



Draft Environmental Impact Report
SCH No. 2024020235

Lake Creek Logistics Center
Town of Apple Valley, California

Lead Agency:
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

October 2025

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**Lake Creek Logistics Center
Town of Apple Valley, California**

Lead Agency

Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

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Lead Agency Discretionary Approvals

Specific Plan Amendment 2023-001
Site Plan Review 2022-003
Tentative Parcel Map No. 20659
Development Agreement

October 2025



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APPENDICES (BOUND SEPARATELY)

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S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

As stated by California Environmental Quality Act (CEQA) Guidelines §15002, the basic purpose of CEQA is to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities involving discretionary government actions (including the approval of development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An Environmental Impact Report (EIR) is an informational document prepared in compliance with CEQA that informs government decision-makers and the public in general about potentially significant environmental impacts that could result from a project. This EIR represents the independent judgment of the Town of Apple Valley (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from constructing and operating the proposed Lake Creek Logistics Center (the “Project”).

Hereafter when the term “Project” is used in this EIR with the initial letter capitalized, the term shall mean all aspects of the Lake Creek Logistics Center’s planning, construction, and operation; and all associated legislative, discretionary, and administrative approvals and permits required by law of public agencies. When the term “Project Applicant” is used with the initial letters capitalized, the term shall mean Lake Creek Industrial, which is the entity that submitted applications to the Town of Apple Valley to entitle the Project site as proposed and as evaluated in this EIR.

Governmental approvals requested from the Town of Apple Valley by the Project Applicant to implement the Project include Site Plan Review 2022-003, Specific Plan Amendment (SPA) 2023-001, and Tentative Parcel Map (TPM) No. 20659. Additionally, a Development Agreement (DA) is proposed between the Project Applicant and the Town of Apple Valley to provide long-term vested right to develop industrial buildings on the Project site. All other related discretionary and administrative actions that are required of the Town of Apple Valley and other public agencies and entities to construct and operate the Project described in this EIR also are considered part of the Project



evaluated herein. Approvals and permits required of other agencies that are currently known to be needed in order to implement the Project are listed in Section 3.0, *Project Description*.

The Town of Apple Valley has determined that an EIR is required for this Project. Pursuant to CEQA Guidelines § 15063(a), when a lead agency can determine that an EIR will be required for a project, an Initial Study is not required. An Initial Study was not prepared for this Project, however, the Town has determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by CEQA Guidelines §15161, is required. As stated in CEQA Guidelines §15161, a Project EIR should "...focus primarily on the changes in the environment that would result from the development project," and "...examine all phases of the project including planning, construction, and operation."

Accordingly, and in conformance with CEQA Guidelines §15121(a), the purpose of this EIR is to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

S.2 PROPOSED PROJECT

S.2.1 LOCATION AND SETTING

The Project site is located in the Town of Apple Valley which is within the Victor Valley Area of San Bernardino County, California. The Town of Apple Valley is situated northeast of the City of Hesperia, east of the City of Victorville, and west and south of unincorporated San Bernardino County. The Project site is located approximately 4.6 miles east of Interstate 15 (I-15) and approximately 4.2 miles north of State Route 18 (SR-18).

At the local scale, the Project site is located immediately north of Corwin Road, west of Central Road, south of Gustine Street, and east of the Apple Valley Airport (see Figure 3-2, *Vicinity Map* and Figure 3-3, *USGS Topographic Map*). The Project site is comprised of five parcels that total approximately 226.75 gross acres in size (Assessor's Parcel Number (APN): 0463-373-01, -03, -04, -05, -06).

Under existing conditions, the Project site is vacant and undeveloped. Refer to EIR Section 2.0, *Environmental Setting*, for more information related to the regional and local setting of the Project site.

S.2.2 PROJECT OBJECTIVES

The underlying purpose and goal of the Lake Creek Logistics Center is to develop modern industrial uses in the Town of Apple Valley in close proximity to the State highway system in order to increase employment opportunities and improve the Town's economic competitiveness. The Project would achieve its underlying purpose and goal through the following objectives.



- A. To efficiently develop a vacant and underutilized property with industrial uses to help meet the regional demands for goods movement facilities.
- B. To expand economic development, facilitate job creation, and increase the tax base for the Town of Apple Valley by establishing new industrial development adjacent to established and planned industrial areas.
- C. To attract new businesses to the Town of Apple Valley and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.
- D. To make efficient use of a property in the Town of Apple Valley by maximizing its buildout potential for employment-generating uses.
- E. To develop Class A speculative industrial buildings in the Town of Apple Valley that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.
- F. To develop industrial buildings in close proximity to the I-15 and SR-18 freeways that can be used as part of the southern California goods movement network.

S.2.3 PROJECT DESCRIPTION SUMMARY

The Project proposes the construction and operation of three industrial buildings totaling approximately 3.48 million square feet (sf). Due to the speculative nature of the Project and to account for potential future tenant needs, cold storage has been assumed to account for 10 percent of the Project's overall building footprint. The primary components of the Project are described below.

- Parcels 0463-373-04 and -06 (approximately 76.60 gross acres) would be merged to form Parcel 1, measuring 76.36 net acres. Building 1 encompasses approximately 1,238,320 sf, including 20,000 sf of office space for a floor area ratio (FAR) of 0.37. Building 1 would provide 446 truck trailer parking spaces and a total of 1,133 automobile parking spaces.
- Parcels 0463-373-03 and -05 (approximately 80.08 gross acres) would be merged to form Parcel 2, measuring 80.08 net acres. Building 2 consists of approximately 1,238,320 sf, including 20,000 sf of office space for an FAR of 0.36. Building 2 would provide 543 truck trailer parking spaces and a total of 1204 automobile parking spaces.
- Building 3 consists of approximately 1,004,096 sf, including 20,000 sf of office space for an FAR of 0.34. Building 3 would provide 576 truck trailer parking spaces and a total of 695 automobile parking spaces.



Refer to EIR Section 3.0, *Project Description*, for a detailed description of the Project.

S.3 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the Lead Agency be identified in the Executive Summary. The Town of Apple Valley has not identified any areas of controversy associated with the Project after considering all comments received in response to the NOP.

Regarding issues to be resolved, this EIR addresses the environmental issues associated with the Project that are known by the Town, that are identified in the comment letters that the Town received on this EIR's NOP which was circulated for a 30-day public review period beginning on February 9, 2024 (refer to *Technical Appendix A*). Environmental topics raised in written comments to the NOP are summarized in Section 1.0, *Introduction*, Table 1-1, *Summary of NOP and Scoping Meeting Comments*, and include but are not limited to the topics of Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, and Tribal Cultural Resources.

S.3.1 PUBLIC SCOPING MEETING

A publicly-noticed EIR scoping meeting was held on February 26, 2024. The scoping meeting was held virtually at 5:00 p.m. via internet-based video and phone conferencing service. The EIR scoping meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of potential environmental concerns to be addressed in this EIR.

S.4 ALTERNATIVES TO THE PROPOSED PROJECT

In compliance with CEQA Guidelines Section 15126.6, an EIR must describe a range of reasonable alternatives to the Project or to the location of the Project. Each alternative must be able to feasibly attain most of the Project's objectives and avoid or substantially lessen the Project's significant effects on the environment. A detailed description of each alternative evaluated in this EIR, as well as an analysis of the potential environmental impacts associated with each alternative, is provided in EIR Section 6.0, *Alternatives*. Also described in Section 6.0 is a list of alternatives that were considered but rejected from further analysis. The alternatives considered by this EIR include those listed below.

S.4.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative considers no development on the Project site beyond what occurs on the site under existing conditions (as described in EIR Section 3.0, *Project Description*). The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the entire 226.75-acre site would remain as is, vacant and undeveloped. Under this Alternative, no improvements would be made to the Project site and none of the Project's internal parking, utility, and other infrastructure improvements would occur. This alternative was selected by the Town as required by CEQA Guidelines Section 15126.6(e)(3)(B) to



compare the environmental effects of the Project with an alternative that would leave the Project site in its existing conditions.

S.4.2 NO PROJECT/EXISTING SPECIFIC PLAN DESIGNATION ALTERNATIVE

To accommodate the proposed Project, the North Apple Valley Industrial Specific Plan (NAVISP) would be amended to redesignate approximately 35 acres in the southeasterly portion of the Project site (APN 0463-373-06) from General Commercial (C-G) to Specific Plan Industrial (I-SP). The No Project/Existing Specific Plan Designation Alternative would consider the development of the Project site with a use that conforms to the existing land use designations for the Project site, specifically the I-SP zone and C-G zone.

This alternative was selected as required by CEQA Guidelines Section 15126.6(e)(3)(A) to compare the environmental effects of the Project with an alternative that would allow the continuation of uses permitted by the NAVISP. Using the maximum building coverage permitted for each zone, this alternative would allow 3,758,356 square feet of industrial uses on 191.75 acres and 990,990 sf of commercial uses on 35 acres.

S.4.3 REDUCED INTENSITY ALTERNATIVE

The Reduced Intensity Alternative was selected to reduce impacts associated with air quality, noise, and transportation. The Reduced Intensity Alternative would consider development of the Project site with a 15% reduction in building square footage. Under this alternative, a total of 2,958,000 sf of industrial uses would be constructed. This alternative would generate approximately 2,475 employees using an employment generation rate of 1 employee per 1,195 square feet for warehouse uses, compared to the 2,912 employees that would be generated by the Project. The development impact area would generally remain the same as the Project. Access to the site would be the same with a proportional reduction in the number of parking spaces.

S.5 SUMMARY OF IMPACT, MITIGATION, AND LEVELS OF IMPACT

Table S-1, *Summary of Impact, Mitigation, and Levels of Impact*, presents a summary of the environmental impacts resulting from the Project. The potential direct, indirect impacts, and cumulative impacts for all environmental topical areas are addressed in Sections 4.1 through 4.15 of this EIR. Growth-inducing impacts and significant irreversible environmental changes are addressed in Section 5.0, *Other CEQA Considerations*.

