequate capacity to support the land uses and development patterns in the Land Use Element of the General Plan (see "Land Use" below for additional information on the Land Use Element). The Mobility Element identifies the County road network, much of which currently exists, to be developed in the unincorporated County during the implementation of this General Plan so that future rights-of-way can be preserved for future motorized and non-motorized roadway purposes.

The following goals and policies from the Mobility Element that could be applicable to Alternative A:

Goal M-2: Responding to Physical Constraints and Preservation Goals. A road network that provides adequate capacity to reasonably accommodate both planned land uses and regional traffic patterns, while supporting other General Plan goals such as providing environmental protections and enhancing community character.

> **M-2.1 Level of Service Criteria.** Require development projects to provide associated road improvements necessary to achieve a LOS of "D" or higher on all Mobility Element roads except for those where a failing LOS has been accepted by the County pursuant to the criteria specifically identified in the accompanying text box (Criteria for Accepting a Road Classification with Level of Service E/F). When development is proposed on roads where a failing LOS has been accepted, require feasible mitigation in the form of road improvements or a fair share contribution to a road improvement program, consistent with the Mobility Element road network.
>
> **M-2.3 Environmentally Sensitive Road Design.** Locate and design public and private roads to minimize impacts to significant biological and other environmental and visual resources. Avoid road alignments through floodplains to minimize impacts on floodplain

habitats and limit the need for constructing flood control measures. Design new roads to maintain wildlife movement and retrofit existing roads for that purpose. Utilize fencing to reduce road kill and to direct animals to under crossings.

M-2.4 Roadway Noise Buffers. Incorporate buffers or other noise reduction measures consistent with standards established in the Noise Element into the siting and design of roads located next to sensitive noise-receptors to minimize adverse impacts from traffic noise. Consider reduction measures such as alternative road design, reduced speeds, alternative paving, and setbacks or buffers, prior to berms and walls.

M-2.5 Minimize Excess Water Runoff. Require road improvements to be designed and constructed to accommodate stormwater in a manner that minimizes demands upon engineered stormwater systems and to maximize the use of natural detention and infiltration techniques to mitigate environmental impacts.

Goal M-3: New or expanded transportation facilities that are phased with and equitably funded by the development that necessitates their construction.

M-3.1 Public Road Rights-of-Way. Require development to dedicate right-of-way for public roads and other transportation routes identified in the Mobility Element roadway network (see Mobility Element Network Appendix), Community Plans, or Road Master Plans. Require the provision of sufficient right-of-way width, as specified in the County Public Road Standards, Active Transportation Plan and Community Trails Master Plan, to adequately accommodate all users, including transit riders, pedestrians, bicyclists, and equestrians.

M-3.2 Traffic Impact Mitigation. Require development to contribute its fair share toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both the local and regional road networks. Transportation facilities include road networks and related transit, pedestrian and bicycle facilities, and equestrian.

M-3.3 Multiple Ingress and Egress. Require development to provide multiple ingress/egress routes in conformance with State law and local regulations.

Goal M-4: **Safe and Compatible Roads**. Roads designed to be safe for all users and compatible with their context

M-4.4 Accommodate Emergency Vehicles. Design and construct public and private roads to allow for necessary access for appropriately-sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.

Goal M-8: **Public Transit System**. A public transit system that reduces automobile dependence and serves all segments of the population.

M-8.5 Improved Transit Facilities. Require development projects, when appropriate, to improve existing nearby transit and/or park and ride facilities, including the provision of bicycle and pedestrian facilities, provisions for bus transit in coordination with North County Bus & Train Service and Metropolitan Transit System as appropriate including, but not limited to, shelters, benches, boarding pads, and/or trash cans, and to provide safe, convenient, and attractive pedestrian connections.

Goal M-11: **Bicycle and Pedestrian Facilities**. Bicycle and pedestrian networks and facilities that provide safe, efficient, and attractive mobility options as well as recreational opportunities for County residents.

M-11.4 Pedestrian and Bicycle Network Connectivity. Require development in Villages and Rural Villages to provide comprehensive internal pedestrian and bicycle networks that connect to existing or planned adjacent community and countywide networks.

Valley Center Road Corridor Concept Plan

The geographic scope of the Valley Center Road Corridor Concept Plan (VCRCCP) covers the segment of Valley Center Road from the Woods Valley Road intersection in the south to the Cole Grade Road intersection in the north. This segment of Valley Center Road traverses the South and North Villages of Valley Center, in addition to the road curve area between the Villages. The purpose of the VCRCCP is to provide a comprehensive corridor access management plan for this segment of Valley Center Road, that addresses safety and overall traffic operations from all road user perspectives. The VCRCCP project was mostly funded through a California Department of Transportation (Caltrans) Sustainable Communities Grant. The County pursued the grant and initiated the project in response to common concerns from the Valley Center community, including:

- The increasing prevalence of speeding and accidents, with the accident rate along the corridor being higher than both the urban and rural averages, per million vehicle miles.
- The need for traffic calming and improved safety for pedestrians and bicyclists.
- The need for a comprehensive approach to corridor access management.
- The desire to develop more of a Village atmosphere in this area of the North and South Villages of Valley Center.

The VCRCCP includes recommendations related to intersection design/control (including signalization improvements and/or roundabouts), safe ingress and egress from adjacent streets/driveways, and operations from the perspective of all road users, including pedestrians, bicyclists, equestrians, and drivers. The VCRCCP was adopted by the County Board of Supervisors in March 2025.

C7-2 ENVIRONMENTAL SETTING

The information provided below related to the environmental setting is informed, in part, by the 2019 Transportation Impact Analysis (TIA) conducted for the Liberty Bell Project previously

approved for the Subject Property (see **Section 1.4**), which is included as **Appendix E**; as well as a traffic assessment completed for the Proposed Project, which is included as **Appendix F**.

C7-2.1 Transportation Networks and Roadways

Regional access to the Subject Property is provided by Valley Center Road, which runs in a general north to south direction and is located west of the Subject Property. Valley Center Road is a four-lane roadway that connects the two nodes of the Valley Center Community Plan Area: South Village (where the Subject Property is located) and North Village. The Subject Property is located between SR 76 to the north, SR 78 to the south, and SR 79 to the east. Local access to the Subject Property is currently provided from Valley Center Road and Mirar De Valle Road, which dead ends into Valley Center Road.

The most recent traffic data available for Valley Center Road in the vicinity of the Subject Property are from three 24-hour traffic counts collected on a weekday in June 2025 (**Appendix F**). Note that these traffic counts were collected to verify the validity of the original traffic counts collected in June 2018 as part of the TIA conducted for the Subject Property (**Appendix E**). While traffic counts collected on these roadway segments were found to have increased between 2025 and 2019, this growth was anticipated and accounted for in the TIA's cumulative conditions analysis.

The 2025 average daily traffic (ADT) on the segment of Valley Center Road between Banbury Drive & Woods Valley Road, south of the Subject Property, was 30,131. Between Charlan Road and Mirar De Valle Road, adjacent to the Subject Property, the 2025 ADT was 31,626. Between Miller Road and Cole Grade Road, north of the Subject Property, the 2025 ADT was 27,098. Valley Center Road was constructed as a 4.1A Major Road with a level of service (LOS) "E" capacity of 37,000 and the 2025 ADTs listed above indicate that the roadway is currently operating well within its design capacity.

C7-2.2 Intersection and Roadway Segments

Operating conditions were evaluated for the following 11 study intersections and 11 roadway segments located in either unincorporated San Diego County or the City of Escondido:

Study Intersections

1. Valley Center Road / Thundernut Lane / Lake Wohlford Road (North)
2. Valley Center Road / Cole Grade Road
3. Valley Center Road / Lilac Road
4. Valley Center Road / Project Driveway #1
5. Valley Center Road / Project Driveway #2
6. Valley Center Road / Project Driveway #3 / Mirar De Valle Road
7. Valley Center Road / Woods Valley Road
8. Valley Center Road / Lake Wohlford Road (South)
9. Valley Parkway / Beven Drive
10. Valley Parkway / Eureka Drive
11. Valley Parkway / Hidden Trails Road

Study Roadway Segments

1. Valley Center Road
    a. Thundernut Lane/N. Lake Wohlford Road to Cole Grade Road
    b. Cole Grade Road to Lilac Road
    c. Lilac Road to Project Driveway #1
    d. Project Driveway #1 to Project Driveway #2
    e. Project Driveway #2 to Project Driveway #3/Mirar De Valle Road
    f. Project Driveway #3/Mirar De Valle Road to Woods Valley Road
    g. Woods Valley Road to Escondido City Limits
    h. Escondido City Limits to Lake Wohlford Road
2. Valley Parkway from Lake Wohlford Road to El Norte Parkway
3. Cole Grade Road from Fruitvale Road to Valley Center Road
4. Lilac Road from Valley Center Road to Betsworth Road

Study intersections and roadway segments are shown graphically in TIA Figure 3-1 (**Appendix E**). Intersection turning movement counts were collected for the study intersections in June 2018. As noted previously, roadway segment counts were collected in June 2025 to verify the validity of the original traffic counts used in the TIA's analysis of intersection operating conditions.

The San Diego County General Plan Policy M-2.1 specifies that roadways must operate at LOS D or higher or they will require improvements to achieve an acceptable level. The City of Escondido's operating standards are consistent with the County's. With the exception of Valley Center Rd/Project Driveway #3/Mirar De Valle Road, which currently operates at LOS F, all study intersections were found to operate at an acceptable level of service of LOS C or better during both the AM and PM peak hours. With the exception of Valley Center Road between Thunder Lane/N. Lake Wohlford Road and Cole Grade Road and Cole Grade Road between Fruitvale Road and Valley Center Road, which both currently operate at LOS E, all study roadway segments were found to operate at an acceptable level of service of LOS D or better.

Since many of the cumulative projects identified in the TIA have already been constructed, the existing year analysis likely understates existing operating conditions at the study area intersections and roadway segments. However, in terms of project impacts (see **Section C7.3**), those are accurately reflected as they include traffic growth due to cumulative projects.

C7-2.3 Existing Bicycle and Pedestrian Facilities and Transit Service

Currently, Valley Center Road includes a contiguous sidewalk on the east side and an unpaved path on the west side (part of the Heritage Trail, a 2.5-mile path between Woods Valley Road and Cole Grade Road bordered by wooden post-and-rail fencing) adjacent to the Subject Property. The nearest signalized intersection is located at Valley Center Road/Park Circle Way, just north of the Subject Property, which provides a controlled crossing location with pedestrian push buttons and crosswalks.

Bicycle lanes are provided on both sides of Valley Center Road.

There are bus stops located adjacent to the Subject Property on Valley Center Road, south of the Mirar de Valle Road intersection. These stops are served by North County Transit District Bus 388, which operates 7-days a week and runs from the Escondido Transit Center to the Pala Casino.

C7-3 IMPACT ASSESSMENT

C7-3.1 Assessment Criteria

Impacts to the transportation system would be significant if the alternative increases traffic volumes to the point where traffic exceeds the design capacity of the roadway after implementation of all feasible mitigation measures. Project development would be considered to have a significant impact if it were to deteriorate operation levels of nearby intersections to below LOS D, the acceptable levels currently specified within the San Diego County General Plan.

C7-3.2 Alternative A – Proposed Project

Construction Traffic

During construction of Alternative A, additional temporary trips would be generated on the weekdays and Saturdays with construction work occurring during daytime hours between 7:00 a.m. and 7:00 p.m. The worker arrival peak would be between 6:00 a.m. and 7:00 a.m. and the departure peak between 3:30 p.m. and 4:30 p.m. These peak commute times partially coincide with local commute times. The increase in construction worker commute trips would be minimal compared to overall traffic volumes on study area roadways, and the additional trips would only occur during construction. Based on assumptions used to model air quality emissions (see **Appendix H**), construction workers would generate a maximum of 25 one-way daily vehicle trips while buildings are being constructed on the Subject Property. Additionally, up to 13 one-way vendor trips would be generated during construction for the delivery of small loads of material. These trips would primarily occur outside of the peak commute hours for the surrounding roadway network and equipment would be moved on and off the Subject Property on different days. The periodic delivery and removal of such equipment during mostly off-peak hours would constitute a minimal disruption of existing traffic on the Valley Center Road roadway network. The relatively small number of trips required to make such deliveries and removals would not result in a noticeable change to the existing traffic volumes or capacity of the surrounding roadway network.

A BMP has been included in **EA Table 2-1** to reduce potential construction impacts associated with traffic. In order to minimize potential conflicts between construction activity and through traffic, a construction traffic control plan would be developed for use during construction activity. The plan would identify traffic control measures, signs, and delineators to be implemented by the construction contractor during of construction. Construction traffic would be controlled in accordance with the Caltrans Traffic Manual and County standards. Because the majority of vehicle trips associated with construction activities would occur during off-peak hours and with implementation of a traffic control plan, potential impacts would be less than significant.

Trip Generation and Distribution

Alternative A would generate approximately 7,956 daily vehicle trips, including 318 AM peak hour trips and 612 PM peak hour trips. Please note that the trip generation was calculated based on an assumed total building development of 81,884 square feet, which is consistent with the previously proposed Liberty Bell Plaza Project at the time the TIA was prepared in 2019. However, the current development plan for the Subject Property under Alternative A includes total commercial development of 76,891 square feet, or approximately 5,000 square feet less (-6%) than was previously assumed. For this reason, the analysis of project impacts, which is based upon the number of trips added to study area intersections and roadways, can be considered as conservative.