S.6 MITIGATION MONITORING

State law requires the preparation of a mitigation monitoring and reporting program (MMRP) to ensure that measures that would avoid or lessen significant environmental effects of a project are adopted as conditions of approval for the project. The mitigation measures identified in this EIR have been described in sufficient detail to provide the necessary information to identify the party or parties responsible for carrying out the mitigation, when the mitigation will be implemented, and why the



mitigation has been required. An MMRP would be adopted by the Town at the time of Project approval and is included as *Technical Appendix L* to this EIR.

Table S-1 Summary of Impact, Mitigation, and Levels of Impact

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
4.1 AESTHETICS			
Threshold a: Would the Project have a substantial adverse effect on a scenic vista?	Less than Significant Impact	No mitigation is required.	N/A
Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact	No mitigation is required.	N/A
Threshold c: In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than Significant Impact	No mitigation is required.	N/A
Threshold d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant Impact	No mitigation is required.	N/A
4.2 AIR QUALITY			
Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact	MM 4.2-1 through 4.2-20 would apply.	Significant and Unavoidable Impact
Threshold b: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially Significant Impact	MM 4.2-1 Construction Equipment Idling Restrictions. The idling of heavy construction equipment for more than 5 minutes shall be prohibited. Signage shall be posted throughout the construction site informing construction personnel of the idling time limit. Idling time limits shall be noted in construction specifications. Subject to all other idling restrictions, heavy construction equipment	Significant and Unavoidable Impact

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>shall not be left in the “on position” for more than 8 hours per day.</p> <p>MM 4.2-2 The Project Applicant or successor in interest shall implement the following measures:</p> <ul style="list-style-type: none"> • The Project’s landscape plan shall incorporate drought-tolerant plants and use water-efficient irrigation techniques. • All appliance fixtures shall be Energy Star-rated. • All fixtures installed in restrooms and employee break areas shall be U.S. Environmental Protection Agency (EPA) WaterSense certified or equivalent. <p>MM 4.2-3 Prior to the certificate of occupancy for each building, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity.</p> <p>MM 4.2-4 Solar Power. Prior to the issuance of building permits, the roofs of the warehouse buildings shall be designed to provide the structural capacity to accommodate roof-top solar panels.</p> <p>Prior to the issuance of certificate of occupancy for each building, the Project Applicant or successor in interest shall install rooftop solar</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>panels that generate sufficient power to meet at least 10 percent (%) of the Project's total operational base energy requirements from within the Project's building envelope. The Town of Apple Valley shall verify the size and scope of the solar energy system based upon the analysis of the projected power requirements and generating capacity as well as the available solar panel installation space. In the event sufficient space is not available on the Project site to accommodate the needed number of solar panels to produce the operation's base power use, the Project Applicant or successor in interest shall demonstrate how all available space has been maximized (e.g., roof) for solar energy system use. Areas that provide for truck movement may be excluded from these calculations unless otherwise deemed acceptable by the supplied reports and applicable building standards. The operation of the system shall commence only when it has received permission to operate from the applicable utility. The solar energy system owner shall be responsible for maintaining the system at not less than 80% of the rated power for 20 years. At the end of the 20-year period, the owners, operators, or tenants shall install a new photovoltaic system meeting the capacity and operational requirements of this measure, or continue to maintain the existing system, for the life of the Project. As the Project's demand for</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>solar power increases, additional solar panels may be added to the Project.</p> <p>MM 4.2-5 Sustainable Design/LEED Measures. The Project shall be designed so that it is able to achieve LEED certification at the time of building permit application. Documentation shall be provided to the Town of Apple Valley demonstrating that the Project meets this requirement prior to the issuance of building permits.</p> <p>MM 4.2-6 Sustainable Concrete Building Materials. The Project shall be designed with sustainable materials that will reduce 35% of the overall carbon footprint compared to other traditionally designed concrete tilt warehouses. The following measures shall be implemented:</p> <ul style="list-style-type: none"> The Project shall reduce overall concrete in the tilt walls by 30% by providing 4-inch foam insulation in the middle of the concrete panel (also known as composite panels). The foam insulation will result in an R value of R-19, while traditional concrete tilt walls have no R value, thereby reducing overall energy consumption and increasing occupant comfort. 	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • The roof shall have a 10% reduction in steel because of the lighter concrete tilt walls due to the foam insulation. • The Project specifications shall require the use of sustainable concrete to reduce the Project's overall carbon footprint by 35%. <p>MM 4.2-7 Electrical Infrastructure for Electric Equipment and Vehicles. The Project shall be designed to include electrical infrastructure to accommodate the required number of electric vehicle (EV) charging stations, the anticipated number charging stations for electric cargo handling equipment, and the potential installation of additional automobile and truck EV charging stations per Title 24, Part 11: California Green Building Standards Code (CALGreen). Electrical conduit shall be installed within reasonable locations (e.g., parking areas, at or near dock doors) at the time of building construction to satisfy this requirement. The Project's electrical rooms shall be of sufficient size to accommodate the upsizing of electrical equipment to accommodate potential future electrical loads.</p> <p>MM 4.2-8 EV Charging Stations. Prior to issuance of a Certificate of Occupancy, Level 2 (or faster) EV charging stations shall be installed on-site for employees for the percentage of employee parking spaces commensurate with CALGreen</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater.</p> <p>MM 4.2-9 Sustainable Energy, Waste, and Water Design Measures. The Project Applicant or successor in interest shall implement the following measures:</p> <ul style="list-style-type: none"> • Structures shall be equipped with outdoor electric outlets in the front and rear of the structures to facilitate use of electrical lawn and garden equipment. • Storage areas shall be provided for recyclables and green waste, as well as food waste storage if a pick-up service is available. • The roof shall provide R-19 insulation to decrease overall energy consumption and increase occupant comfort. • A timer system for lighting to ensure that lights shall be switched off during times of non-operation shall be installed on the Project site. <p>MM 4.2-10 Design of Ingress/Egress Points. Entry gates into the loading dock/truck court areas shall be sufficiently positioned to ensure that all truck and other vehicles are contained on site and inside the property line. Queuing, or circling of vehicles, on public streets immediately pre- or post-entry to</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>the Project shall be strictly prohibited unless queuing occurs in a deceleration lane or right turn lane exclusively serving the Project site.</p> <p>MM 4.2-11 Measures to Reduce the Urban Heat Island Effect. The following measures shall be implemented to reduce the urban heat island effect:</p> <ul style="list-style-type: none"> • The Project’s roof structures shall be designed to include “cool roof” materials with a minimum aged reflectance and thermal emittance values that are equal to or greater than those specified in the current edition of CALGreen, Table A5.106.11.2.3 for Tier 1 standards. • Sufficient shade trees shall be provided throughout the Project site so that at least 30% of the automobile parking areas will be shaded within 15 years after Project construction is complete (excluding the truck courts where trees cannot be planted due to interference with truck maneuvering). <p>MM 4.2-12 Truck Requirements and Restrictions. The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>the Project are informed of the following operational responsibility:</p> <ul style="list-style-type: none"> Only haul trucks meeting California Air Resources Board (CARB) model year 2010 (or newer) engine emission standards shall be used for the on-road transport of materials to and from the Project site. In addition, tenants shall be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB’s Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation. The building manager or their designee shall be responsible for enforcing these requirements. <p>MM 4.2-13 Idling Time Restriction. The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility:</p> <ul style="list-style-type: none"> Upon commencement of operations, the tenant/operator of the Project shall be required to restrict truck idling on site to a maximum of 3 minutes, subject to 	



Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>exceptions defined by the CARB's commercial vehicle idling requirements. The building manager or their designee shall be responsible for enforcing this requirement.</p> <p>MM 4.2-14 Anti-Idling Implementation Measures. The following measures shall be implemented to reduce air pollutant emissions from idling:</p> <ul style="list-style-type: none"> • Signage. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify the Project's three-minute idling restriction. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; (3) telephone numbers of the building facilities manager and CARB to report violations; and (4) that penalties apply for violations. Prior to the issuance of an occupancy permit, the Town of Apple Valley shall conduct a site inspection to ensure that the signs are in place. 	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • Efficient Load Management. The facility operator(s) shall be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. • Anti-Idling Training. Tenants and operators on the Project site shall ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free, one-day Course #512). <p>MM 4.2-15 Truck Routing Plan. The Project Applicant or successor in interest shall establish and submit for approval to the Town of Apple Valley a Truck Routing Plan that provides for routes between the Project site and the State Highway System. The Truck Routing Plan shall include measures, such as signage, pavement markings, and enforcement, for preventing truck queuing, circling, stopping, and parking on public streets. The Truck Routing Plan shall make every effort to avoid passing sensitive receptors, to the greatest extent possible, unless otherwise superseded by an applicable truck routing ordinance adopted by the Town of Apple Valley. The tenant/operator of the Project shall be</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>responsible for enforcement of the Truck Routing Plan. A revised plan shall be submitted to the Town of Apple Valley prior to a business license being issued by the Town of Apple Valley for any new tenant/operator of the Project site. The revised plan shall expand upon the original Truck Routing Plan and describe the operational characteristics of the use of the tenant/operator, including, but not limited to, hours of operations, types of items to be stored within the building, and whether any modifications to the Project's designated truck routes are necessary. The Town of Apple Valley shall have discretion to determine if changes to the Truck Routing Plan are necessary including any additional measures to alleviate truck routing and parking issues that may arise during the life of the Project. Signs and drive aisle pavement markings shall clearly identify the on-site circulation pattern to minimize unnecessary on-site vehicular travel.</p> <p>MM 4.2-16 Transportation Demand Management Plan. For occupants with more than 250 employees, a Transportation Demand Management (TDM) program to reduce employee commute vehicle emissions shall be established, subject to review and approval by the Town of Apple Valley. The TDM plan shall apply to Project tenants through tenant leases. The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>carpooling, taking transit, walking, and biking. Examples of trip reduction measures may include, but are not limited to:</p> <ul style="list-style-type: none"> • Transit passes • Car-sharing programs • Telecommuting and alternative work schedules • Ride sharing programs <p>MM 4.2-17 Yard Sweeping to Reduce Fugitive Dust. The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility:</p> <ul style="list-style-type: none"> • Yard and parking area sweeping shall be periodically conducted to minimize dust generation from the Project site. The building manager or their designee shall be responsible for enforcing this requirement. <p>MM 4.2-18 Provision of Information Regarding Programs to Reduce Emissions from Trucks. Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that occupants/tenants of the</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>Project site have been provided informational documentation regarding:</p> <ul style="list-style-type: none"> Funding opportunities that provide incentives for using cleaner than-required engines and equipment, such as the Carl Moyer Program and Voucher Incentive Program. The U.S. EPA SmartWay Program, which assists freight shippers, carriers, logistics companies, and other stakeholder partner with the U.S. EPA to measure, benchmark, and improve logistics operations and reduce air pollutant emissions from transport of cargo. <p>MM 4.2-19 Fire Pump Requirements. All diesel-fueled fire pump shall meet U.S. EPA-certified Tier 4 Interim emissions standards, at a minimum.</p> <p>MM 4.2-20 The Project Applicant/Developer/Owner shall require tenants to use zero-emission light- and medium-duty trucks as part of business operations, if such trucks are commercially available, as reasonably determined by the Lead Agency.</p>	
<p>Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?</p>	<p>Less than Significant Impact</p>	<p>No mitigation is required.</p>	<p>N/A</p>