The Subject Property is zoned for Commercial Use, and the trip rate for neighborhood commercial is 1,200 ADT per acre. Therefore, the Mobility Element allocates 10,200 ADT for the 8.5-acre site. Alternative A was estimated to generate approximately 7,956 ADT, which is less than the ADT allocated to the Subject Property in the County's Mobility Element.

The project traffic was distributed and assigned to the street system based on the Subject Property's proximity to state highways and arterials and travel behavior data from the San Diego Association of Government's (SANDAG's) Year 2020 regional travel demand model.

Study Intersections

As detailed in the TIA prepared for the Liberty Bell Project (see **Appendix E**) previously approved for the Subject Property (see **Section 1.4**), the addition of project traffic to the study intersections would result in acceptable (LOS D or better) conditions at all study area intersections with the exception of the following:

- Valley Center Road/Cole Grade Road – LOS E during the PM peak hour
- Valley Center Road/Project Driveway #3/Mirar De Valle Road – minor street left-turn at LOS F during the AM and PM peak hours

Note that baseline conditions have changed in the six years since completion of the TIA in 2019. For this reason, the impacts identified above are based on the TIA's Existing plus Project plus Cumulative Projects traffic scenario, as this traffic scenario accounts for development that has occurred near the Subject Property in the last six years and, therefore, better represents 2025 baseline conditions.

These significant intersection impacts have already been mitigated with the implementation of targeted intersection improvements identified for the Liberty Bell Project; the following two improvements have already been constructed or are currently under construction:

- **Valley Center Road/Cole Grade Road** – Payment of the County's transportation impact fee (TIF) to contribute towards the cost of constructing an exclusive westbound right-turn lane at this intersection.
- **Valley Center Road/Project Driveway #3/Mirar De Valle Road** – Installation of a traffic signal and providing the following lane geometry will mitigate the impact at this intersection:

- Northbound: provide one (1) exclusive left-turn lane, one (1) exclusive through lane and one (1) shared through/right-turn lane.
- Southbound: provide one (1) exclusive left-turn lane, one (1) exclusive through lane and one (1) shared through/right-turn lane.
- Eastbound[2]: one (1) shared left/through lane and one (1) exclusive right-turn lane.
- Westbound: provide one (1) exclusive left-turn lane and one (1) shared through/right-turn lane (20 feet wide).

No additional mitigation is required.

Study Roadway Segments

As detailed in the TIA, the addition of project traffic to the study roadway segments would result in acceptable (LOS D or better) conditions at all study area intersections with the exception of the following:

- Valley Center Road between Thunder Lane/N. Lake Wohlford Road and Cole Grade Road – LOS F
- Cole Grade Road between Fruitvale Road and Valley Center Road – LOS E

As noted above for the study intersections, the impacts identified above are based on the TIA's Existing plus Project plus Cumulative Projects traffic scenario.

These significant roadway segment impacts have already been mitigated with the implementation of targeted intersection improvements identified above for the Liberty Bell Project. These improvements have either already been completed or are currently under construction. No additional mitigation is required.

Bicycle and Pedestrian Facilities and Transit Service Impacts

Based on the proposed land use and the car-oriented nature of the surrounding area, Alternative A would not generate a large amount of pedestrian and bicycling activity, or transit riders along roadways adjacent to and within the Subject Property or the other public roads in the area. Some employees and/or patrons of the land uses developed on the Subject Property may use North County Transit District Bus 388 to travel to and from the Subject Property. However, given the limited transit connectivity (only one bus line with 10 daily runs), it is likely that added transit ridership would be minimal (i.e., less than 10 trips per day).

Any new pedestrian or bicycle trips generated by the Proposed Project could be safely accommodated on designated pedestrian and bicycle facilities that have already been developed on Valley Center Road adjacent to the Subject Property. Considering the recently developed residential area to the west of Valley Center Road, a moderate number of new pedestrian and bicycle trips may be expected for nearby residents who are also employees and/or patrons of the land used developed on the Subject Property. As noted above, improvements are currently under construction at the Valley Center Road/Project Driveway #3/Mirar De Valle Road intersection,

[2] After consultation with the County of San Diego, it was determined that an eastbound exclusive left-turn lane originally identified in the TIA for the Liberty Bell Project was not needed. (Saavedra, 2025).

which will include additional controlled crossing with pedestrian push buttons and crosswalks, facilitating the safe movement of pedestrians across Valley Center Road. Thus, no significant impacts would occur to bicycle and pedestrian facilities or to transit service, and no mitigation measures are warranted.

C7-3.3 Alternative B – No Action Alternative

Under the No Action Alternative, there would be no development constructed on the Subject Property, and consequently no increase in vehicular traffic on roadways in the vicinity of the Subject Property. There would be no change in pedestrian, bicycle, or transit circumstances.

C7-4 MITIGATION MEASURES

Transportation improvements identified in the TIA prepared for the Liberty Bell Project have either already been constructed or are currently under construction. No additional mitigation measures are required.

Appendix C-8 Land Use

C8-1 REGULATORY SETTING

C8-1.1 Federal

Farmland Protection Policy Act

The FPPA is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. It assures that federal programs are administered in a matter that is compatible with state and local units of government, and private programs and policies to protect farmland (7 U.S.C. § 4201).

The NRCS is responsible for the implementation of the FPPA and categorizes farmland in a number of ways. These categories include prime farmland, farmland of statewide importance, and unique farmland. Prime farmland is considered to have the best possible features to sustain long-term productivity. Farmland of statewide importance includes farmland similar to prime farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique farmland is characterized by inferior soils and, depending on climate, generally needs irrigation.

The NRCS fulfills the directives of the Soil and Water Conservation Act (16 USC § 2001-2009) by identifying significant areas of concern for the protection of national resources. NRCS uses a land evaluation and site assessment system to establish a Farmland Conversion Impact Rating (FCIR) score. The FCIR is completed on form AD-1006. The FCIR form has two components: land evaluation, which rates soil quality up to 100 points, and the site assessment, which measures other factors that affect the property's viability up to 160 points.

The total FCIR score is used as an indicator for the project's sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the allowable level; however, the FPPA does not require federal agencies to alter projects to avoid or minimize farmland conversion. Sites receiving a combined score of less than 160 (out of 260 possible points) do not require further evaluation. For sites with a combined score greater than 160 points, at least two other alternatives are required to be considered and the alternative with the lowest number of points selected unless there are other overriding considerations.

C8-1.2 State and Local

Williamson Act

The California Land Conservation Act of 1965, commonly known as the Williamson Act, is designed to preserve farmlands and open space lands by discouraging premature and

unnecessary conversion to urban uses. Under the provisions of the Williamson Act, landowners contract with the county to maintain agricultural or open space use of their lands in return for a reduced property tax assessment. The contract is self-renewing, and the landowner may notify the county at any time of intent to withdraw the land from its preserve status. Withdrawal involves a 10-year period of tax adjustment to full market value before protected open space can be converted to urban uses. Alternatively, landowners can petition the County to withdraw prematurely from a Williamson Contract. In order to cancel a contract without instituting the 10-year tax adjustment period, the County must make the required findings that the cancellation is consistent with the purposes of the Williamson Act, and that cancellation is in the public interest.

San Diego County General Plan

The current 2022 San Diego County General Plan was the first comprehensive update since 1978, and this version of the plan has been periodically updated since its first 2011 draft. The various elements in the plan guide planning decisions in the County, with goals of protecting the County's unique and diverse natural resources and maintaining the character of its rural and semi-rural communities. The 2022 General Plan provides an environmentally sustainable approach to planning that strives to balance infrastructure needs, housing, and economic vitality, while maintaining and preserving each unique community within the County, agricultural areas, and extensive open space.

Land Use Element

The San Diego County General Plan Land Use Elements contains goals, objectives, and policies to guide development within the County. The General Plan has identified three regional categories, Village, Semi-Rural, and Rural Lands, that reflect the different character and land use development goals of the County in each of these three community types.

Goal LU-1: Primacy of the Land Use Element. A land use plan and development doctrine that sustain the intent and integrity of the Community Development Model and the boundaries between Regional Categories.

> **LU-1.3 Development Patterns.** Designate land use designations in patterns to create or enhance communities and preserve surrounding rural lands.
>
> **LU-1.5 Relationship of County Land Use Designations with Adjoining Jurisdictions.** Prohibit the use of established or planned land use patterns in nearby or adjacent jurisdictions as the primary precedent or justification for adjusting land use designations of unincorporated County lands. Coordinate with adjacent cities to ensure that land use designations are consistent with existing and planned infrastructure capacities and capabilities.

Goal LU-2: Maintenance of the County's Rural Character. Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.

LU-2.1 Community Plans. Maintain updated Community Plans, as part of the General Plan, to guide development to reflect the character and vision for each individual unincorporated community, consistent with the General Plan.

LU-2.5 Greenbelts to Define Communities. Identify and maintain greenbelts between communities to reinforce the identity of individual communities.

LU-2.8 Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

LU-2.9 Maintaining Rural Character. Consider LOS criteria, in accordance with Policy M-2.1, to determine whether adding lanes to a Mobility Element road would adversely impact the rural character of a community or cause significant environmental impacts. In those instances, consider other options to mitigate LOS where appropriate.

Goal LU-4: Inter-jurisdictional Coordination. Coordination with the plans and activities of other agencies and tribal governments that relate to issues such as land use, community character, transportation, energy, other infrastructure, public safety, and resource conservation and management in the unincorporated County and the region.

LU-4.1 Regional Planning. Participate in regional planning to ensure that the unique communities, assets, and challenges of the unincorporated lands are appropriately addressed with the implementation of the planning principles and land use requirements, including the provisions of SB375.

LU-4.2 Review of Impacts of Projects in Adjoining Jurisdictions. Review, comment, and coordinate when appropriate on plans, projects, and proposals of overlapping or neighboring agencies to ensure compatibility with the County's General Plan, and that adjacent communities are not adversely impacted.

Goal LU-6: Development—Environmental Balance. A built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities.

LU-6.1 Environmental Sustainability. Require the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment.

LU-6.5 Sustainable Stormwater Management. 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 BMPs, where applicable and consistent with the County's LID Handbook.

LU-6.6 Integration of Natural Features into Project Design. Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

Conservation and Open Space Element

The Conservation and Open Space Element of the San Diego County General Plan establishes goals, policies, and programs that value and protect natural resources, with the primary objectives of preserving the diverse range of visual, natural, and cultural resources that exemplify the County. Goals and policies within this Element are divided into nine sections to address and protect the following resources:

- *Biological Resources*—Land use-based conservation goals and policies that protect the ecological and lifecycle needs of threatened, endangered, or otherwise sensitive species and their associated habitats.
- *Water Resources*—Conserve and efficiently use water and protect the groundwater aquifer, water bodies, and water courses, which include reservoirs, rivers, streams, and the watersheds located throughout the region.
- *Agricultural Resources*—Minimize land use conflicts, preserve agricultural resources, and support the long-term presence and viability of agricultural industry as an important component of the region's economy and open space linkage.
- *Cultural Resources*—Federal and State legislation such as the NEPA, NHPA, and CEQA establish requirements to ensure cultural resources are protected and preserved. This section supplements this legislation with goals and policies that set the framework for local ordinances and regulations that protect these important cultural resources.
- *Paleontological Resources and Unique Geologic Features*—Preserve the County's rich geologic and paleontological history by establishing achievable land-use-based goals and policies.
- *Mineral Resources*—Manage the remaining mineral deposits while striving to ensure that adequate resources are available to support the economic prosperity of future generations of San Diego County residents.
- *Visual Resources*—Protect scenic corridors, geographically extensive scenic viewsheds, and dark skies within the natural environment.
- *Air Quality, Climate Change, and Energy*—Reduce the emissions of criteria air quality pollutants, emissions of GHG, and energy use in buildings and infrastructure, while promoting the use of renewable energy sources, conservation, and other methods of efficiency.
- *Park and Recreation Facilities*—Ensure that adequate park and recreational facilities will adequately serve current and future residents.

Valley Center Community Plan

The Valley Center Community Plan is a document that outlines guidelines for development and conservation in the Valley Center community planning area of San Diego County. The Valley Center Community Plan Area is a region of approximately 94 square miles in the unincorporated

area of northern San Diego County. The plan was adopted on December 31, 1979, and has been amended several times since then. The plan text is divided into nine chapters, including Community Character, Land Use, Housing, Mobility, Public Facilities and Services, Conservation, Open Space, Parks and Recreation, and Noise. The plan also includes an appendix on the Interstate 15 Corridor Subregional Plan. The plan's goals and policies cover a range of topics, including residential, commercial, industrial, and agricultural land use, as well as fire protection, education, water service, sewage disposal and treatment, and more. The plan is currently being updated, and a comprehensive community plan update is expected to replace the amended text upon its adoption.

San Diego County Zoning Ordinance

The San Diego County Zoning Ordinance (Ordinance No. 5281) regulates development in the unincorporated areas of the County by establishing districts and designating lawful permitted uses and uses which may be approved through the use permit process. The purpose of the Zoning Ordinance is to serve the public health, safety and general welfare and to provide the advantages resulting from the implementation of the San Diego County General Plan. The Zoning Ordinance provides the following description of zoning found on the Subject Property, C36 (General Commercial) and RR (Rural Residential):

> *The C36 Use Regulations are intended to create and enhance commercial areas where a wide range of retail goods and services are permitted. Typically, the C36 Use Regulations would be applied where central area commercial facilities were desired in association with administrative and office uses. Various applications of the C36 Use Regulations with appropriate development designators can create community or regional shopping complexes, central business districts, or small but highly diverse commercial developments.*
>
> *The RR Use Regulations are intended to create and enhance residential areas where agricultural use compatible with a dominant, permanent residential use is desired. Typically, the RR Use Regulations would be applied to rural or semi-rural areas where urban levels of service are not available and where large lots are desired. Various applications of the RR Use Regulations with appropriate development designators can create buffers between residential and agricultural uses, family or small farm areas, or large lot rural residential developments.*

C8-2 ENVIRONMENTAL SETTING

C8-2.1 Subject Property Land Use and Zoning

The 8.5-acre Subject Property is located within unincorporated San Diego County and is primarily undeveloped with the exception of three building pads and a dirt road. The Subject Property is within the 1979 Valley Center Community Plan. Furthermore, the Subject Property is also within the Woods Valley Ranch Specific Area Plan, one of the specific area plans part of the Valley Center

Community Plan. Zoning of the Subject Property and surrounding area can be seen in **Figure 9** of **Appendix A**. As can be seen therein, the Subject Property is zoned C36 by the County except for APN 189-091-35-00 that is zoned RR (San Diego County, 2025). C36 is specified as General Commercial. General retail sales and services are permitted if conducted within buildings. Outdoor uses may be allowed by Use Permit. Residences may be permitted as secondary uses. RR is specified as Rural Residential. Residential uses are permitted as the dominant land use, with agricultural uses allowed when compatible with residential development. RR zoning is typically applied to rural or semi-rural areas where urban levels of service are not available and where larger lots are required. RR zoning may also be applied to create buffers between residential and agricultural uses or to allow family farms and small-scale agricultural operations (County of San Diego Planning and Development Services, 2020).

In addition to assigned zoning, the Subject Property is designated General Commercial unincorporated land use with the exception of APN 189-091-35-00 that is designated Village Residential unincorporated land use by the County (**Figure 10** of **Appendix A**).

Based on a 2018 Phase I ESA conducted by SCST, Inc., the Subject Property has been used intermittently for agricultural purposes since 1946, with the surrounding areas also used for agriculture. In 1964, structures were built on the Subject Property. The site visit conducted for the Phase I ESA confirmed that there were no signs of agricultural activity or development, except for a concrete slab located on the central-western portion of the Subject Property. The Phase I ESA also determined that a commercial business, Terry's Hay and Grain, was located on the Subject Property. The business is no longer active on the site and the building has been demolished.

C8-2.2 Surrounding Land Uses and Zoning

Land uses surrounding the Subject Property are a mix of limited commercial, rural residential, and recreational/open space uses:

- **South**: limited commercial uses including the Valley Food Center and the Valley Center Insurance Agency, Charlan Road, and rural residential development.
- **East**: Rural residential uses interspersed with limited commercial development, including the Native Oaks Golf Course.
- **West**: Valley Center Road with frontage commercial development and undeveloped parcels, with additional rural residential development beyond.
- **North**: Recreational and open space uses associated with the Native Oaks Golf Course.

Zoning (**Figure 9** of **Appendix A**) and the designated unincorporated land uses by the County (**Figure 10** of **Appendix A**) for the area surrounding the Subject Property are described below.:

- **South:** Rural Residential (RR), General Commercial (C36). Designated General Commercial and Village Residential unincorporated land use by the County.
- **North:** Specific Plan Area (Native Oaks Golf Course under the Woods Valley Ranch Specific Area Plan), Special Purpose (S88). Designated Specific Plan Area and Village Residential unincorporated land use by the County.

- **East:** Rural Residential (RR), Special Purpose (S88). Designated Specific Plan Area and Village Core Mixed Use unincorporated land use by the County.
- **West:** General Commercial (C36), Rural Residential (RR), Variable Family Residential (RV), Holding Area (S90). Designated General Commercial and Public/Semi-Public Facilities unincorporated land use by the County.

The Subject Property and surrounding area are within the Valley Center Community Plan. Several Specific Area Plans that are part of the Valley Center Community Plan, such as the Woods Valley Ranch Specific Area Plan, are located in the broader vicinity and are designed to promote environmentally sensitive residential development while maintaining open space and agricultural elements.

The nearest airport to the Subject Property is Rincon Airfield, approximately 6.3 miles northeast. The Subject Property is not within an airport land use plan.

C8-2.3 Agriculture

The San Diego Crop Report provides information on crop production data for the past year for grains and oilseeds, sugar crops, cotton, tobacco, and others. According to the 2023 report, approximately 210,732 acres were cultivated with an approximate total value of $1.67 billion (San Diego County, 2023). The FMMP designates the Subject Property as a mixture of Farmland of Local Importance and "Other Land" with small portion being "Urban and Built-Up Land" (DOC, 2025a) (see **Figure 11** of **Appendix A**). This category is not designated as farmland and common examples within this category include golf courses, airports, residential, industrial, and commercial facilities, landfills, and water control structures. Farmland of Local Importance designation is determined by each county's board of supervisors in consultation with a local advisory committee based on the local agriculture economy (DOC, 2025a). The Subject Property is not enrolled in the Williamson Act (DOC , 2025b). There are soils on the Subject Property that are considered 'Prime Farmland If Irrigated': Visalia sandy loam 2-5 percent. In addition, Visalia sandy loam 0-2 percent slopes is considered 'Prime Farmland If Irrigated and Protected From Flooding' (USDA, 2025).

C8-3 IMPACT ASSESSMENT

C8-3.1 Assessment Criteria

Land use impacts would be significant if the alternative results in conflicts with surrounding land uses or would inhibit the implementation of regional, State, and local land use plans for surrounding properties. Significant land use impacts may also occur if the alternative would convert a significant amount of Prime Farmland or Farmland of Statewide/Local/Unique Importance to other uses, as determined by the FPPA.

C8-3.2 Proposed Project – Proposed Project

Land Use Compatibility

Proposed Project would result in approximately 8.5 acres of land being transferred from fee to federal trust, thereby removing the Subject Property from County land use jurisdiction. Although County zoning and land use regulations would no longer apply once in trust, the proposed development—a grocery store, convenience store, commercial buildings, fuel pumps, and associated parking—would be compatible with existing land uses in the vicinity.

The Subject Property is primarily zoned General Commercial (C36) with one parcel, or approximately 1.4% of the Project Site, zoned Rural Residential (RR)—C36 allows retail sales and services within buildings, consistent with the type of development proposed under Proposed Project. As noted in Section C8-2, the Subject Property had commercial activity on it in the past, and the proposed commercial development would complement the existing commercial adjacent uses and would not interfere with recreational or residential activities in the area. Furthermore, Alternative A would not require the extension of new public utilities or roadways that could induce growth, and access to surrounding land uses would not be affected.

For these reasons, Proposed Project would be compatible with the surrounding land uses and would not conflict with applicable land use plans or policies. Land use impacts would therefore be less than significant and no mitigation measures are warranted.

Agriculture

According to the FMMP, the Subject Property is primarily designated as Farmland of Local Importance with some areas mapped as "Other Land" and "Urban and Built-Up Land" (**Figure 11** of **Appendix A**). Development of Proposed Project would convert this designation to urban uses. While the NRCS identifies soils on the Subject Property (Visalia sandy loam) as "Prime Farmland if Irrigated" and it was intermittently cultivated in the past, the property is no longer irrigated and has been developed with commercial development in the past. The Subject Property is currently zoned C36 (General Commercial) and RR (Rural Residential) and is not under a Williamson Act contract.

Surrounding parcels are zoned and developed for commercial, residential, and recreational purposes. There are no agricultural operations or areas zoned for agricultural production in the immediate vicinity, and the Native Oaks Golf Course and Valley Center Road commercial corridor reflect the non-agricultural character of the area. The conversion would therefore be limited to the Subject Property, which is not in active agricultural use, and would not displace farming or affect agricultural land use patterns in the surrounding community.

For these reasons, Alternative A have a less-than-significant impact on agriculture and no mitigation measures are warranted.

C8-3.3 Alternative B – No Action Alternative

Under the No Action Alternative, the Subject Property would remain under County jurisdiction, and no development would occur on the Subject Property. Therefore, any potential for land use consistency or compatibility impacts would not occur under this alternative.

C8-4 MITIGATION MEASURES

There are no mitigation measures for land use.

Appendix C-9 Public Services

C9-1 REGULATORY SETTING

C9-1.1 Federal

Safe Drinking Water Act and Clean Water Act

See **Section C2-1** above.

Public Law 280

Public Law 280 was enacted in 1953 to grant certain states criminal jurisdiction over Indians on reservations in addition to permitting civil litigation under tribal or federal court jurisdiction to be handled by state courts. The states mandated to assume criminal and civil jurisdiction over federal Indian lands are Alaska, California, Minnesota, Nebraska, Oregon, and Wisconsin, although certain tribal lands are exempt, including Metlakatla Indian Community on the Annette Island Reserve, Red Lake Reservation, and Warm Springs Reservation. In addition to these states, other states elected to assume full or partial responsibility, including Arizona, Florida, Idaho, Iowa, Montana, Nevada, North Dakota and Utah. The federal government relinquished all special criminal jurisdictions over Indian offenders and victims in these states. However, Public Law 280 does not grant states the following regulatory powers over lands held in federal trust or tribes:

- Federally guaranteed fishing, tribal hunting, and trapping rights;
- Fundamental tribal governmental functions, such as domestics relations and tribal enrollment; and
- Authority to impose state taxes.

Due to the one-sided process that imposed state jurisdiction on tribes and the failure to recognize tribal sovereignty and tribal self-determination, Public Law 280 was opposed by Indian Nations from its enactment. Subsequent acts of Congress, court decisions, and state actions to retrocede (or give back) jurisdiction back to the federal government have mitigated some of the effects of the 1953 law and strengthened tribes' jurisdiction over civil and criminal matters on their reservations.

C9-1.2 State and Local

California Integrated Waste Management Act (AB 939)

In 1989, the State of California enacted AB 939, the California Integrated Waste Management Act, which requires jurisdictions to conduct a solid waste disposal needs assessment that estimates the disposal capacity needed to accommodate projected solid waste generated within

the jurisdiction and to identify a minimum of 15 years of permitted disposal capacity. All local jurisdictions are required to divert 50 percent of their total waste stream from landfill disposal.

California Senate Bill 1383- Organic Waste

Requires cities, counties, and special districts to provide organic waste collection services to all residents and businesses and to conduct education and outreach on organics recycling. The bill mandates a 75 percent reduction in organic waste sent to landfills by 2025, compared to the 2014 levels, to decrease methane emissions. This requires cities and residents to implement and participate in organic waste collection services, such as composting anaerobic digestion, as well as to recover 20 percent of edible food, statewide, to be recovered for human consumption if it would otherwise be disposed of.

San Diego County Integrated Waste Management Plan

Consists of a countywide summary plan and countywide siting element. Serves as a reference tool for implementing and monitoring compliance with AB 939.

Valley Center Community Plan

Developed in conjunction with the San Diego General Plan to provide guidelines for development and conservation in Valley Center. The plan lists general goals, findings, policies, and recommendations for public facilities and services.

C9-2 ENVIRONMENTAL SETTING

C9-2.1 Water Supply

The Subject Property is currently within the service area of the VCMWD, which provides water and wastewater reclamation services to approximately 25,600 customers for domestic, agricultural, and commercial purposes within its 101 square mile service area in northern San Diego County. The Subject Property is connected to public water mains that were previously installed on the site.. The VCMWD receives all its potable water from the following surface water supplies: imported State Water Project water; imported Colorado River supplies; seawater desalination; and dry-year supplies from the San Diego Water Authority reservoirs (VCMWD, 2021). Groundwater is not utilized by the VCMWD. The largest sector water user in the VCMWD service area is agricultural use (VCMWD, 2021).

The VCMWD 2020 Urban Water Management Plan estimates there are sufficient supplies to meet the project population demands and no water shortages are anticipated within the next 25 years under normal, single-dry, and multiple dry year conditions, even including a five-year drought extending through 2025. If future demands are slightly more or less than projected, the supply portfolio will be flexible enough to continue to meet the water demands (VCMWD, 2021). Commercial use projected demands of the VCMWD for the year 2025 are 1,958 acre-feet per year and up to 2,914 acre-feet per year by 2045 (VCMWD, 2021). The San Diego County Water

Authority states that as of 2023, 112 gallons of water are used per capita daily (San Diego Water Authority, 2025).

C9-2.2 Wastewater Service

The Subject Property is connected to the VCMWD's Woods Valley Ranch WRF for wastewater treatment, which is located directly adjacent to the Subject Property along the northeastern boundary. VCMWD treats effluent at the Woods Valley Ranch WRF to Title 22 standards and the recycled water is then pumped to the Native Oaks Golf Course for storage within man-made ponds and ultimately for irrigation of the existing golf course (VCMWD, 2021).