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
<p>Threshold d: Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?</p>	<p>Less than Significant Impact</p>	<p>No mitigation is required.</p>	<p>N/A</p>
<p>4.3 BIOLOGICAL RESOURCES</p>			
<p>Threshold a: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p>Potentially Significant Impact</p>	<p>MM 4.3-1 A 30-day pre-construction survey for Burrowing Owl in compliance with CDFW’s Staff Report on Burrowing Owl Mitigation, dated March 7, 2012, shall be conducted prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.) to safeguard that no owls have colonized the Project site.</p> <p>If Burrowing Owls have colonized the Project site prior to the initiation of ground-disturbing activities, the Project Applicant shall immediately inform CDFW in conjunction with the Town of Apple Valley to determine if “take” would occur and coordinate with CDFW to determine minimization and avoidance measures.</p> <p>If ground-disturbing activities occur, but the Project site is left undisturbed for more than 30 days, another pre-construction survey shall be conducted no less than fourteen (14) days prior to resuming ground-disturbing activities to safeguard that Burrowing Owl has not colonized the Project since it was last disturbed. If Burrowing Owls are found, the same</p>	<p>Less than Significant Impact with Mitigation Incorporated</p>

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>coordination with CDFW in conjunction with the Town of Apple Valley described above shall be required.</p> <p>MM 4.3-2 A 30-day pre-construction clearance survey shall be conducted by a qualified Biologist in accordance with USFWS’s clearance survey protocol, dated May 2019, for the Desert Tortoise prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.).</p> <p>If Desert Tortoises have colonized the Project site prior to the initiation of ground-disturbing activities, the Project shall immediately inform CDFW and USFWS in conjunction with the Town of Apple Valley to determine if “take” would occur and coordinate with CDFW and USFWS to determine minimization and avoidance measures.</p> <p>If ground-disturbing activities occur, but the Project site is left undisturbed for more than 30 days, a pre-action clearance survey shall again be conducted immediately prior to surface disturbance to safeguard that Desert Tortoise have not colonized the Project site since it was last disturbed. If tortoises are found, the same coordination described above would be necessary.</p>	



Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		MM 4.3-3 Prior to construction activities, a qualified Biologist shall develop and implement a worker awareness program to increase the on-site worker's recognition of and commitment to Burrowing Owl and Desert Tortoise protection. The program shall include identification of the species, legal protections, avoidance measures, and procedures in the event of an encounter.	
		MM 4.3-4 In order to ensure that construction activities are limited to the Project site boundaries, prior to the issuance of grading permits, a note shall be placed on the grading plan verified by the Town Engineer, which requires delineation of the limits of disturbance. Limits of grading and construction activities shall be clearly delineated with temporary construction staking, flagging, or similar materials.	
		MM 4.3-5 Prior to the issuance of grading permits, a note shall be placed on the grading plan verified by the Town Engineer that the limits of disturbance are clear of debris. To avoid attracting predators and nuisance species, the Project site shall be clear of debris, where possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
<p>Threshold b: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</p>	<p>No Impact</p>	<p>No mitigation is required.</p>	<p>N/A</p>
<p>Threshold c: Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<p>Potentially Significant Impact</p>	<p>MM 4.3-6 Prior to issuance of grading permits or other permits authorizing ground disturbance (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging), the Project Applicant shall provide evidence to the Town of Apple Valley that impacts to 1.9 acres of non-riparian ephemeral streambeds that are subject to regulation under California Fish and Game Code Section 1600 and California Water Code Section 13260 have been mitigated through purchase of wetland establishment and or rehabilitation credits from the Mohave River Watershed Mitigation Bank at a minimum 2:1 ratio. In addition, and also prior to issuance of grading permits, the Project Applicant shall provide the Town with a copy of the Project's Section 401 Water Quality Certification from the Regional Board, Waste Discharge Order from the Regional Board, and Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement from CDFW, as applicable.</p>	<p>Less than Significant Impact with Mitigation Incorporated</p>
<p>Threshold d: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native</p>	<p>Potentially Significant Impact</p>	<p>MM 4.3-7 In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, any</p>	<p>Less than Significant Impact with</p>

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		<p>necessary vegetation clearing shall take place outside of the typical avian nesting season for protected species (February 1 through September 15).</p> <p>If work needs to take place during the nesting season for protected avian species, a pre-activity clearance survey for nesting birds shall be completed by a qualified biologist no less than fourteen (14) days prior to the onset of ground disturbance. An activity exclusion buffer zone around occupied nests shall be maintained during physical ground disturbing undertakings. Once nesting has ended, the buffer may be removed.</p>	Mitigation Incorporated
Threshold e: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant Impact	<p>MM 4.3-8</p> <p>Prior to the issuance of grading permits, the Property Owner/Developer shall obtain a native plant removal permit from the Town of Apple Valley for removal of any native desert plant that is protected by the Town of Apple Valley Plant Protection and Management Policy (Chapter 9.76), the County of San Bernardino's Desert Native Plant Protection, and the State Desert Native Plants Act (i.e., Food and Agricultural Code 80001 et seq.).</p>	Less than Significant Impact with Mitigation Incorporated
Threshold f: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact	No mitigation is required.	N/A

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
4.4 CULTURAL RESOURCES			
<p>Threshold a: Would the Project cause a substantial adverse change in the significance of a historical resource in pursuant to § 15064.5?</p>	<p>Potentially Significant Impact</p>	<p>MM 4.4-1</p> <p>Prior to the issuance of a grading permit, the Project Applicant shall retain a Registered Professional Archaeologist, meeting Secretary of Interior standards, (“Project Archaeologist”) subject to the approval of the Town to be on-call during all mass grading and trenching activities. The Project Archaeologist’s responsibilities include, but are not limited to, performing the tasks that require the need for a qualified archaeologist pursuant to Mitigation Measures MM 4.4-1 through MM 4.4-3 below.</p> <p>In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and the Project Archaeologist shall be contacted to assess the find. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Additionally, any culturally-affiliated tribes shall be contacted as detailed within Mitigation Measure MM 4.14-1, regarding any pre-contact finds and be provided information after the Project Archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.</p>	<p>Less than Significant Impact with Mitigation Incorporated</p>
		<p>MM 4.4-2</p> <p>If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>archaeologist shall develop a Monitoring and Treatment Plan, that includes performance standards identified in Mitigation Measure MM 4.4-3. The drafts of which shall be provided to any consulting tribes for review and comment, as detailed within Mitigation Measure MM 4.14-1. The Monitoring and Treatment Plan shall be subject to final approval by the Town of Apple Valley Planning Department. The Project Archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.</p> <p>MM 4.4-3 In the event that buried archaeological resources/Tribal Cultural Resources are uncovered during the course of ground disturbing activity associated with the Project, all work must be halted in the vicinity of the discovery and the Project Archaeologist shall visit the site of discovery and assess the significance and origin of the archaeological resource in coordination with consulting tribes. The following procedures will be carried out for treatment and disposition of the discoveries:</p> <ol style="list-style-type: none"> 1) Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the Project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and 	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>2) Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the Town of Apple Valley Planning Department with evidence of same:</p> <p>a) Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources. This will require revisions to the grading plan, denoting the location and avoidance of the resource.</p> <p>b) Accommodate the process for onsite reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed; location information regarding the reburial location shall be included into the final report. Copies of the report shall be</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>provided to the Town for their records, any consulting tribes, and the South Central Coastal Information Center.</p> <p>c) Curation. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation.</p> <p>MM 4.4-4 If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the San Bernardino County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project.</p>	
<p>Threshold b: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?</p>	<p>Potentially Significant Impact</p>	<p>Mitigation Measures 4.4-1 through 4.4-4 would apply.</p>	<p>Less than Significant Impact with Mitigation Incorporated</p>
<p>Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?</p>	<p>Less than Significant Impact</p>	<p>No mitigation is required.</p>	<p>N/A</p>