C9-2.3 Solid Waste

The County of San Diego Department of Public Works is the lead planning agency for solid waste management in the County and issues a Countywide Integrated Waste Management Plan (County of San Diego Department of Public Works, 2021). Solid waste collection is provided by EDCO Valley Center and solid waste is sent to one of four landfills in the San Diego region. Of these four landfills, one is operated by the City of San Diego (Miramar Landfill), and the following three are privately owned: Boreggo Landfill, Otay Landfill, and Sycamore Landfill (SANDAG, 2021).

C9-2.4 Electricity and Natural Gas

SDGE provides transmission and distribution of natural gas and electricity to the Subject Property. They are responsible for the delivery of electricity and other services, but there are other providers, known as Community Choice Aggregators (CCAs), that purchase electricity on behalf of the homes and businesses. SDCP which is a California Joint Powers Authority formed as a CCA to provide power to San Diego County and unincorporated residents and businesses in Valley Center, including the Subject Property (SDGE, 2025). SDCP serves nearly 1 million customer accounts. Fifty-five percent of the electricity from SDGE comes from renewable sources, such as solar and wind (SDGE, 2025).

C9-2.5 Law Enforcement

The San Diego County Sheriff provides law enforcement services to the Subject Property. The Valley Center Sheriff's substation, located approximately 3.5 miles northeast of the Subject Property, provides law enforcement services to more than 25,000 residents in an area encompassing 330 square miles as well as the San Pasqual Indian reservation (San Diego County Sheriff, 2025). The substation has 33 employees consisting of 16 patrol deputies, three detectives, four patrol sergeants, one administrative/detective sergeant, one lieutenant, three special purpose deputies, two office assistants, a crime suppression sergeant, and a crime prevention specialist. The San Pasqual Tribal Police Department provides law enforcement services to San Pasqual Tribal lands. All officers within the San Pasqual Tribal Police Department are cross-sworn under the authority of the BIA and Federal Public Officers with powers to arrest. Currently there are nine members of the police force, including a director, two sergeants, two

corporals, and four officers (San Pasqual, 2025). The station is located approximately 3.29 miles east of the Subject Property.

C9-2.6 Fire Protection and Emergency Medical Services

Fire protection and emergency medical services for the unincorporated community of Valley Center are primarily provided by the VCFPD. The district is 84.5 square miles serving a population of over 23,000 people. (VCFPD, 2025). VCFPD has two fire stations; Station 1 is located approximately 0.65-miles northwest of the Subject Property and Station 2 is located approximately 3.5 miles northeast. Each station is staffed with one fire captain, one fire engineer, two firefighter paramedics, and one firefighter emergency medical technician, and they respond to approximately 1,300 calls per year. In addition to the two VCFPD stations, there is also one CAL FIRE staffed station and one San Pasqual Reservation Fire Department station (providing service to San Pasqual Tribal lands) within the service area, and just outside the service area (within 0.5 mile) is the Rincon Reservation Fire Department station. VCFPD contracts with the County for funding of a paramedic ambulance transport service provided by Mercy Ambulance Transportation Inc. (VCFPD, 2025).

The nearest medical facility is the Neighborhood Healthcare Valley Center, located 1.5 miles northeast of the Subject Property, and the Indian Health Council Inc. is located approximately 6.10 miles northeast of the Subject Property. There are numerous hospitals in the region, the closest of which is the Palomar Medical Center approximately 8 miles southwest; this hospital is the only designated trauma center in northern San Diego County.

C9-2.7 Public Schools

The Subject Property is located within the Valley Center-Pauma Unified School District. The district is comprised of eight schools, including elementary, primary, middle, prep, and high schools, which serve approximately 3,711 students in the 2023-2024 school year (National Center for Education Statistics, 2025). The nearest public school is Valley Center Prep School, which is located approximately 1.70 miles northeast of the Subject Property, and the nearest private school is the High Sierra Academy, located approximately 1.40 miles northeast of the Subject Property.

C9-2.8 Parks and Recreation

San Diego Parks and Recreation is responsible for the operation and maintenance of over 100 parks Countywide. Cole Grade Park is the closest park, located northeast approximately 1.60 miles, and Keys Creek County Preserve is northwest approximately 1.82 miles. There are a few nature preserves in the vicinity of the Subject Property that are not managed by San Diego Parks and Recreation. The closest is Daley Ranch Park, a conservation area, which is located approximately 2 miles southwest of the Subject Property (San Diego Parks and Recreation, 2025).

C9-3 IMPACT ASSESSMENT

C9-3.1 Assessment Criteria

An adverse effect would occur if project-related demands on public services would cause an exceedance of system capacities that result in significant effects to the physical environment.

C9-3.2 Alternative A – Proposed Project

The Subject Property was previously developed and was served with public services including water, wastewater, solid waste, electricity, natural gas, and law enforcement/fire/emergency medical services. The Subject Property is zoned for commercial use and has received a CEQA exemption due to the zoning and previous commercial use on the property.

Water Supply

As described in **Section 1.4**, there is existing water supply infrastructure on the Subject Property that was recently installed for the previously approved Liberty Bell Plaza Project in accordance with permits issued by the County. Commercial buildings have an average annual water demand of approximately 5,000 gpd, per acre. Based on this average annual water demand, Alternative A would require approximately 42,500 gpd per year (City of San Diego, 2021). This demand of 42,500 gpd or 47.64 acre-feet per year is a small fraction (.02 percent) of the total potable water projected to be supplied by VCMWD for commercial facilities in 2025 and (.016 percent) of total potable water projected to be supplied by VCMWD for commercial facilities in 2045. These projections would not significantly impact the ability of VCMWD to supply its existing customers. VCMWD has sufficient water to meet future demand as stated in the 2020 Urban Water Management Plan, which is more than sufficient to meet the demands of Alternative A. Impacts to municipal water systems would be less than significant and no mitigation measures are warranted.

Wastewater

As described in **Section 1.4**, there is existing wastewater infrastructure on the Subject Property that was installed for the previously approved Liberty Bell Plaza Project in accordance with permits issued by the County. The Subject Property will be connected to the adjacent VCMWD's Woods Valley Ranch WRF located adjacent to the northeastern portion of the property. It treats wastewater from the surrounding area and returns recycled water to the area. The Proposed Project would increase the wastewater generation by approximately 36,125 gpd or 40.46 acre-feet per year. The VCMWD currently has an enclosed water storage capacity of 431 acre-feet (141 million gallons)[VCMWD, 2021; VCMWD, 2025]. This is a small increase that is consistent with current zoning and would not affect the WRF's overall capacity or ability to treat wastewater. Impacts to municipal wastewater systems would be less than significant and no mitigation measures are warranted.

Solid Waste Service

Solid waste from construction may include vegetation removal, paper, wood, glass, aluminum, and plastics from packing materials; waste lumber; insulation; empty non-hazardous chemical containers; concrete; metal, including steel from welding/cutting operations; and electrical wiring. These solid waste materials are typical of construction sites and would most likely be collected by EDCO Valley Center service trucks after being contracted for services prior to construction. Solid waste generated from the construction of Alternative A would be temporary and therefore would not impact long-term capacity of local landfills or private hauling companies. Once in operation, there would be an increase in the generation of solid waste. Retail commercial buildings typically dispose of 2.5 pounds of solid waste per day per 1000 square foot (CalRecycle, 2019) and grocery stores typically dispose of 3.12 pounds of solid waste per day per 100 square foot; therefore, the development of the Native Oaks Village would generate up to 64.32 pounds of solid waste per day for the commercial buildings and 1,596 pounds of solid waste per day for the grocery store or 303 tons of solid waste per year. As of 2022, San Diego County had a remaining capacity of 107,005,301 tons, with some estimated closure dates for landfills as early as year 2030 and others as late as year 2060 (CalRecycle, 2022). Waste generated by Alternative A would be 0.0003% of the remaining waste stream processed at local landfills per year. With implementation of BMPs described in **EA Table 2-1**, including development of a solid waste management plan, construction and operation of Alternative A would ensure potential impacts to s solid waste services are less than significant and no mitigation measures are warranted.

Electricity and Natural Gas

All buildings would be built to meet or exceed the standards set forth in the IBC. Although unlikely, construction on the Subject Property could damage underground utilities and lead to outages and/or serious injury, which would be a potentially significant impact. As described in **Section 1.4**, the majority of the underground construction has already been completed, but if additional construction of underground utilities are needed, the Tribe will contact the State Utility Notification Center to notify the utility service providers of excavation at the work site in order to avoid unintentional disruption to existing utilities as specified in the BMP described in **EA Table 2-1**, which would ensure potential impacts are less than significant.

Electricity will be provided by SDGE or San Diego Community Power using SDGE facilities off-site. Natural gas services would be provided by SDGE. There is existing electrical infrastructure and natural gas services on the Subject Property that were installed. If any additional extensions or relocations are needed the Tribe will coordinate with SDGE. The Tribe would pay the cost associated with these services per specifications. There would be a less than significant impact and no mitigation measures are warranted.

Law Enforcement

Under Alternative A, the San Diego County Sheriff Valley Center Substation will provide primary law enforcement services with cooperation and assistance from the San Pasqual Tribal Police Department, after being taken into trust pursuant to Public Law 280, with tribal consent. On-site development would be consistent with past use and current zoning. The operation of the Native Oaks Village and development would result in a slight increase in demands on the Sheriff's

department and Tribal Police Department. Calls for service would not be disproportionate to other developments in the County. The increase is not anticipated to require the San Diego County Sheriff or the Tribal Police Department to build new or expand facilities to provide services as a consequence of the development on the Subject Property and impacts to law enforcement would be less than significant and no mitigation measures are warranted.

Fire Protection and Emergency Medical Services

Construction of Alternative A would require construction vehicles and equipment, such as welders, torches, and grinders, that may accidentally spark and ignite vegetation or building materials. This risk is minimal due to the disturbed nature of the Subject Property and the lack of native vegetation. The Tribe will implement BMPs in **EA Table 2-1** to reduce the probability of fire risk during construction. Thus, potentially adverse impacts to VCFPD during construction would be less than significant and no mitigation measures are warranted.

VCFPD would provide primary fire protection services with cooperation and assistance from the San Pasqual Tribal Fire Department (or primary service from the San Pasqual Tribal Fire Department should an agreement for services with VCFPD not be reached). Calls for service during operation of Alternative A would not be disproportionate to other developments in the County. The increase is not anticipated to require the VCFPD or the San Pasqual Tribal Fire Department to build new or expand facilities to provide services as a consequence of the development on the Subject Property, and impacts to fire protection and emergency service providers would be less than significant and no mitigation measures are warranted.

Schools and Parks

Impacts to Valley Center-Pauma Unified School District as a result of Alternative A would be negligible due to the size and scope of the proposed development. Any new employees required to staff the Native Oaks Village are expected to already live in the vicinity of the Subject Property and therefore would not result in a significant number of new families moving to the area that could impact local schools.

The nearest parks are approximately 1.6 miles away from the Subject Property. Alternative A is not expected to significantly increase visitation to these parks because it would not significantly increase the population in the County. Therefore, less-than-significant impacts to schools and parks would occur and no mitigation measures are warranted.

C9-3.3 Alternative B – No Action Alternative

The No Action Alternative would not increase demands on public services and no new utility extensions would be required.

C9-4 MITIGATION MEASURES

There are no mitigation measures for public services.

Appendix C-10 Noise

C10-1 ACOUSTICAL BACKGROUND AND TERMINOLOGY

C10-1.1 Fundamentals of Sound

Acoustical Background and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are designated as sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 decibel (dB). Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Noise levels associated with common noise sources are provided in **Table C10-1.**

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor, DNL (or L_{dn}), and shows very good correlation with community response to noise. DNL is based on the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based on the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table C10-1: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	100	
Gas Lawn Mower at 1 m (3 ft.)	90	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	80	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	70	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	60	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	50	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans, 2013

The effects of noise on people can be divided into three categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the third category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Human reaction to a new noise can be estimated through comparison of the new noise to the existing ambient noise level within a given environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will likely be judged by the recipients. With regard to increases in dBA noise levels, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.

- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected.
- A 10-dBA change is subjectively heard as approximately a doubling in loudness and can cause adverse response.

Noise effects on humans can be physical or behavioral in nature. The mechanism for chronic exposure to noise leading to hearing loss is well established. The elevated sound levels cause trauma to the cochlear structure in the inner ear, which can give rise to irreversible hearing loss. Though not considered a health effect similar to those noted above, noise pollution also constitutes a significant factor of annoyance and distraction in modern artificial environments:

- The meaning listeners attribute to the sound influences annoyance; if listeners dislike the noise content, they are annoyed.
- If the sound causes activity interference (for example, sleep disturbance), it is more likely to annoy.
- If listeners feel they can control the noise source, it less likely to be perceived as annoying.
- If listeners believe that the noise is subject to third party control, including police, but control has failed, they are more annoyed.

Generally, most urban noise is generated by transportation systems, principally motor vehicle noise, but also including aircraft noise and rail noise. The level of traffic noise depends on three things: l) the volume of the traffic, 2) the speed of the traffic, and 3) the number of trucks in the flow of the traffic. Because noise is measured on a logarithmic scale, 70 dBA plus 70 dBA does not equal 140 dBA. Instead, two sources of equal noise added together have been found to result in an increase of 3 dBA. That is, if a certain volume of traffic results in a noise level of 70 dBA the addition of the same volume of traffic, or doubling, would result in a noise level of 73 dBA. As stated above, 3 dBA is just audible; therefore, if a project doubles the traffic volume there would be an audible increase in the ambient noise level.

Stationary points of noise attenuate (lessen) at a rate of 6 to 9 dBA per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and noise barriers, vegetative or manufactured, etc.). Widely distributed noises, such as a large industrial facility or a street with moving vehicles would typically attenuate at a lower rate, approximately 4 to 6 dBA per doubling of distance.

Vibration Background and Terminology

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square velocity in decibels (VdB, RMS). Standards pertaining to

perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities. In terms of RMS velocities, vibration levels below approximately 65 VdB are typically considered to be below the threshold of perception. The threshold of perception for humans is approximately 65 VdB while a vibration level of 85 VdB in a residence can result in strong annoyance.

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. However, traffic rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.

C10-2 REGULATORY SETTING

C10-2.1 Federal

Federal Noise Abatement Criteria

Operational noise standards used in this study are Federal Highway Administration (FHWA) NAC for the assessment of noise consequences related to surface traffic and other project-related noise sources. These standards are discussed below. The FHWA establishes NAC for various land uses that have been categorized based upon activity. Land uses are categorized on the basis of their sensitivity to noise as indicated in **Table C10-2**. The FHWA NAC is based on peak traffic hour noise levels. Sensitive receptors with the potential to be impacted by the project alternatives primarily consist of residential land uses; thus, the Category B noise standard (67 dBA L_{eq}) would apply to those uses.

Table C10-2: Federal Noise Abatement Criteria Hourly A-Weighted Sound Level Decibels

Activity Category	Activity Criteria Leq (h), dBA	Evaluation Location	Activity Category Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential.

Activity Category	Activity Criteria Leq (h), dBA	Evaluation Location	Activity Category Description
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52	Interior	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, shipyards, utilities (water resources, water treatment, electricity), and warehousing.
G	--	--	Undeveloped lands that are not permitted.

Source: Title 23 CFR Part 772, Table 1 to Part 772 – Noise Abatement Criteria

Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (2018)

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by the FTA are shown in **Table C10-3**. The FTA has also adopted standards associated with human annoyance for groundborne vibration impacts for three land use categories: (1) High Sensitivity; (2) Residential; and (3) Institutional. **Table C10-4** describes these three categories as well the associated vibration thresholds associated with human annoyance for these categories.

Table C10-3: Construction Vibration Damage Criteria

Building Category	Peak Particle Velocity (inches/second)
Reinforced concrete, steel or timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Non-engineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Source: FTA, 2018

Table C10-4: Groundborne Vibration Impact Criteria for General Assessment

Land Use Category	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB	65 VdB	65 VdB
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

Source: FTA, 2018
[1] More than 70 events per day
[2] 30-70 events per day
[3] Fewer than 30 events per day
VdB = Vibration decibels

In addition, the FTA manual outlines guidelines for evaluating construction noise impacts across various land use categories, which the general assessment is presented in **Table C10-5**.

Table C10-5: General Assessment Construction Noise Criteria

Land Use	Day L_{eq}	Night L_{eq}
Residential	90 dBA	80 dBA
Commercial	100 dBA	100 dBA
Industrial	100 dBA	100 dBA

Source: FTA, 2018

C10-2.2 State and Local

San Diego County General Plan

The Noise Element of the General Plan identifies noise and land use compatibility guidelines for various land uses. The land use compatibility table is reproduced in **Table C10-6**.

The County's General Plan Noise Element also provides recommendations for maximum noise levels for specific land uses, which are reproduced in **Table C10-7**.

In addition to the compatibility guidelines and noise standards, the General Plan has the following policies related to noise:

> **Policy N-3.1:** Use the Federal Transit Administration and Federal Railroad Administration guidelines, where appropriate, to limit the extent of exposure that sensitive uses may have to groundborne vibration from trains, construction equipment, and other sources.

Policy N-4.6: For County road improvement projects, evaluate the proposed project against ambient noise levels to determine whether the project would increase ambient noise levels by more than three dBA. If so, apply the limits in the noise standards listed in Table N-2 for noise sensitive land uses that may be affected by the increased noise levels. For federally funded roadway construction projects, use the limits in the applicable FHWA Standards.

Table C10-6: Noise Compatibility Guidelines for Exterior Noise Level (CNEL; Table N-1)

Land Use Category			55	60	65	70	75	80
A	Residential – single family residences, mobile homes, senior housing, convalescent homes							
B	Residential – multi-family residences, mixed-use (commercial/residential)							
C	Transient lodging – motels, hotels, resorts							
D	Schools, churches, hospitals, nursing homes, child care facilities							
E	Passive recreation parks, nature preserve, contemplative spaces, cemeteries							
F*	Active parks, golf courses, athletic fields, outdoor spectator sports, water recreation							
G*	Office/professional, government, medical/dental, commercial, retail, laboratories							
H*	Industrial, manufacturing, utilities, agriculture, mining, stables, ranching, warehouse, maintenance/repair							

	ACCEPTABLE – specific land use is satisfactory, based upon the assumption that any buildings involved are of normal construction, without any special noise insultation requirements.
	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 N-2, 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

*Denotes facilities used for part of the day; therefore, an hourly standard would be used rather than CNEL (Refer to Table N-2)
CNEL = Community Noise Equivalent Level
Source: County of San Diego, 2022

Table C10-7: Noise Standards (Table N-2)

1.	The exterior noise level (as defined in item 3) standard for Category A shall be 60 Community Noise Equivalent Level (CNEL), and the interior noise level standard for indoor habitable room shall be 45 CNEL.
2.	The exterior noise level standard for Categories B and C shall be 65 CNEL, and the interior noise level standard for indoor habitable rooms shall be 45 CNEL.
3.	The exterior noise level standard Categories D and G shall be 65 CNEL and the interior noise level standard shall be 50 dBA L_{eq} (one hour average).
4.	For single-family detached dwelling units, "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10% of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.
5.	For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.
6.	For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.
7.	For noise sensitive land uses where people normally do not sleep at night, the exterior and interior noise standard may be measured using either CNEL or the one-hour average noise level determined at the loudest hour during the period when the facility is normally occupied.
8.	The exterior noise standard does not apply for land uses where no exterior use area is proposed or necessary, such as a library.
9.	For Categories E and F, the exterior noise level standard shall not exceed the limit defined as "Acceptable" in Table N-1 or an equivalent one-hour noise standard.

Note: Exterior Noise Level computability guidelines for Land Use Categories A-H are identified in Table N-1, Noise Compatibility Guidelines.

Source: County of San Diego, 2022

County of San Diego Municipal Code

Section 36.404. General Sound Level Limits

(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 [reproduced as **Table C10-8**] 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.

(d) If the measured ambient noise level exceeds the applicable limit in Table 36.404 [reproduced as **Table C10-8**], the allowable one-hour average sound level shall be the one-hour average ambient noise level, plus three dBA. 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 dBA at the property line regardless of the zone in which the extractive industry is located.

Table C10-8: Sound Level Limits in Decibels (dBA) (Table 36.404)

Zone	Time	One-Hour Average Sound Level Limits (dBA)
(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 am to 10 pm	50
	10 pm to 7 am	45
(2) RRO, RC, RM, S86, FB-V5, RV and RU with a General Plan Land Use Designation density of 10.9 or more dwelling units per acre.	7 am to 10 pm	55
	10 pm to 7 am	50
(3) S94, FB-V4, AL-V2, AL-V1, AL-CD, RM-V5, RM-V4, RM-V3, RM-CD and all commercial zones.	7 am to 10 pm	60
	10 pm to 7 am	55
(4) FB-V1, FB-V2, RM-V1, RM-V2	7 am to 7 pm	60
	7 pm to 10 pm	55
FB-V1, RM-V2	10 pm to 7 am	55
FB-V2, RM-V1	10 pm to 7 am	50
FB-V3	7 am to 10 pm	70
	10 pm to 7 am	65
(5) M50, M52, and M54	Anytime	70
(6) S82, M56, and M58.	Anytime	75

Source: Section 36.404 if the County of San Diego Municipal Code

Section 36.408. Hours

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

(a) Between 7 pm and 7 am

(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, the fourth Thursday in November and December 25th. A person may, however, operate construction equipment on a Sunday or holiday between the hours of 10 am and 5 pm 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 sections 36.409 and 36.410.

(Amended by Ord. No. 9962 (N.S.), effective 1-9-09; amended by Ord. No. 10364 (N.S.), effective 1-2-15).

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 dBA for an eight-hour period, between 7 am and 7 pm, 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.

(Amended by Ord. No. 9700 (N.S.), effective 2-4-05; amended by Ord. No. 9962 (N.S.), effective 1-9-09).

Section 36.410 Sound Level Limitations on Impulsive Noise[3]

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 shall 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 Table 36.410A [reproduced as **Table C10-9**] 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% of the minutes in the measurement period, as described in subsection (c) below. The maximum sound level depends on the use being made of the occupied property. The uses in Table 36.410A [reproduced as **Table C10-9**] are as described in the County Zoning Ordinance.

Table C10-9: Maximum Sound Level Measured at Occupied Property (Table 36.410A)

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

Source: Section 36.410 if the County of San Diego Municipal Code

(b) Except for emergency work, no person working on a public road project shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in Table 36.410B [reproduced as **Table C10-10**], 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% of the minutes in the measurement period, as described in subsection (c) below.

The maximum sound level depends on the use being made of the occupied property. The

[3] According to San Diego Municipal Code Section 36.402., "Impulsive noise" means a single noise event or a series of single noise events, which causes a high peak noise level of short duration (one second or less), measured at a specific location. Examples include, but are not limited to, a gun shot, an explosion or a noise generated by construction equipment.

uses in Table 36.410B [reproduced as **Table C10-10**] are as described in the County Zoning Ordinance.

Table C10-10: L_{max} Measured at Occupied Property for Public Road Projects (Table 36.410B)

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

Source: Section 36.410 of the County of San Diego Municipal Code

(c) The minimum measurement period for any measurements conducted under this section shall be one hour. During the measurement period a measurement shall be conducted every minute from a fixed location on an occupied property. The measurements shall measure the maximum sound level during each minute of the measurement period.
If the sound level caused by construction equipment or the producer of the impulsive noise exceeds the maximum sound level for any portion of any minute, it will be deemed that the maximum sound level was exceeded during that minute.

(Added by Ord. No. 9962 (N.S.), effective 1-9-09).

C10-3 ENVIRONMENTAL SETTING

For the fundamentals of sounds, effects of noise on people, and characteristics of vibrations, please refer to **Section C10-1**. The dominant noise source in the vicinity of the Subject Property is the traffic along Valley Center Road, Mirar de Valle Road, and Charlan Road. Other noise sources in the area include residential sounds and activities from limited commercial/recreational development, such as from the Native Oaks Golf Course to the east and north of the Subject Property. The estimated ambient noise level (assumed to be primarily due to traffic noise) in the vicinity is approximately 55 dBA equivalent continuous sound pressure level (L_{eq}) over a 24-hour period (U.S. Department of Transportation, 2025).

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than commercial or industrial land uses. A sensitive receptor is defined as any living entity or aggregate of entities whose comfort, health, or well-being could be impaired or endangered by the existence of the criteria pollutant, whether it is emissions or noise, in the atmosphere.

Sensitive receptors in the project vicinity include residences in the surrounding area, such as the several adjacent single family homes on the eastern and western border of the southern portion of the Subject Property.

C10-4 IMPACT ASSESSMENT

C10-4.1 Assessment Criteria

The assessment of project effects is based on federal NAC standards used by the FHWA, on FTA thresholds for perceptible vibration, and the noise standards of San Diego County. Specifically, adverse noise and vibration effects are identified at existing sensitive receptor locations if the following were to occur as a result of the project:

Construction

- Construction noise levels were to exceed FTA guidelines for significant impacts to residential receptors (90 dBA L_{eq} between 7 am and 6 pm or 80 dBA L_{eq} between 10 p.m. and 7 a.m.)
- On-site construction sources that violates standards set forth in the San Diego County Municipal Code Section 36.408 through 36.409:
    - No operation of construction equipment between 7 p.m. and 7 a.m.
    - No construction on Sundays or holidays.
    - Exceeds an average sound level of 75 dBA 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.
- Project construction vibration levels exceed FTA groundborne vibration for impact criteria for general assessment for residences (Category 2) of 80 VdB for infrequent events, 75 VdB for occasional events, and 72 VdB for frequent events.
- Project construction noise levels exceed the FTA construction vibration damage criteria (see **Table C10-3**).