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
4.5 ENERGY			
Threshold a: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant Impact	No mitigation is required.	N/A
Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant Impact	No mitigation is required.	N/A
4.6 GEOLOGY AND SOILS			
Threshold a: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides?	Less than Significant Impact	No mitigation is required.	N/A
Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?	Less than Significant Impact	No mitigation is required.	N/A
Threshold c: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant Impact	No mitigation is required.	N/A
Threshold d: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant Impact	No mitigation is required.	N/A

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Threshold e: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact	No mitigation is required.	N/A
Threshold f: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant Impact	MM 4.6-1 Prior to the start of the proposed Project activities, all field personnel shall receive a worker's environmental awareness training on paleontological resources. The training shall provide a description of the laws and ordinances protecting fossil resources, the types of fossil resources that may be encountered in the Project area, the role of the paleontological monitor, an outline of steps to follow if a fossil discovery is made, and the contact information for the Project paleontologist. The training shall be developed by the Project paleontologist.	Less than Significant Impact with Mitigation Incorporated
		MM 4.6-2 Prior to the commencement of any ground-disturbing activities, the Project Applicant shall retain both a qualified paleontologist and paleontological monitor to prepare and implement a Paleontological Resource Impact Mitigation Project (PRIMP), which describes monitoring and fossil collection procedures. If a paleontological resource is discovered, the paleontologist or paleontological monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and, if appropriate, collected. If the resource is determined to be of scientific significance, the	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>Project paleontologist shall complete the following:</p> <p>1) Salvage of Fossils. If fossils are discovered, all work in the immediate vicinity shall be halted to allow the paleontological monitor and project paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially significant, the Project paleontologist (or paleontological monitor) shall recover them following standard field procedures for collecting paleontological resources as outlined in the paleontological mitigation plan for the Project. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils, such as complete skeletons or large mammal fossils, require more extensive excavation and longer salvage periods. In the case of discovery of larger fossils, the paleontologist or paleontological monitor shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossils can be removed in a safe and timely manner.</p> <p>2) Fossil Preparation and Curation. The paleontological mitigation plan for the project shall identify the museum that has agreed to accept fossils that may be discovered during Project-related excavations. Upon completion of</p>	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>fieldwork, all significant fossils collected shall be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation and inventory, the fossils specimens shall be identified to the lowest taxonomic level practical prior to curation at an accredited museum. The fossil specimens must be delivered to the accredited museum or repository no later than 30 days after all laboratory work is completed. The cost of curation shall be assessed by the repository and will be the responsibility of the Project Applicant.</p> <p>3) Final Paleontological Mitigation Report. Upon completion of ground-disturbing activity, and curation of fossils if necessary, the Project paleontologist shall prepare a final paleontological mitigation report outlining the results of the mitigation and monitoring program. The report shall include a discussion of the location, duration, and methods of monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils and where fossils were curated.</p>	
4.7 GREENHOUSE GAS EMISSIONS			
Threshold a: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact	No mitigation is required.	N/A



Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Threshold b: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact	No mitigation is required.	N/A
4.8 HAZARDS AND HAZARDOUS MATERIALS			
Threshold a: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant Impact	No mitigation is required.	N/A
Threshold b: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant Impact	No mitigation is required.	N/A
Threshold c: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact	No mitigation is required.	N/A
Threshold d: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact	No mitigation is required.	N/A
Threshold e: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?	Less than Significant Impact	No mitigation is required.	N/A
Threshold f: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant Impact	No mitigation is required.	N/A

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
Threshold g: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant Impact	No mitigation is required.	N/A
4.9 HYDROLOGY AND WATER QUALITY			
Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant Impact	No mitigation is required.	N/A
Threshold b: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less than Significant Impact	No mitigation is required.	N/A
Threshold c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impeded or redirect flood flows?	Less than Significant Impact	No mitigation is required.	N/A
Threshold d: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less than Significant Impact	No mitigation is required.	N/A
Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant Impact	No mitigation is required.	N/A

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
4.10 LAND USE AND PLANNING			
Threshold a: Would the Project physically divide an established community	No Impact	No mitigation is required.	N/A
Threshold b: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant Impact	No mitigation is required.	N/A
4.11 NOISE			
Threshold a: Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant Impact (off-site traffic noise)	Both rubberized asphalt and off-site noise barriers were considered as potential noise mitigation measures to reduce the potentially significant off-site traffic noise level increases, but neither mitigation measure would feasibly nor tangibly reduce the off-site traffic noise levels. Therefore, the Project-related off-site traffic noise level increases along certain roadway segments in the study area are considered a significant and unavoidable impact.	Significant and Unavoidable Impact
Threshold b: Would the Project generate excessive groundborne vibration or groundborne noise levels?	Less than Significant Impact	No mitigation is required.	N/A
Threshold c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	Less than Significant Impact	No mitigation is required.	N/A
4.12 PUBLIC SERVICES			
Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain	Less than Significant Impact	No mitigation is required.	N/A

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
acceptable service ratios, response times or other performance objectives for Fire Protection? Police protection? Schools? Parks? Other Public Facilities?			
4.13 TRANSPORTATION			
Threshold a: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant Impact	No mitigation is required.	N/A
Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Potentially Significant Impact	MM 4.13-1 Prior to the issuance of the certificate of occupancy for each tenant, the Project operator or tenant shall: 1) prepare and submit a Transportation Demand Management (TDM) Program to the Town Engineer for review, detailing strategies for reducing the use of single occupant vehicles by employees; and 2) provide written documentation to the satisfaction of the Town that the TDM Program requirement is incorporated into any lease agreement for the project site to ensure enforceability. The TDM Program shall include all feasible transportation measures recommended by California Air Pollution Control Officers Association (CAPCOA) and analyzed in the VMT report (see EIR Technical Appendix K1) as calculated pursuant to the “CAPCOA Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity” or other substantial evidence. Transportation measures to	Significant and Unavoidable Impact

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<p>be considered in the TDM Program may include, but are not limited to:</p> <ul style="list-style-type: none"> • T-11 Provide Employer-Sponsored Vanpool. Employer-sponsored vanpool service to provide groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting and reduce overall commute VMT. • T-7 Commute Trip Reduction (CTR) Marketing, to educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT, including: <ul style="list-style-type: none"> ○ Onsite or online commuter information services. ○ Employee transportation coordinators. ○ Onsite or online transit pass sales. ○ Guaranteed ride home service. • T-8 Ridesharing Program. <ul style="list-style-type: none"> ○ Designating a certain percentage of desirable parking spaces for ridesharing vehicles. ○ Designating adequate passenger loading and unloading and waiting areas for ridesharing vehicles. 	

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
		<ul style="list-style-type: none"> ○ Providing an app or website for coordinating rides. ● T-10 End-of-Trip Bicycle Facilities. The Project shall install and maintain end-of-trip facilities for employee use. End-of-trip facilities may include bike parking, bike lockers, showers, and personal lockers. 	
Threshold c: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant Impact	No mitigation is required.	N/A
Threshold d: Would the Project result in inadequate emergency access?	Less than Significant Impact	No mitigation is required.	N/A



Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
4.14 TRIBAL CULTURAL RESOURCES			
<p>Threshold a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <ol style="list-style-type: none"> 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? 	Potentially Significant Impact	<p>MM 4.14-1 Any culturally-affiliated Tribes (including the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN), the Morongo Band of Mission Indians, and/or the Kern Valley Indian Community, as determined by the NAHC) shall be contacted, as detailed in Mitigation Measure MM 4.4-1, of any pre-contact cultural resources discovered during Project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the Tribe(s), and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents the Tribe(s) for the remainder of the Project, should the Tribe(s) elect to place a monitor on-site.</p>	Less than Significant Impact with Mitigation Incorporated
4.15 UTILITIES AND SERVICE SYSTEMS			
<p>Threshold a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric</p>	Less than Significant Impact	No mitigation is required.	N/A

Potential Impacts	Level of Significance Before Mitigation	Mitigation Measures (MMs)	Level of Significance After Mitigation
power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			
Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant Impact	No mitigation is required.	N/A
Threshold c: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant Impact	No mitigation is required.	N/A
Threshold d: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant Impact	No mitigation is required.	N/A
Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant Impact	No mitigation is required.	N/A



1.0 INTRODUCTION

This Environmental Impact Report (EIR) is an informational document that represents the independent judgment of the Town of Apple Valley (Town), acting as the Lead Agency pursuant to the California Environmental Quality Act (CEQA), and evaluates the physical environmental effects that could result from constructing and operating the proposed Lake Creek Logistics Center (hereafter, “Project”). To implement the Project, the Project Applicant has requested that the Town approve Specific Plan Amendment (SPA 2023-00), Site Plan (Plan 2022-003), Tentative Parcel Map (TPM 20659), and an associated Development Agreement. This EIR also describes other related discretionary and administrative actions that are required to construct and operate the Project.

When the term “Project” is used in this EIR with the initial letter capitalized, the term shall mean all aspects of the planning, construction, and operation of the Lake Creek Logistics Center, including all discretionary and administrative approvals and permits required for its implementation. When the term “Project Applicant” is used with the initial letters capitalized, the term shall mean Lake Creek Industrial, which is the entity that submitted applications for the Project as proposed and as evaluated in this EIR.

1.1 TYPE OF EIR

As the first step in the CEQA-compliance process, on February 9, 2024, the Town of Apple Valley filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) and the San Bernardino County Clerk to indicate that an EIR would be prepared to evaluate the Project’s potential to impact the environment. An Initial Study was not prepared for the proposed Project pursuant to CEQA Guidelines Section 15063 because the Town determined that an EIR clearly was required for the Project. Accordingly, this document serves as a Project EIR that evaluates the environmental topics identified as requiring evaluation by the Project’s NOP.

Pursuant to CEQA Guidelines Section 15161, this Project EIR shall “...focus primarily on the changes in the environment that would result from the development project,” and “...examine all phases of the project including planning, construction, and operation.” Also, pursuant to CEQA Guidelines Section 15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project; (2) identify possible ways to minimize or avoid those significant effects; and (3) describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

1.2 LIST OF PROJECT APPROVALS

As more fully described in EIR Subsection 3.0, *Project Description*, the Project Applicant submitted applications to the Town of Apple Valley to allow for the construction and operation of three (3) industrial warehouse and distribution buildings totaling approximately 3,480,736 square feet (sf) on approximately 226.75 gross acres. The Project site is bounded by Gustine Street to the north, Central Road to the east, Corwin



Road to the south, and the Apple Valley Airport to the west. Under existing conditions, the Project site is vacant and undeveloped. The Project’s design also includes the installation of associated site improvements, including drive aisles, landscaping, utility infrastructure, underground storm drain detention facilities, exterior lighting, walls/fencing, and signage as well as roadway improvements.

Provided below is a brief description of the Project’s applications that are under consideration by the Town of Apple Valley. Refer to EIR Subsection 3.0, *Project Description*, for a more comprehensive description of the Project’s discretionary applications.

- **Site Plan Review 2022-003** would develop three (3) industrial buildings totaling approximately 3.48 million square feet on a 227-acre site located at the northwest corner of Central Road and Corwin Road within the North Apple Valley Industrial Specific Plan (NAVISP) (APNs: 0463-373-01, 03, 04, 05, & 06);
- **Tentative Parcel Map (TPM) No. 20659** would merge four parcels into two parcels. The TPM would merge parcels 0463-363-03 and -05 to form Parcel 2 and merge parcels 0463-373-04 and -06 to form Parcel 3;
- **Specific Plan Amendment (SPA) 2023-01** would rezone one parcel from General Commercial (CG) to Industrial – Specific Plan (I-SP) within the North Apple Valley Industrial Specific Plan (NAVISP);
- A **Development Agreement (DA)** is proposed between the Project Applicant and the Town of Apple Valley to provide long-term vested right to develop industrial buildings on the Project site and to provide community benefits to the Town.

1.3 STATEMENT OF LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 *et seq.*).

Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the Town of Apple Valley is the Lead Agency under whose authority this EIR has been prepared. “Lead Agency” refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the Town has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA and the CEQA Guidelines; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the Town’s independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or alternatives identified in this EIR are not feasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (CEQA Guidelines Section 15090 through 15093).



Pursuant to CEQA Guidelines Sections 15040 through 15043, and upon completion of the CEQA review process, the Town will have the legal authority under CEQA – and in conjunction with discretionary powers granted to the Town by other laws –to do any of the following:

- Approve the Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Deny approval of the Project in order to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or
- Approve the Project even through the Project would cause a significant effect on the environment if the Town makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for proposed Specific Plan Amendment (SPA 2023-00), Site Plan (Plan 2022-003), Tentative Parcel Map (TPM 20659), Development Agreement, and all other governmental discretionary and administrative actions related to the Project.

1.4 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resources Code (Section 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also CEQA Guidelines Sections 15082 and 15086(a)). As defined by CEQA Guidelines Section 15381, “the term ‘Responsible Agency’ includes all public agencies other than the Lead Agency that have discretionary approval power over the project.” A “Trustee Agency” is defined in CEQA Guidelines Section 15386 as “a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.” The Project would require approval from the following Trustee and Responsible Agencies:

- Lahontan Regional Water Quality Control Board (RWQCB) is identified as a Trustee Agency for the Project that is responsible for issuance of a National Pollutant Discharge Elimination System (NPDES) Permit to ensure that during and after Project construction, on-site water flows do not result in siltation, other erosional actions, or degradation of surface or subsurface water quality. The Lahontan RWQCB also is responsible for issuance of a Water Quality Certification pursuant to Section 401 of the federal Clean Water Act (CWA).
- Mojave Desert Air Quality Management District (Mojave Desert AQMD) is identified as a Responsible Agency pertaining to the issuance of construction-related permits.
- Federal Aviation Administration is a Responsible Agency pertaining to the issuance of an encroachment permit for the proposed sewer alignment and National Environmental Policy Act (NEPA) compliance.



- San Bernardino County Department of Airports is a Responsible Agency pertaining to the issuance of a utility easement for the proposed sewer alignment.
- California Department of Fish and Wildlife (CDFW) is a Responsible Agency pertaining to the issuance of a Section 1602 Streambed Alteration Agreement pursuant to the California Fish and Wildlife Code.
- Liberty Utilities is a Responsible Agency pertaining to the approval of the Project’s proposed water infrastructure improvements and connections.
- The San Bernardino County Flood Control District (SBCFCD) is a Responsible Agency pertaining to the approval of the Project’s proposed drainage improvements.
- The Apple Valley Fire Protection District (AVFPD) is a Responsible Agency pertaining to the approval of fire hydrant locations and fire protection features for the Project.

There are no other known Trustee Agencies or Responsible Agencies identified for the Project. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether identified in this EIR or not, as part of their decision-making processes in relation to the proposed Project.

1.5 SCOPE OF THE EIR

1.5.1 EIR SCOPE

The Town filed a Notice of Preparation (NOP) with the State Clearinghouse of the California Office of Land Use and Climate Innovation (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project’s potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to potential Responsible Agencies, Trustee Agencies, and other interested parties on February 9, 2024, for a 30-day public review period. The NOP was distributed for public review to solicit responses that would help the Town identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR.

In addition, a publicly noticed EIR Scoping Meeting was held on February 26, 2024. The scoping meeting was held virtually at 5:00 p.m. via internet-based video and phone conferencing service. The EIR Scoping Meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of potential environmental concerns addressed in this EIR. No comments were made during the EIR Scoping Meeting.

The NOP, public review distribution list, and the six (6) written comments received by the Town during the NOP public review period are provided in *Technical Appendix A* to this EIR. Substantive issues raised in response to the NOP and during the Scoping Meeting are summarized below in Table 1-1, *Summary of NOP and Scoping Meeting Comments*. The purpose of Table 1-1 is to present a summary of the environmental topics that were identified by public agencies, interested parties, and members of the general public to be of



primary interest. However, all relevant comments received in response to the NOP and the EIR Scoping Meeting are addressed in this EIR.

Table 1-1 Summary of NOP and Scoping Meeting Comments

COMMENTS	DATE	COMMENT	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
State and Local Agencies			
California Air Resources Board (CARB)	March 06, 2024	<ul style="list-style-type: none"> - Request that the EIR include preparation of a Health Risk Assessment (HRA) to evaluate the Project’s potential to result in cancer and other health risks during long-term operation. In addition to the health risks associated with operational diesel PM emissions, the HRA should also evaluate cumulative cancer risk impacts with Project operation in conjunction with past, present, and reasonably foreseeable future projects. - Request that, if the specific type of warehouse is not specified, the EIR should consider and analyze the impacts of construction and operation of cold storage warehouse space and the potential use of transportation refrigeration units (TRUs) during Project operation. - The HRA should be prepared based on the latest OEHHA guidance. The HRA should evaluate and present the existing baseline, future baseline, and future year with the Project. The analysis modeled under both the existing and the future baselines should reflect all applicable federal, State, and local rules and regulations. - The HRA should account for all diesel PM emission sources related to Project construction, including, but not limited to, off-road mobile equipment, diesel generators, and on-road heavy-duty trucks. 	Subsection 4.2, <i>Air Quality</i>
California Department of Fish and Wildlife (CDFW)	March 04, 2024	<ul style="list-style-type: none"> - Recommends the Draft EIR include an assessment of the various habitat types located within the Project footprint and a map that identifies the location of each habitat type. - The Draft EIR should include a general biological inventory of fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. - The Draft EIR should include a complete, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). 	Subsection 4.3, <i>Biological Resources</i>



COMMENTS	DATE	COMMENT	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		<ul style="list-style-type: none"> - The Draft EIR should include an assessment of special status plants and natural communities, regional setting, species specific surveys on burrowing owl, Mohave ground squirrel, crotch's bumble bee, and Agassiz's desert tortoise. - The Draft EIR should include analysis of direct, indirect, and cumulative impacts to biological resources and a range of reasonable alternatives. - The Draft EIR should identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. - Recommends consultation with CDFW on the Lake and Streambed Alteration Program - Recommends incorporation of water-wise concepts in the Project's landscape design plans 	
Native American Heritage Commission (NAHC)	February 12, 2024	<ul style="list-style-type: none"> - Provides information regarding required Native American consultation pursuant to Senate Bill 18 and Assembly Bill 52. 	Subsection 4.4, <i>Cultural Resources</i> ; and Subsection 4.14, <i>Tribal Cultural Resources</i>
San Bernardino County Department of Public Works	March 05, 2024	<ul style="list-style-type: none"> - The Project is located adjacent to the San Bernardino County Flood Control District (SBCFCD) road right-of-way of Central Road. The Project Applicant will need to obtain an encroachment permit from the SBCFCD if any improvements are within SBCFCD right-of-way. - Request to be included on the circulation list for all Project notices, public reviews, or public hearings 	Section 3.0, <i>Project Description</i>
Mojave Desert Air Quality Management District (Mojave Desert AQMD)	February 21, 2024	<ul style="list-style-type: none"> - Requires the Project to implement dust mitigation measures required for Project construction 	Subsection 4.2, <i>Air Quality</i>
Organizations			
Californians Allied for a Responsible Economy (CARE CA)	March 11, 2024	<ul style="list-style-type: none"> - Recommends the Draft EIR reflect a good faith effort at full disclosure including as much information on the nature of the Project operation and the Lead Agency should study a reasonable worst-case scenario - The Draft EIR should make efforts to minimize air quality effects and health consequences. - Recommends the Lead Agency to adopt quantitative threshold to determine the significance of Project GHG emissions 	Subsection 4.2, <i>Air Quality</i> ; and Subsection 4.7, <i>Greenhouse Gas Emissions</i>



COMMENTS	DATE	COMMENT	LOCATION IN EIR WHERE COMMENT IS ADDRESSED
		- Encourages the City to incorporate modern technology in the Project mitigation measures and ensure that the mitigation measures are effective and enforceable. A Statement of Overriding Considerations should be considered only after all feasible mitigation measures are included in the Project Mitigation Monitoring and Reporting Program.	