Operation

- Project-generated traffic would cause traffic noise levels to exceed the FHWA NAC (e.g., 67 dBA for exterior residential uses) where the criteria is not currently being exceeded (see **Table C10-2**).
- On-site noise sources associated with ongoing project operations exceed the standards set forth in County of San Diego Municipal Code Section 36.404, specifically in Table 36.404, at residences (see **Table C10-8**).
- On-site noise sources associated with ongoing project operations exceed the standards set forth in County of San Diego Municipal Code Section 36.410: no person shall produce or cause to be produced an impulsive noise that exceeds the maximum sound level shown in Table 36.410A and Table 36.410B (**Table C10-9** and **Table C10-10**, respectively) except for the listed exceptions, such as emergency work.

C10-4.2 Alternative A – Proposed Project

Construction Noise

During construction of Proposed Project, noise from construction activities would add to the noise environment in the immediate vicinity of the Project Site. Typical construction activities could generate maximum noise levels up to 85 dBA at a distance of 50 feet, as indicated in **C10-11**. These noise levels may vary depending on the particular type, number, and duration of use of various pieces of construction equipment. Noise attenuates (lessens) at a 6 – 9 dBA per doubling of distance from the source, depending on environmental conditions (e.g., atmospheric conditions, noise barriers) and whether the noise source is stationary or moving. An attenuation factor of 6 dBA per doubling of distance is appropriate for the Subject Property given the relatively level topography and vegetation level between the property and the sensitive receptors in the vicinity. Assuming up to three of the loudest pieces of equipment operating at one time, the highest noise level would be 89.8 dBA. Maximum construction noise levels would be louder than 89.8 dBA at the nearest sensitive receptor, where no attenuation is expected due to its location is less than 50 feet from potential construction activities. This noise level would be above both the FTA noise construction threshold of 90 dBA for residences and the County threshold of 75 dBA under Section 38.409 of the Municipal Code. To reduce this potential impact, **Mitigation Measure NOI-1** includes measures to reduce noise impacts, such as appointing a noise disturbance coordinator and reducing the use of high noise generating equipment. Furthermore, with the incorporation of the construction noise BMPs included **EA Table 2-1**, construction noise and duration would be reduced. This includes confining constructions hours to 7 a.m. to 7 p.m., Monday through Saturday with no work occurring on Sundays or federal holidays. This would be consistent with the San Diego Municipal Code Section 36.408 with regards to construction hours. Therefore, because of the short-term and temporary nature of construction noise and implementation of BMPs and Mitigation Measure NOI-1 to reduce construction noise levels and working hours, effects associated with noise due to construction would not be significant and no mitigation measures are warranted.

During construction, workers commuting by vehicle, vendor, and material haul trips have the potential to raise ambient noise levels on local roadways, depending on the number of trips (e.g. haul trips) and the types of vehicles used. For the ambient noise environment, peak commute times would be the nosiest time periods because the highest traffic volumes would occur at these times. Increasing vehicle trips during these times would have the potential to create the greatest noise impact and cause adverse effects to sensitive receptors along roadways. As described in **Section C7-3**, workers trips to the Project Site would partially coincide with local commute trips, but the majority of truck trips would occur during the day and outside the traffic peak hours. Existing traffic volumes on Valley Center Road, Mirar de Valle Road, and Charlan Road would experience increases in traffic due to construction, but construction traffic would be a temporary effect. Furthermore, the increase in traffic is anticipated to be small due to the small development size of Proposed Project. For these reasons, construction traffic would not result in a significant increase in the existing ambient noise level and no mitigation measures are warranted.

Table C10-11: Typical Construction Noise Levels

Construction Equipment	Maximum Noise Level at 50 ft (dBA)	Construction Equipment	Maximum Noise Level at 50 ft (dBA)
Crane (mobile or stationary)	85	Tractor	84
Dozer	85	Generator (less than 25 kilo-volt-amperes)	70
Excavator	85	Backhoe	80
Grader	85	Compressor (air)	80
Paver	85	Front end loader	80
Scraper	85	Pickup truck	55
Jackhammer	85	Flat Bed truck	84
Concrete pump truck	82	Dump truck	84

Source: FTA, 2018

Construction Vibration

The vibration levels of typical construction equipment at a distance of 25 feet from the equipment are shown in **Table C10-12**. With the exception of vibratory rollers, vibrations associated with construction equipment are below the thresholds for structural damage (0.2 inch/sec) at a distance of 25 feet; however, vibration levels associated with all the equipment in **Table C10-10** are above the FTA threshold for infrequent events at a distance of 25 feet (80 VdB) except for jackhammers.

Table C10-12: Vibration Levels for Construction Equipment

Equipment	Maximum Vibration Level at 25 feet [VdB (rms)]	Maximum Vibration Level at 25 feet in/sec PPV
Vibratory Roller	94	0.21
Large Bulldozers	87	0.089
Loaded Trucks	86	0.076
Jackhammer	79	0.035

Source: FTA, 2018

The nearest residential receptor are residences adjacent to the Subject Property. Excessive vibration is usually only an issue when construction requires the use of equipment with high vibration levels (compactors or large dozers) occurs within 25 to 100 feet of a structure. Construction activity could occur within 25 feet or less of the residences adjacent to the Subject Property and therefore excessive vibration could be felt. For paving activities, a vibratory roller in the range of approximately 4-6 tons would likely be used during construction of Alternative A. Rollers of this size are commonly employed for roadway paving and maintenance in residential areas and are typically operated near houses without causing structural damage. Therefore, structural damage due to vibration would be unlikely, but there still could be a potentially significant impact in relation to vibration annoyance from the nearby sensitive receptors. To reduce this impact, **Mitigation Measure NOI-1** would include appointing a vibration monitor and

reducing the usage of high vibratory equipment near the adjacent residences. With incorporation of this mitigation measure, vibration effects associated with temporary construction activities would be less than significant with mitigation.

Operation Noise

Operation of Alternative A would generate noise associated with commercial activities typical of grocery, convenience store, and retail uses. These include customer and employee conversations, deliveries, trash collection, maintenance and landscaping activities, and vehicular movements such as cars starting, idling, and doors opening and closing. These activities would be limited in duration and intensity and would not generate continuous, high-intensity noise sources.

Operational noise levels would also remain below the County's Municipal Code Section 36.404 limits of 50 dBA daytime and 45 dBA nighttime at residential property lines and would not exceed the General Plan Noise Element standards of 60 CNEL for single-family residences and 65 CNEL for multi-family residences, transient lodging, schools, and similar uses. No impulsive noise sources exceeding the 82 dBA L_{max} residential standard of Section 36.410 would occur.

Increases in traffic can often be a significant source of noise, but as described in **Section C7-3**, Proposed Project would result in a small daily increase in traffic that would be distributed throughout the day. Only a small fraction of traffic would be occurring during the peak times, the noisiest time periods due to traffic. This would not be substantial enough to increase the ambient noise environment by a noticeable level. Furthermore, Alternative A includes the construction of a six-foot wall between the Project Site and the adjacent sensitive receptors on the western boundary. This would help to reduce noise due to the increased traffic, and therefore further decrease the impact.

Accordingly, operational noise from Proposed Project would not exceed County standards, would not conflict with General Plan compatibility guidelines, and would result in a less than significant effect. No mitigation measures are warranted.

Operation Vibration

Alternative A does not include activities or equipment that would generate substantial groundborne vibration. Typical operational activities (such as passenger vehicle and light-duty truck traffic) are not perceptible beyond the immediate source area and would be well below the FTA's vibration annoyance threshold of 72 VdB for frequent residential exposure. Furthermore, because Alternative A does not include industrial operations, rail, or other heavy equipment use, there would be no exceedance of County General Plan Policy N-3.1 regarding vibration exposure at sensitive land uses. Therefore, Proposed Project would not result in noticeable vibration effects at nearby receptors. This impact would be less than significant, and no mitigation measures are warranted.

C10-4.3 Alternative B – No Action Alternative

Under the No Action Alternative, the Subject Property would remain as it is with no additional development. The Subject Property would not be a source of new construction or operational noise. No noise impacts would occur under the No Action Alternative.

C10-5 MITIGATION MEASURES

NOI-1: Construction Noise and Vibration Impacts to Sensitive Receptors

The following mitigation measures are recommended for reducing potential construction noise and vibration impacts to sensitive receptors:

A. Loud or high-vibration generating stationary construction equipment shall be located as far away from residential receptor areas as feasible.
B. Construction equipment and machinery that produce reduced noise and vibration levels shall be utilized to the extent feasible.
C. To minimize construction noise exposure, the line of sight between the nearby sensitive receptors along the Subject Property's western boundary and active construction areas shall be obstructed using noise-reducing fencing. If feasible, the six-foot permanent fence included as part of Alternative A shall be constructed prior to or early in the construction phase to provide noise attenuation for nearby residences. If the permanent fence is constructed early, temporary augmentations shall be added as needed to enhance its effectiveness. If this fence is not installed, temporary noise-reducing construction fencing shall be installed along the boundary of the Subject Property in the vicinity of adjacent residences to block the line of sight between nearby sensitive receptors and construction activities.
D. The Tribe shall monitor construction noise and vibration and will designate a disturbance coordinator, post the coordinator's contact telephone number conspicuously around the Subject Property, and provide the number to nearby sensitive receptors. The disturbance coordinator shall receive all public complaints, be responsible for determining the cause of the complaints, and implement any feasible measures to alleviate the problem.

Appendix C-11 Hazardous Materials

C11-1 REGULATORY SETTING

C11-1.1 Federal

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The CERCLA (also known as the Superfund law) defines hazardous substances by reference to the following authorities: CWA, section 311; CWA section 307(a); CAA section 112; Resource Conservation and Recovery Act (RCRA) section 3001; and Toxic Substance Control Act section 7. CERCLA hazardous substances are elements, compounds, mixtures, and radionuclides designated as hazardous under the environmental laws. There are currently 800 CERCLA hazardous substances. A list of hazardous substances is found in 40 CFR part 302.4 in table 302.4 "List of Hazardous Substances and Reportable Quantities."

CERCLA imposes liability on owners and parties responsible for the presence of hazardous substances at a site. The liability is retroactive, and parties can be held liable for contamination that occurred before CERCLA's enactment in 1980. CERCLA also creates a process for identifying hazardous waste sites with the highest potential for environmental and health risks and placing them on a National Priorities List (NPL). Finally, CERCLA created a fund ("Superfund") to provide governmental funding assistance for cleaning up sites on the NPS when liable parties either cannot be found or are not able to fully fund the remediation.

Resource Conservation and Recovery Act

RCRA regulates the land disposal of hazardous materials from cradle-to-grave. This means establishing a regulatory framework for the generation, transport, treatment, storage and disposal of hazardous waste. Specifically, Subtitle D of RCRA pertains to non-hazardous solid waste and Subtitle C focuses on hazardous solid waste. A solid waste can consist of solids, liquids and gases, but these must be discarded in order to be considered waste. Additionally, the USEPA has developed regulations to set minimum national technical standards for how disposal facilities should be designed and operated. States issue permits to ensure compliance with USEPA and state regulations. The regulated community is comprised of a diverse group that must comprehend and adhere to RCRA regulations. These groups can consist of hazardous waste generators, government agencies, small businesses, and gas stations with underground petroleum tanks. As of November 27, 2023, the RCRA regulations have been updated by the USEPA to include the identification of Non-Hazardous Secondary Materials that Are Solid Waste and the 2018 Additions to List of Categorical Non-Waste Fuels.

Food, Drug, and Cosmetic Act

Under the federal Food, Drug, and Cosmetic Act, the USEPA sets maximum residue limits, or tolerances, for pesticides residues on food. When the USEPA sets a tolerance level for a food, this is the level deemed safe. In defining safe, this means that, "reasonable certainty that no harm will result from aggregate exposure to the pesticide residue." When determining a safety finding for a tolerance level, the USEPA considers the toxicity of the pesticide and its break-down products, aggregate exposure to the pesticide in foods and from other sources of exposure if applicable, and any special risks specific to infants and children. If a tolerance is not set for a pesticide residue, a food containing that pesticide residue will be subject to government seizure if deemed appropriate. However, once a tolerance has been established for a pesticide residue, then residue levels below the tolerance will not trigger enforcement actions. If the residue level is detected above that tolerance, then the commodity will be subject to seizure. Some pesticides do not have a set tolerance level as the USEPA may grant exemptions in the cases where the pesticide residue does not pose, under foreseeable situations, a significant dietary risk.

Insecticide, Fungicide, and Rodenticide Act

The federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) addresses the sale, distribution, and labeling of pesticides, as well as the certification and training of pesticide applicators. FIFRA establishes recordkeeping and reporting requirements on certified applicators of restricted use pesticides. Furthermore, FIFRA imposes storage, disposal, and transportation requirements on registrants and applicants for the registration of pesticides. Pesticide use is regulated through requirements to apply pesticides in a manner consistent with the label. The labeling requirement includes directions for use, warnings, and cautions along with the uses for which the pesticide is registered (e.g., pests and appropriate applications). This includes the specific conditions for the application, mixture, and storage of the pesticide. Additionally, the label must specify a time period for re-entry into an area after the pesticide has been applied, and when crops may be harvested after the application of the pesticide. If a pesticide is used in a manner contrary to specifics on its label, then the use constitutes a violation of the FIFRA.