In light of the comments received by the Town in response to the NOP and the EIR scoping meeting, this EIR provides a detailed analysis of the Project’s potential to cause adverse effects under the following topic areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology & Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology & Water Quality
- Land Use & Planning
- Noise
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities & Service Systems

The analysis related to the above topics is provided in EIR Section 4.0, *Environmental Analysis*.

The Town concluded that the Project would result in no impact or less than significant impacts to five (5) environmental topic areas, including Agriculture and Forestry Resources; Mineral Resources; Population and Housing; Recreation; and Wildfire. Potential effects to these topic areas are summarized in EIR Section 5.0, *Other CEQA Considerations*.

1.5.2 EIR FORMAT AND CONTENT

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

- **Section S.0, Executive Summary** provides an overview of the EIR and CEQA process and provides a brief Project Description, which includes summaries of the Project’s objectives, the location and regional setting of the Project site, and potential alternatives to the Project as required by CEQA. The Executive Summary also provides a summary of the Project’s impacts, mitigation measures, and conclusions, in a table that forms the basis of the Project’s Mitigation, Monitoring, and Reporting Program (MMRP).



- **Section 1.0, Introduction** provides introductory information about the CEQA process and the responsibilities of the Town in its role as Lead Agency, a brief Project Description, the purpose of the EIR, and an overview of the EIR’s format.

Table 1-2 Location of CEQA Required Topics

CEQA REQUIRED TOPIC	CEQA GUIDELINES REFERENCE	LOCATION IN THIS EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section 5.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Project is Implemented	§ 15126.2(c)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Caused by the Project Should it be Implemented	§ 15126.2(d)	Subsection 5.2
Growth-Inducing Impact of the Project	§ 15126.2(e)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Subsection 5.4
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Energy Conservation	§ 15126.2(b) & Appendix E	Subsection 4.5

- **Section 2.0, Environmental Setting** describes the environmental setting, including descriptions of the Project site’s physical conditions and surrounding context used as the baseline for analysis in the EIR.
- **Section 3.0, Project Description** serves as the EIR’s Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to CEQA Guidelines Section 15123. This Section provides a detailed description of the Project, including its location, purpose, main objectives, design features, construction characteristics, and operational characteristics expected over the Project’s lifetime. In addition, the discretionary actions required of the Town of Apple Valley and other government agencies to authorize implementation of the Project are discussed.
- **Section 4.0, Environmental Analysis** provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the Project. A determination concerning the significance of each impact is addressed and mitigation measures are presented when warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as



“effects” or “impacts” interchangeably. CEQA Guidelines Section 15358 describe the terms “effects” and “impacts” as being synonymous.

In each Subsection of Section 4.0, the existing conditions pertaining to the subject area being analyzed are discussed accompanied by a specific analysis of physical impacts that may be caused by implementing the Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in CEQA Guidelines Section 15355 as “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.”

The analyses in Section 4.0 are based in part upon technical reports that are included in this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the Project and are cited in Section 7.0, *References*.

Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be “roughly proportional” to the impacts of the Project. The discussion then indicates whether the identified mitigation measures would reduce impacts to below a level of significance. In most cases, implementation of the mitigation measures would reduce the adverse environmental impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations would need to be adopted by the Town of Apple Valley pursuant to CEQA Guidelines Section 15093.

- **Section 5.0, Other CEQA Considerations** includes specific topics that are required by CEQA. These include a summary of the Project’s significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not to be significant during preparation of this EIR.
- **Section 6.0, Project Alternatives** describes and evaluates alternatives to the Project that could reduce or avoid the Project’s adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives, including a “No Project” alternative, that will foster informed decision making and public participation.
- **Section 7.0, References**, cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted in preparing this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.



1.6 INCORPORATION BY REFERENCE

CEQA Guidelines Section 15147 states that the “information contained in an EIR shall include summarized...information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public,” and that the “[p]lacement of highly technical and specialized analysis and data in the body of an EIR shall be avoided through the inclusion of supporting information and analyses as appendices to the main body of the EIR.” CEQA Guidelines Section 15150 allows for the incorporation “by reference all or portions of another document... [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand.” The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of an EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR. Refer to EIR Section 7.0, *References*, for a list of documents incorporated into this EIR by reference.

This EIR also relies on a number of Project-specific technical studies that are bound separately as *Technical Appendices*. The individual technical studies, reports, and supporting documentation that comprise the *Technical Appendices* are as follows:

- A: Notice of Preparation (NOP) and NOP Comment Letters
- B1: Air Quality Impact Analysis
- B2: Health Risk Assessment
- C: Biological Resources Assessment
- D: Cultural Resources Assessment
- E: Energy Impact Analysis
- F1: Geotechnical Investigation
- F2: Paleontological Resources Technical Memorandum
- G: Greenhouse Gas Analysis
- H1: Phase I Environmental Site Assessment
- H2: Airport Land Use Compatibility Analysis
- I1: Preliminary Hydrology Calculations
- I2: Water Quality Management Plan
- I3: Water Supply Assessment
- J: Noise Impact Analysis
- K1: Vehicle Miles Traveled (VMT) Analysis
- K2: Traffic Analysis

The Technical Appendices are available for review at the Town of Apple Valley Planning Department, 14955 Dale Evans Parkway, Apple Valley, California 92307, during the Town’s regular business hours or can be accessed on the Town’s website at the following address:

- <https://applevalley.org/government/california-environmental-quality-act/>



Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed. References relied upon by this EIR will be available for public review at the Town of Apple Valley Planning Department, 14955 Dale Evans Parkway, Apple Valley, California 92307, during the Town's regular business hours, or can be requested in electronic form by contacting the Town Planning Department.



2.0 ENVIRONMENTAL SETTING

2.1 REGIONAL SETTING AND LOCATION

The Project site is in the Town of Apple Valley, which is within the Victor Valley Area of San Bernardino County, California. The Town of Apple Valley is situated northeast of the City of Hesperia, east of the City of Victorville, and west and south of unincorporated San Bernardino County. The Project site is located approximately 4.6 miles east of Interstate 15 (I-15) and approximately 4.2 miles north of State Route 18 (SR-18). The site's location and regional context are shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

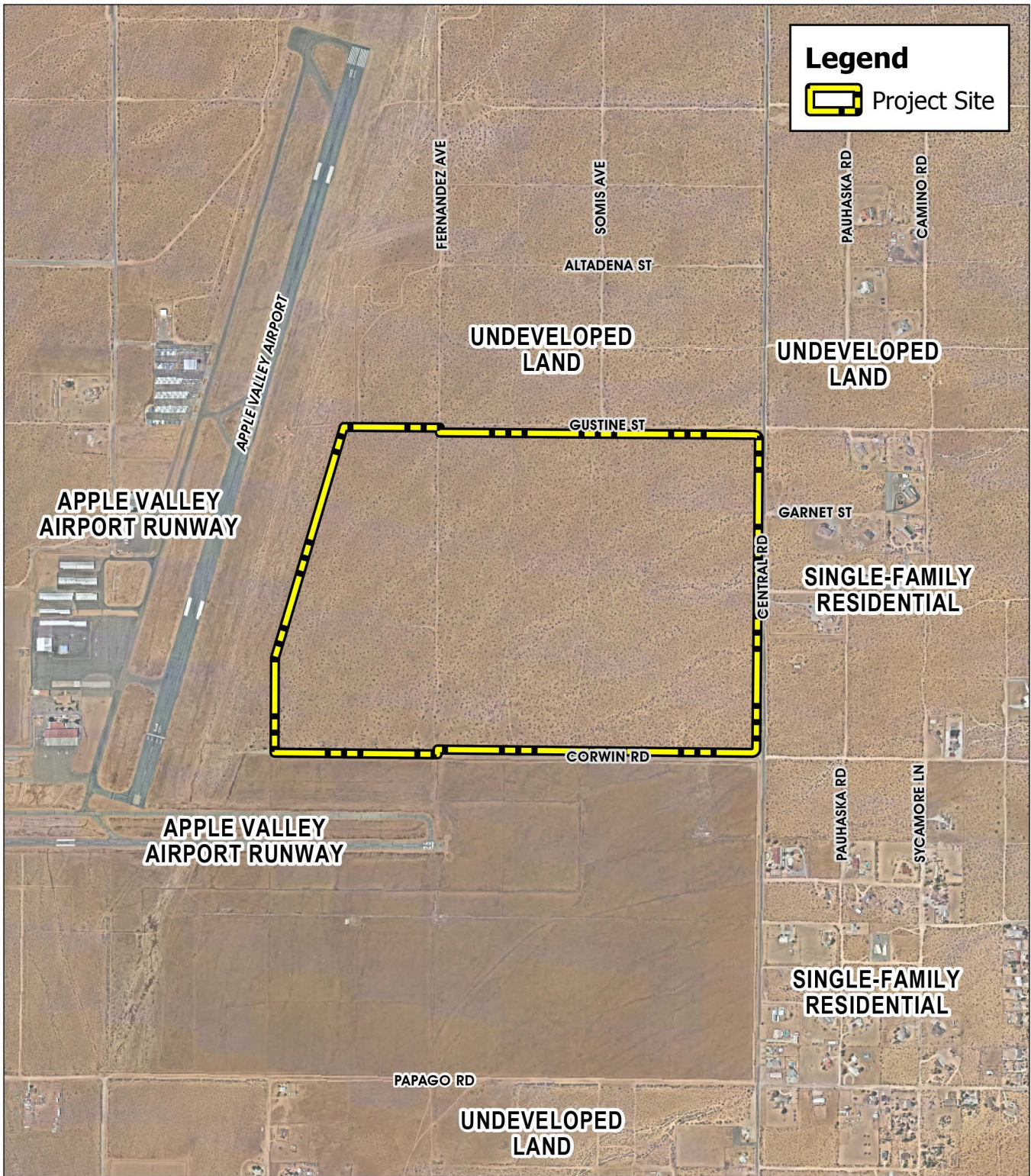
The Project site is in an urbanized area of southern California commonly referred to as the “High Desert,” which is a subset of what is referred to as the “Inland Empire.” The Inland Empire is an approximate 28,000 square mile region comprising San Bernardino County, Riverside County, and the eastern tip of Los Angeles County. According to U.S. Census data, the 2023 population of San Bernardino County was 2,195,611 (USCB, 2023). The Southern California Association of Governments (SCAG) forecast models predict that the population of San Bernardino County will grow to approximately 2,623,000 persons by the year 2050 (SCAG, 2024a, Demographics and Growth Forecast Technical Report, Table 12).