Hazardous Communication Standard

The Occupational Safety and Health Administration helps ensure employee safety by regulating the handling and use of chemicals in the workplace. For instance, it administers the HCS. The HCS ensures safety in the workplace concerning chemicals through requiring information to be provided and understood by workers about the identity and hazards associated with chemicals they may work with. This also requires that chemical manufactures and importers evaluate the hazards associated with the chemicals they create or import, and that these chemicals have proper labels and material safety data sheets concerning their hazards to others (e.g., customers). Downstream of the production, employers who utilize these hazardous chemicals in their workplaces are obligated to have labels and safety data sheets for their workers and to train them on the proper handling of these chemicals.

Hazardous Substances Act

The Consumer Product Safety Commission has a limited role in regulating hazardous substances; it primarily deals with the labeling of consumer products through the federal Hazardous Substances Act (HSA). HSA only requires products that may at some point be in the presence of people's dwellings to be labeled, including during purchase, storage, or use. These labels must alert consumers of the potential hazards that the product may pose. However, in order for a product to be required for labelling, the product must be toxic, corrosive, flammable/combustible, an irritant, a strong sensitizer, or have the ability to generate pressure through decomposition, heat, or other means. Furthermore, the product must possess the ability to cause severe personal injury or substantial illness during or as a result of any customary or reasonably predictable handling or use, including reasonably foreseeable ingestion by children.

Toxic Substances Control Act

The federal Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, permits the USEPA to evaluate the potential risk from novel and existing chemicals and address unacceptable risks chemicals may have on human health and the environment. The USEPA oversees the production, importation, use, and disposal of certain chemicals. This includes the USEPA having the authority to require record keeping, reporting, and test requirements and restrictions associated with certain chemical substances and/or mixtures. However, certain groups of chemicals are excluded from TSCA consideration, including—but not limited to—food, drugs, cosmetics and pesticides. Examples of chemicals included in TSCA consideration are lead paint, asbestos, mercury, formaldehyde, and polychlorinated biphenyls.

Emergency Planning and Community Right-to-Know Act

The federal Emergency Planning and Community Right-to-Know Act (EPCRA) is designed to assist local communities protect public health, safety, and the environment from chemical hazards. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. The EPCRA also requires industry to report on the storage, usage, and releases of hazardous substances to federal, state, and local governments, and states and communities can use the information gained to improve chemical safety and protect public health and the environment.

40 CFR Part 280- Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)

40 CFR Part 280, specifically part 280.20 outlines the performance standards for new underground storage tank systems. The standards require the USTs are properly designed, constructed, and installed to prevent releases. The standards list key requirements to include corrosion protection for tanks and pipes, installation of spill and overflow prevention equipment, and proper installation according to nationally recognized codes of practice. In addition, new tanks and pipes must have secondary containment.

C11-1.2 State and Local

California Building Code

The California Building Code (CBC) includes fire code elements to reduce wildfire impacts including Chapter 7A regarding building materials, systems, and/or assemblies used in the exterior design and construction of new buildings locating within a Wildland-Urban Interface Fire Area. CBC Section 703A.7 incorporates State Fire Marshal standards for exterior wildfire exposure protection.

San Diego County General Plan

The 2011 updated San Diego County General Plan (General Plan) is the long-term blueprint for the vision of the future for the County's unincorporated areas. Policies in the General Plan that are relevant to the off-Reservation hazards and hazardous materials in the vicinity of the Project are from the Safety Element and include the following policies:

Policy S-2.2: Advise, and where appropriate, require all new developments to help eliminate impediments to evacuation within existing community plan areas, where limited ingress/egress conditions could impede evacuation events.

Policy S-2.7: All development proposals are required to identify evacuation routes at the Community Plan level and identify and facilitate the establishment of new routes needed to ensure effective evacuation. Evacuation routes should be incorporated into existing Community Wildfire Protection Plans where available.

Policy S-4.1: Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.

Policy S-4.2: Require development located in wildland areas, near ridgelines, top of slopes, saddles, or other areas where the terrain or topography affects its susceptibility to wildfires to be located and designed to account for topography and reduce the increased risk from fires. Density reduction may be necessary to reduce fire hazards if the location and design of the development cannot reduce the threat effectively.

Policy S-4.3: Site and design development to minimize the likelihood of a wildfire spreading to structures by minimizing pockets or peninsulas or islands of flammable vegetation within a development.

Policy S-4.4: Plan for development where fire and emergency services are available or planned.

Policy S-4.5: Require development to provide additional access roads where feasible to provide for safe access of emergency equipment and civilian evacuation concurrently. The width, surface, grade, radius, turnarounds, turnouts, bridge construction, vegetative

management and brush clearance around roadways, and lengths of fire apparatus access roads shall meet the requirements of the State and San Diego County Consolidated Fire Codes. All requirements and any deviations will be at the discretion of the Fire Code Official.

Policy S-4.6: Ensure that development located within fire hazard areas implement measures in a Fire Protection Plan that reduce the risk of structural and human loss due to wildfire.

Policy S-4.7: Require all new, remodeled, or rebuilt structures to meet current ignition resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire hazard areas.

Policy S-7.2: Require development to contribute its fair share towards funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.

Policy S-7.3: Require that new development demonstrate that adequate fire services can be provided that meet the minimum staffing of personnel and that meet the minimum travel times identified in Table S-3 (Travel Time Standards from Closest Fire Station).

Policy S-7.4: Ensure that fire protection staffing, facilities, and equipment required to serve development are operating prior to, or in conjunction with, the development. Allow incremental growth to occur until a new facility can be supported by development.

C11-2 ENVIRONMENTAL SETTING

Additional information on the existing setting can be found in the Phase I and Phase II ESAs in **Appendix J**.

C11-2.1 Hazardous Materials

A Phase I and II ESA were completed for the Subject Property with updates over multiple years. The most updated Phase I and Phase II ESA's for the Subject Property were completed on August 21, 2019 (**Appendix J**). The Phase I was to assess the presence of any recognized environmental conditions (RECs) which are existing, historical, or threatened releases of any hazardous substances or petroleum products into structures, soils, and/or groundwater beneath the Subject Property that may have occurred following the preparation of the original Phase I ESA in 2018 in compliance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527-13. The Phase II soil screening was to provide information relevant to identifying, defining, and evaluating property conditions associated with target analysis that may pose risk to human health or the environment based on historic land use in compliance with ASTM E1903-11.

The Phase I ESA performed a review of relevant database listings of hazardous material sites, waste generators, above ground storage tanks and UST, review of historical topographic maps and aerial photographs of the Subject Property, and interviews with owners, operators, occupants, and/or local government officials to determine if RECs existed on the Subject Property

or within the vicinity. Electronic databases were reviewed for possible hazardous waste generating establishments in the vicinity of the Subject Property, as well as any adjacent sites with known environmental concerns.

The December 2018 Phase I documented a release of petroleum hydrocarbon products associated with the former retail establishment identified as Terry's Hay and Grain. It was concluded that the historical uses of the Subject Property were considered a REC. A total of 11 soil samples from across the Subject Property were collected and tested. This included two soil samples from three sample locations within the area believed to be impacted by the Terry's Hay and Grain release were collected. They were tested for organochlorine pesticides (OCP), total petroleum hydrocarbons (TPH), and California T22 metals in accordance with USEPA Test Method 8081A, USEPA Method 8015M, and USEPA Method 6010B respectively. Based on the results of the soil samples and analyses, OCP and TPH residue were not present in the on-site surficial soils in concentrations that would warrant further evaluation. California T22 metals are present in the on-site surficial soils, however, the reported T22 concentrations are below published screening levels or within normal background ranges as shown in the laboratory analytical results attached to **Appendix J**.

C11-2.2 Wildfire History and Risk

In 2024, 8,110 fires occurred and burned a total of 1,077,711 acres across the State (CAL FIRE, 2024). Of these, San Diego County experienced 32 fires, burning approximately 5,518 acres (CAL FIRE, 2024). In 2023, 7,127 fires were counted and burned a total of 324,917 acres across the State. Of these, San Diego County experienced nine fires, burning approximately 913 acres (CAL FIRE, 2023a). As described in **Section C-4,** the Subject Property is disturbed.

The Subject Property is located within a State Responsibility Area based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These zones, referred to as Fire Hazard Severity Zones, classify a wildland zone as moderate, high, or very high fire hazard based on the average hazard across the area included in the zone. The Subject Property is in a very high fire hazard severity zone and is surrounded by very high fire hazard severity zones and high fire hazard severity zones (CAL FIRE, 2023b).

C11-3 IMPACT ASSESSMENT

C11-3.1 Assessment Criteria

Impacts associated with hazardous materials include a release of hazardous materials and improper hazardous material management. A project would be considered to have significant hazardous material impacts if the site had existing hazardous materials onsite that would require remediation or mitigation prior to development of a project. Additionally, if a project results in the use, handling, or generation of a controlled hazardous material that the regulated amount would increase the potential risk of exposure that results in the reduction in the quality or loss of life, then the project would have a significant impact.

A project would be considered to have a significant impact if it were to increase wildfire risk on-site or in the surrounding area. This includes, but is not limited to, increasing fuel loads, exacerbating the steepness of the local topography, introducing uses that would increase the chance of igniting fires, reducing fire barriers, inhibiting local emergency response to or evacuation routes from wildfires, building in a high-risk fire zone without project design measure to reduce inherent wildfire risk, and conflicting with a local wildfire management plan.

C11-3.2 Alternative A– Proposed Project

Hazardous Materials

Construction

A Phase I ESA and Phase II ESA were conducted for the Subject Property and found no presence of hazardous materials above screening levels or background ranges within the soil. No contaminated soil is known to exist on the Subject Property; therefore, it is not likely contaminated soil will be encountered during construction activities. Hazardous materials will be used during construction, which can include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, paint thinner, and other products. As with any liquid and solid, during handling and transfer from one container to another or general usage, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose both a hazard to construction employees as well as to the environment. Construction BMPs required within the NPDES CGP limit and often eliminate the impact of such accidental releases. Since contact with stormwater during construction is the primary means of transporting these contaminants offsite, appropriate BMPs for this impact are included in the construction stormwater BMPs in **EA Table 2-1**. During transportation of hazardous materials off- and on-site, the transporters of hazardous materials would be required to adhere to applicable State, federal, and local regulations, including those set by the US Department of Transportation, which governs the transport of hazardous materials in interstate, intrastate, and foreign commerce. These regulations ensure that the transportation of hazardous materials to and from the Subject Property would not result in spills. Once onsite, BMPs in **EA Table 2-1** would reduce the probability of accidental onsite release through spill prevention methods and utilizing proper equipment. Furthermore, onsite hazardous chemicals would be used and stored per federal regulations and manufacturer guidelines would be followed. Therefore, the impacts from Alternative A from the routine transport, use, or disposal of hazardous materials during construction would be less than significant and no mitigation measures are warranted.

Operation

During operation, common hazardous materials may be used on the site, including motor oil, hydraulic fluids, solvents, cleaners, lubricants, and paints etc. All hazardous materials would be stored, handled, and disposed of according to federal manufacturer's guidelines and federal law. Any solid waste produced on site would be stored, handled, and disposed of by adhering to applicable federal and state regulations.

Fuel pumps would be installed according to applicable regulations and would have specific safety measures in place. The fuel pump component of Alternative A would be equipped with two USTs filled with petroleum products that would include gasoline and diesel fuel, and 12 fueling stations for distributing these fuels to customers. Releases of the petroleum products could occur at the gas station in a number of ways. Potential releases could occur during refueling events, such as gasoline dripping from a fuel dispenser nozzle to the ground after utilization or petroleum fuel escaping while refueling one of the USTs. Another method for potential releases is unproperly maintained and/or faulty equipment that could become susceptible to leaks, such as unprotected steel tanks and piping that could corrode, and release product thorough holes caused by corrosion of the metal tank or piping. Petroleum products released through spills, overfills and leaks has the potential to contaminate stormwater runoff, or enter the surrounding groundwater through direct spilling or leaking into the surrounding soil. The fuel storage tanks would comply with the provisions of 40 CFR Part 280, including Part 280.20 Performance Standards for new UST systems, which includes requirements for tank design, the installation and maintenance of leak detection and prevention systems, and spill and overfill controls to minimize the risk of release of petroleum into the environment. The standards are therefore protective of both public health and the environment (including soil and groundwater) through the prevention of accidental release which could lead to soil and groundwater contamination. Alternative A will not result in significant adverse effects related to waste production and hazardous materials and no mitigation measures are warranted.

Wildfire Risk

Construction

During construction, the operation of equipment could create sparks or fire that could ignite the vegetation within the Subject Property, which could then create a wildfire. Examples of construction equipment that could ignite a fire and thus increase risk include power tools and acetylene torches. As described in **Section C11-2**, the Subject Property is in a very high fire hazard severity zone and is surrounded by very high fire hazard severity zones and high fire hazard severity zones. With this very high severity zone rating, chances of fires during construction is possible, although the Subject Property is disturbed with minimal vegetation, minimizing the available fuel within the construction area that could start or transmit a fire if a spark were to occur during construction. Furthermore, BMPs provided in **EA Table 2-1** would reduce the probability of igniting a fire. These BMPs include the prevention of fuel being spilled and putting spark arresters on equipment with the potential to create sparks. Therefore, the potential for fire ignition during construction is less than significant and no mitigation measures are warranted.