2.2 LOCAL SETTING AND LOCATION

The Project site is located immediately north of Corwin Road, west of Central Road, south of Gustine Street, and east of the Apple Valley Airport as illustrated on Figure 3-2, *Vicinity Map*, and Figure 3-3, *USGS Topographic Map*, in EIR Section 3.0, *Project Description*. The site encompasses Assessor's Parcel Numbers (APNs) 0463-373-01, -03, -04, -05, and -06. As described in Subsection 2.4.3 below, the Project site is located within the North Apple Valley Industrial Specific Plan (NAVISP) area.

2.3 SURROUNDING LAND USES

Property to the north of the Project site is vacant and undeveloped. To the east of the site are residential uses and vacant land zoned “Apple Valley/Rural Living” by the County of San Bernardino. Residences in the vicinity are located approximately 492 feet to 1,456 feet from the property line of the Project site. An Apple Valley Airport runway is located approximately 500 feet from the southern property line, as well as undeveloped land. Undeveloped land is located westerly adjacent to the site, beyond which is another Apple Valley Airport runway (approximately 700 feet away from the western property line). Existing land uses in the immediate vicinity of the Project site are illustrated on Figure 2-1.

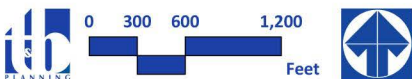


Legend

 Project Site

Source(s): Esri, Nearmap Imagery (July 2023), San Bernardino County (2024)

Figure 2-1



Surrounding Land Uses



2.4 PLANNING CONTEXT

2.4.1 TOWN OF APPLE VALLEY GENERAL PLAN

The Town of Apple Valley’s prevailing planning document is its 2009 General Plan. As depicted on, Figure 2-2, *Existing General Plan Land Use Map* the Town General Plan Land Use Map (as amended in 2022) designates the Project site as “Specific Plan.” This designation is applied to lands on which a specific plan has been approved by the Town Council. The specific plan must conform to State law, and include maps and text that establish the land use designations; standards and guidelines for development; infrastructure requirements; and phasing for the specific plan area. (Apple Valley, 2009)

2.4.2 ZONING

As shown on, Figure 2-3, *Existing Zoning* the Project site is zoned “Specific Plan.” Chapter 9.56, Specific Plan Districts, of the Town Municipal Code states, “[s]pecific plans are intended to provide for development which is superior to that which can be achieved through the strict application of conventional land use and development criteria by allowing greater design flexibility and planning. Greater design flexibility within a comprehensive planning framework allows for clustering of units, mixing of uses and building types, and use of special development standards and criteria which respond to the particular features of a site.” (Apple Valley, 2024) Lands to the east of the site are in unincorporated San Bernardino County, and are zoned “Apple Valley/Rural Living.”

2.4.3 SPECIFIC PLAN DESIGNATIONS

The NAVISP was approved in 2006 to establish long-term development goals, standards and guidelines for the approximately 6,000 acres surrounding the Apple Valley Airport. Primary land uses envisioned in this area are industrial and commercial land uses. (NAVISP, p. I-1) Within the NAVISP, most of the site is designated as Specific Plan Industrial (I-SP), with the southeasterly parcel designated as General Commercial (C-G). (NAVISP p. II-6) Please refer also to Figure 2-4, *Existing Specific Plan Designations*. The Specific Plan Industrial designation is intended to support development of a broad range of clean, well planned industrial, quasi-industrial and commercial support uses. Uses may range from manufacturing and warehousing to offices and retail facilities which support the employee population within the Specific Plan Area. (NAVISP p. III-1) The Specific Plan General Commercial designation allows retail stores, offices and personal and business services designed to support the employees within the Specific Plan Area. Uses which are geared to residential neighborhoods (such as grocery stores) are not permitted in this designation. (NAVISP p. III-2) Surrounding properties to the north, west and south are also located in the NAVISP and are zoned “Specific Plan”. The NAVISP land use designation of lands to the south and west is Airport Industrial (I-A), while lands north of the site are designated Specific Plan Industrial (I-SP).

Pursuant to CEQA Guidelines Section 15125(d), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans. The Project’s consistency with applicable general, specific and regional plans is provided in Section 4.10, *Land Use and Planning*, of this EIR.



2.4.4 TOWN OF APPLE VALLEY COMPREHENSIVE AIRPORT LAND USE COMPATIBILITY PLAN

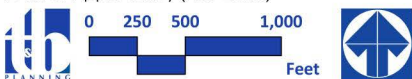
The Town of Apple Valley Comprehensive Airport Land Use Compatibility Plan (ALUCP), adopted in 1995, provides guidelines to reduce potential land use conflicts in areas surrounding the Airport, and protect public health, safety, and welfare by minimizing aircraft-related hazards. (Apple Valley, 1995)

The ALUCP identifies Airport Overlay Districts A-1 and A-2, with compatibility guidelines outlined for land uses within each Overlay District. Guidelines include height restrictions, recommended population densities, and prohibited land use types. A small portion of the southeast corner of the Project site lies within the Overlay District A-1. This portion of the Project site would only contain parking areas; No buildings would be located within Overlay District A-1. None of the guidelines for Overlay District A-1 would pertain to parking areas. The entire building area of the site is located within Overlay District A-2. Please refer to Figure 4.10-1 and Table 4.10-4, presented within Section 4.10, *Land Use and Planning*.

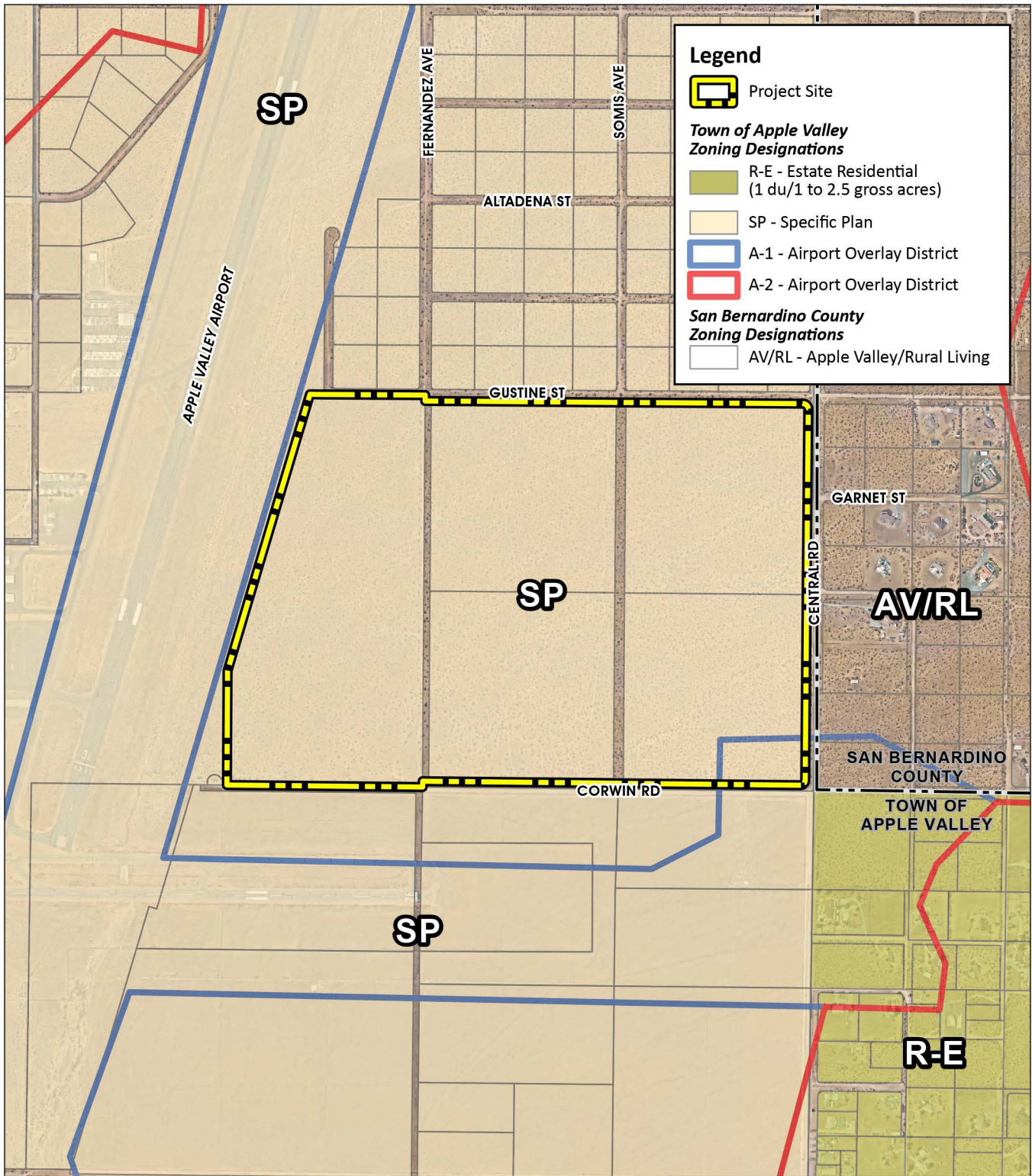


Source(s): Esri, Nearmap Imagery (July 2023), San Bernardino County (2024),
Town of Apple Valley (Nov 2022)