Operation

As described in **Appendix B2**, Alternative A would be designed to meet IBC, including measures related to fire and structural safety. The IBC includes comprehensive provisions related to fire safety, including the use of fire-resistant materials, requirements for safe and accessible means of ingress and egress for the fire department, and the installation and maintenance of fire protection systems, including fire sprinklers and fire alarms, and smoke control systems. Furthermore, as described above, applicable regulations would be adhered to for the USTs. These

measures would reduce the risk of a large structure fire commencing on or spreading off the Project Site. In addition, BMPs provided in **EA Table 2-1** will include regular inspections and maintenance and staff training on safety procedures for the fuel pumps. Key maintenance includes checking for leaks, ensuring proper calibration, and cleaning equipment. For safety fire extinguishers will be available within each structure and at the fuel island. Emergency shutoff systems and hose breakaway coupling systems will be installed at the fuel pumps.

Alternative A does not include building components that would impede off-site emergency evacuation or emergency response plans, but it would attract additional patrons and increase the total number of persons onsite during operation that may need to be evacuated during a wildfire event. The Project Site has direct access to Valley Center Road and Charlan Road for emergency routes. An increase in vehicles on emergency evacuation routes during a wildfire could worsen traffic congestion and adversely affect evacuation timelines or access for emergency responders, which would increase the risk of loss, injury, or death involving wildland fires, but the Subject Property is zoned as commercial and was previously developed with commercial buildings. In addition, a traffic analysis was previously completed for the Subject Property, and a traffic assessment was completed for this project, both are included as **Appendices E** and **F**. The analyses included traffic counts for the construction and operation of Alternative A. Although traffic counts increased between the first traffic study conducted in 2019 and the second traffic study conducted in 2025, the roadways are currently operating well within their design capacity, and the addition of Alternative A would not adversely affect evacuation timelines.

Impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving ignition of wildland fires during operation of Alternative A are less than significant and no mitigation measures are warranted.

C11-3.3 Alternative B – No Action Alternative

No development would occur under this alternative, and the Subject Property would remain in its current state. No hazardous material impacts would occur under the No Action Alternative.

C11-4 MITIGATION MEASURES

There are no mitigation measures for hazardous materials.

Appendix C-12 Visual Resources

C12-1 REGULATORY SETTING

Development of the Subject Property is currently guided by the County General Plan.

C12-1.1 Federal

Wild and Scenic Rivers Act of 1968

The Wild and Scenic Rivers Act of 1968 is a federal law that was established to protect selected rivers in the United States that have outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. The Act preserves the unique character of these rivers while also acknowledging their potential for appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. The National Wild and Scenic Rivers System was created by the Wild and Scenic Rivers Act. River units designated as part of the system are classified and administered three types based on the condition of the river, the amount of development in the river or on the shorelines, and the degree of accessibility by road or trail at the time of designation:

- Wild River Areas: These rivers or sections of rivers are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- Scenic River Areas: These rivers or sections of rivers are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- Recreational River Areas: These rivers or sections of rivers are readily accessible by road or railroad, may have some development along their shorelines, and may have undergone some impoundment or diversion in the past.

Typically, rivers are added to the system by an act of Congress, but they may also be added by state nomination with the approval of the Secretary of the Interior. Congress initially designated 789 miles of eight rivers as part of the system. Today there are 208 river units with 12,708.8 miles in 40 states and Puerto Rico, administered by federal agencies or by state, local, or tribal governments. Federal agencies are typically the National Park Service, the Bureau of Land Management, the Forest Service, or the USFWS.

C12-1.2 State and Local

California State Scenic Highway Program

In 1963, the California State Legislature established the California Scenic Highway Program through Senate Bills 1467 and 1468, provisions of which were added to the Streets and Highways Code. The goal of the California Scenic Highway Program is to preserve and enhance the natural beauty of California, with scenic highways being designated based upon the amount of natural landscape visible to a passing motorist. Scenic highway designation does not preclude nearby development; however, the program encourages development that does not degrade the scenic value of the highway corridor.

Scenic highways are designated based upon the amount of natural landscape visible to a passing motorist, with the goal of preserving and enhancing the natural beauty of California. The program does preclude development near a scenic highway, rather it encourages development that does not degrade the scenic value of the corridor.

Title 24 Outdoor Lighting Zones

The California Energy Commission has published the 2019 Building Energy Efficiency Standards for residential and non-residential buildings (Title 24, part 6). These standards took effect January 1, 2020, and include mandatory requirements for outdoor lighting such as maximum brightness and shielding. These requirements vary based on the Lighting Zone the building is located in. Lighting Zones range from Zone 0 (undeveloped open spaces) to Zone 3 (urban areas). Lighting Zone 4 can only be designated when a local government applies for exceptionally high lighting allowances. Lighting Zones are intended to help limit light pollution and ensure light levels are appropriate for the region.

County of San Diego General Plan Update

The Conservation and Open Space Element (COSE) of the County's General Plan Update contains goals and policies related to landscape/setting, scenic corridors, and astronomical dark skies. The General Plan identifies three distinctive geographic regions, listed from west to east: (1) low-lying coastal plain, (2) mountainous peninsular range, and (3) desert Salton (Imperial) Basin. The General Plan states that the diversity of these regions provides the residents/visitors with an array of natural vistas and scenic environments that provide a unique collection from the ocean to the desert.

The COSE addresses two aspects of scenic highways within the scenic corridor discussion: (1) County designated and (2) State designated. For County designated segments, the General Plan Update states that "A "scenic highway" can pertain to any freeway, highway, road, or other vehicular right-of-way along a corridor with considerable or otherwise scenic landscape." For State Scenic Highways, highways that are officially designated as scenic or eligible for designation are considered "State Scenic Highways" by the County.

The County of San Diego General Plan Update goals and policies include the following:

Goal COS-11: Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

Policy COS 11.1: Require the protection of scenic highways, corridors, regionally significant vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.

Policy COS 11.2: Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.

Policy COS 11.3: Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following: (a) creative site planning, (b) integration of natural features into the project, (c) appropriate scale, materials, and design to complement the surrounding natural landscape, and (d) minimal disturbance of topography.

Goal COS-13: Preserved dark skies that contribute to rural character and are necessary for the local observatories.

Policy COS 13.1: Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.

Policy COS 13.2: Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

Policy COS 13.3: Coordinate with adjacent federal and State agencies, local jurisdictions, and tribal governments to retain the quality of night skies by minimizing light pollution.

Valley Center Community Plan

The Valley Center Community Plan is a comprehensive document that outlines land use, housing, mobility, public facilities and services, conservation, open space, parks and recreation, and noise goals for the Valley Center Community Plan Area.

The plan does not establish new legislation or rezone property, but it conjunction with the San Diego County General Plan, it establishes the basis for appropriate actions to be taken through the regular legislative process.

San Diego County Zoning Code

The purpose of the San Diego County zoning code is to regulate land use and development within the unincorporated areas of San Diego County. The code establishes zoning designations for all properties within the county, reflecting the current designations in the Land Development Code.

The code also provides flexibility in the application of development regulations for projects where strict application of the base zone development regulations would restrict design options and result in a less desirable project. The zoning code is used to implement the General Plan and the community plans, which establish the pattern and intensity of land use throughout the County.

The San Diego County Zoning Ordinance has specific regulations for outdoor lighting and landscaping in unincorporated County:

- Lightning: minimize light pollution, protect the environment, and promote energy conservation. The code specifies that outdoor lighting fixtures must be shielded and directed downward to minimize light pollution and glare. The code also requires that outdoor lighting fixtures be designed to minimize the amount of light that spills over onto adjacent properties.
- Landscaping: promote water conservation, protect the environment, and enhance the aesthetic quality of the County. The code specifies that landscaping must be designed to minimize water usage and promote water conservation. The code also requires that landscaping be designed to minimize the amount of water that runs off onto adjacent properties.

San Diego County Dark Sky Ordinance

The San Diego County Dark Sky Ordinance, codified as Section 51.201 of the County Code of Regulatory Ordinances, intends to minimize light pollution to allow citizens of the County to view and enjoy the night environment, allow communities within the unincorporated areas of the County to become recognized by the International Dark-Sky Association as Dark-Sky Communities, and protect the Palomar and Mount Laguna observatories from the detrimental effect that light pollution has on astronomical research. The ordinance includes lamp type and shielding standards for outdoor lighting. The purpose of these standards are to reduce light pollution, minimize glare, and promote energy conservation.

This ordinance also includes maximum total outdoor light output standards for commercial and industrial zones, and residential and mixed use zoning. This regulation is to limit light pollution and glare. It specifies measures to prevent glare, to reduce the amount of unwanted or excessive light that spills into the sky or neighboring properties.

Dark-Sky Association's Model Lighting Ordinance

The International Dark-Sky Association and the Illuminating Engineering Society of North America have developed a Model Lighting Ordinance to address the need for strong, consistent outdoor lighting regulation in North America (IDA, 2011). The purpose of the Model Lighting Ordinance is to provide regulations for outdoor lighting that will:

- Permit the use of outdoor lighting that does not exceed the minimum levels specified in Illuminating Engineering Society recommended practices for night-time safety, utility, security, productivity, enjoyment, and commerce;
- Minimize adverse offsite impacts of lighting such as light trespass, and obtrusive light;

- Curtail light pollution, reduce skyglow and improve the nighttime environment for astronomy;
- Help protect the natural environment from the adverse effects of night lighting from gas or electric sources; and
- Conserve energy and resources to the greatest extent possible

C12-2 ENVIRONMENTAL SETTING

The Subject Property is currently vacant and recently graded through permits obtained from the County (**Figure 3** of **Appendix A**). The Subject Property contains limited defining natural visual characteristics. As described in **Section C1-2**, the topography of the Subject Property, is relatively flat with elevations at approximately 1300 feet amsl. Moosa Canyon Creek is just north and east of the Subject Property at elevations of approximately 1350 feet amsl and there is an undeveloped and steeply sloped knoll to the north and east that rises to elevations of approximately 1675 feet amsl. The surrounding land uses consist of mixed commercial uses, rural residential, recreational and open space (**Figure 3** of **Appendix A**).

Valley Center Road is not designated as a State scenic highway, a candidate scenic highway, or a County scenic route. The closest eligible roads are Highway 76 which is approximately 7.5 miles north of the Subject Property, Old Highway 395 which is 7.5 miles northwest, and Interstate 5 located 21 miles west (Caltrans, 2024).

As described further in **Section C-8**, the Subject Property is zoned C36 (San Diego County, 2025). The C36 use regulations are designed to facilitate Specific Plan Areas that are in the San Diego County General Plan or on lands for which a Specific Plan Area has been approved by the Board of Supervisors. In this case, the Subject Property is within the 1979 Valley Center Community Plan and this plan designates the Subject Property as General Commercial use. This use is for general retail sales and services if conducted within buildings.

C12-3 IMPACT ASSESSMENT

C12-3.1 Assessment Criteria

Impacts related to visual resources would be considered significant if the alternative were to adversely affect a scenic vista or scenic resource, substantially degrade the existing visual character or quality of the site and its surroundings or create new sources of substantial light or glare that would adversely affect day or nighttime views in the area.

C12-3.2 Alternative A – Proposed Project

The Subject Property is zoned for commercial use and was previously developed with commercial uses. Development of Alternative A would result in a grocery store, convenience store, multiple commercial buildings, fuel pumps, and parking spaces. Alternative A would generally conform to the visual resources goals outlined in the Valley Center Community Plan and the County's General Plan, although once the property is taken into federal trust, County regulations and zoning would no longer apply. The proposed development components would be consistent with the

developments and land uses surrounding the property. Development of Alternative A would be directly visible from Valley Center Road, but this is not designated as a State scenic highway or County scenic route (Caltrans, 2024).

A significant effect from shadows would result if the Proposed Project were to cast a shadow on private residences or public areas for substantial portions of the day. The nearest off-site buildings to the development footprint of Alternative A are residences and commercial buildings. The development would not be located in close enough proximity to cast shadows on any private residences or public areas. Alternative A includes the construction of a six-foot wall between the Project Site and the adjacent sensitive receptors on the western boundary at the entrance off of Charlan Road. This six-foot wall would help to reduce line of site to the entrance and therefore further decrease the impact of visual resources. Alternative A would introduce new sources of light on the Subject Property; however, Alternative A would implement the BMPs listed in **EA Table 2-1** to reduce visual impacts during operations, such as from lighting and glare.

With the implementation of BMPs listed in **EA Table 2-1**, Alternative A would not interrupt or substantially alter local views, damage scenic resources, or create any sources of glare or excessive nighttime illumination. Therefore, visual impacts would be less than significant and no mitigation measures are warranted.

C12-3.3 Alternative B – No Action Alternative

Under the No Action Alternative, the Subject Property would remain in its current state. Any future development of the Subject Property would be required to meet County design standards.

C12-4 MITIGATION MEASURES

There are no mitigation measures for visual resources.

Appendix C-13 Other Reasonably Foreseeable Impacts

As described in **Sections C-1** through **C-12**, the Proposed Action and subsequent Proposed Project would not result in any significant impacts with the implementation of mitigation measures listed in **Section 4**. There are no reasonably foreseeable development projects on or in the vicinity of the Subject Property. Any future development in the area would be subject to local review and approval consistent with land use designations.