Figure 2-2

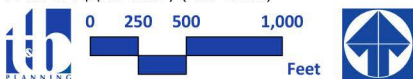


Existing General Plan Land Use Designations



Source(s): Esri, Nearmap Imagery (July 2023), San Bernardino County (2024), Town of Apple Valley (Nov 2022)

Figure 2-3



Existing Zoning Designations

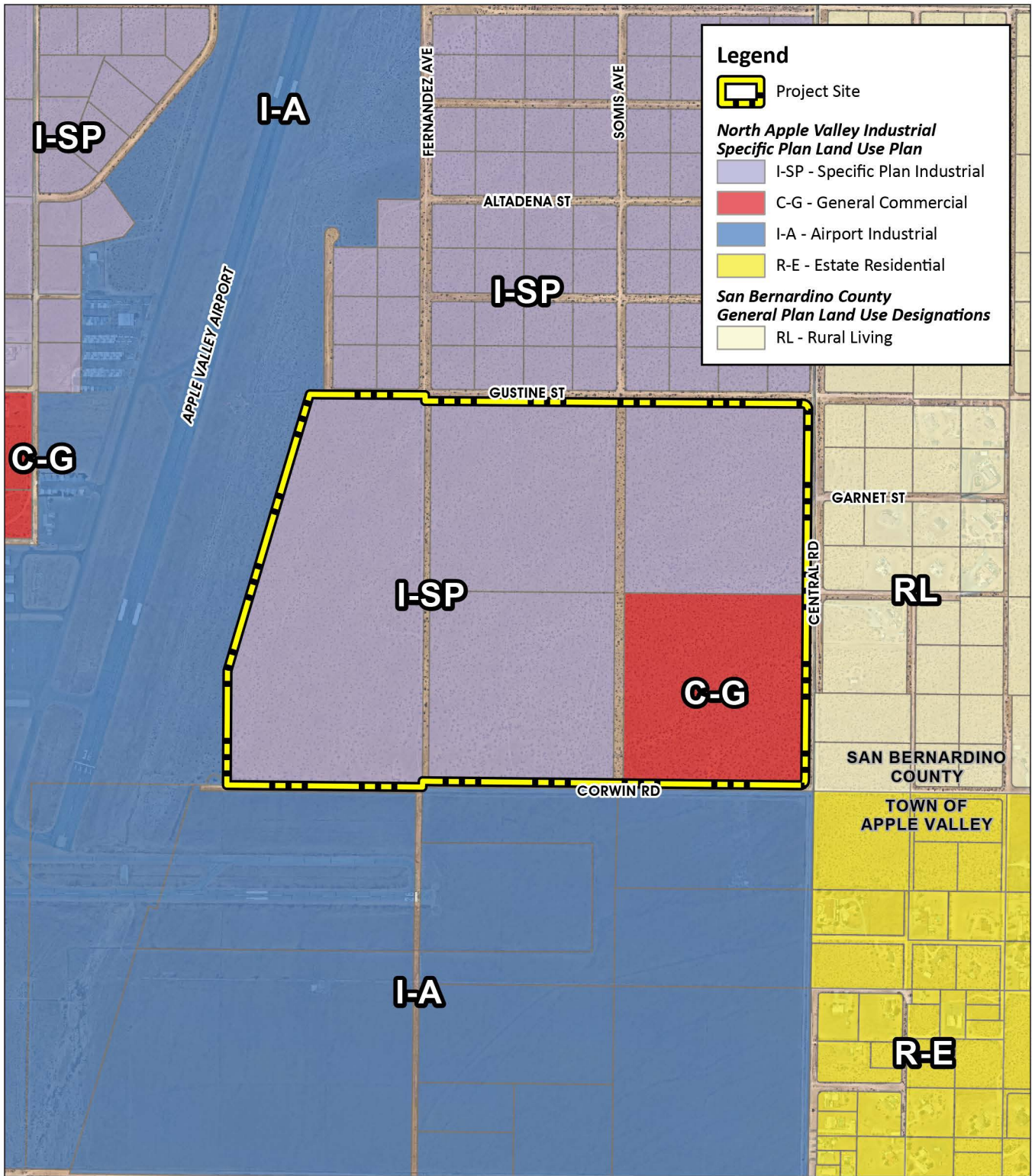
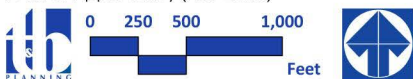


Figure 2-4

Source(s): Esri, Nearmap Imagery (July 2023), San Bernardino County (2024), Town of Apple Valley (Nov 2022)



Existing Specific Plan Land Use Designations



2.4.5 SCAG REGIONAL TRANSPORTATION PLAN / SUSTAINABLE COMMUNITIES STRATEGY

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities' strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region.

In April 2024, SCAG adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as "Connect SoCal." The RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. These goals are meant to provide guidance for considering a proposed project within the context of regional goals and policies. Project consistency with Connect SoCal illustrates consistency with goals set forth for the Project region.

2.5 EXISTING PHYSICAL SITE CONDITIONS

CEQA Guidelines Section 15125(a)(1), recommends that the physical environmental condition that existed at the time an EIR's NOP is released for public review normally be used as the comparative baseline for the EIR analysis. The NOP for this EIR was released for public review on February 9, 2024, and the following pages include a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. Figure 2-1 depicts the existing conditions of the Project site and its surroundings. More information regarding the Project's site's environmental setting is provided in the specific subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 LAND USE

Under existing conditions, the Project site is wholly vacant and undeveloped, except for two unpaved access roads running in north-south orientation through the site. The more easterly of the two access roads runs along what was previously envisioned as the future alignment of Fernandez Street. Properties located to the north and northeast of the Project site are vacant and undeveloped.

2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES

The Project site is currently undeveloped, and slopes gently downward from northeast to southwest. The subject property is located between 2,975 to 3,085 feet above mean sea level (MSL). Two unpaved access roads bisect the subject property, and two unpaved access roads border the north and west of the subject property. Under existing conditions, portions of the site have been subject to illegal dumping, and evidence residential trash, spent shell casings, and concrete rubble. (Noreas, 2025)(SCG, 2022) Please refer to Figure



4.1-1 and Figure 4.1-2, presented within Section 4.1, *Aesthetics*, which illustrate the existing conditions of the Project site.

2.5.3 AIR QUALITY AND CLIMATE

The Project site is located in the portion of the County of San Bernardino, California, that is part of the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains within the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and Central California valley regions by mountains (highest elevation is approximately 10,000 feet), whose passes form the main channels for these air masses. The Mojave Desert is bordered on the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser pass lies between the San Bernardino Mountains and the Little San Bernardino Mountains in the Morongo Valley. The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley), whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

During the summer, the MDAB is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate that at least three months have maximum average temperatures over 100.4° F. Snow is common above 5,000 feet in elevation, resulting in moderate snowpack and limited spring runoff.

Currently, the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are exceeded in most parts of the MDAB. Under the NAAQS, the Project region within the MDAB is in nonattainment for ozone (“O₃”; 8-hour standard) and particulate matter smaller than 10 microns (PM₁₀). For the CAAQS, the Project region within the MDAB is in nonattainment for O₃ (1-hour and 8-hour) and PM₁₀. In response, the MDAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the State and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. (Urban Crossroads, 2025a)

Refer to EIR Subsections 4.2, *Air Quality*, and 4.7, *Greenhouse Gas Emissions*, for a more detailed discussion of the existing air quality and climate setting in the Project area.



2.5.4 BIOLOGY

Creosote Bush Scrub and Developed/Disturbed are the dominant land cover types on the Project site. Creosote Bush Scrub within the Project site consists of widely spaced creosote (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), cheesebush (*Ambrosia Salsola*), and sweetbush (*Bebbia juncea*) with bare ground between them. Developed or disturbed lands include locales that have been disked, cleared, or otherwise altered by human activities. This cover type within the Project site includes off-highway vehicle routes, an abundance of trash from illegal dumping, spent shell casings, and cleared lands. Common non-native plants species within this land cover type included red brome and Mediterranean grass. No Federal or State listed plant species were observed within the Project site during the recent field surveys. However, several species of native cacti are located within the Project site. No Western Joshua Trees are located on the Project site.

Wildlife species observed within the Project site consisted of commonly occurring species including, but not limited to, house finch (*Haemorhous mexicanus*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), and cottontail (*Sylvilagus audubonii*). No Federal or State listed wildlife species were observed within the Project site during the recent field surveys. One Burrowing Owl was observed within the Project site. (Noreas, 2025)

Refer to EIR Subsection 4.3, *Biological Resources*, for a more detailed discussion of the existing biological resources setting.

2.5.5 CULTURAL RESOURCES & TRIBAL CULTURAL RESOURCES

The Project area is within Sidewinder Valley in the western Mojave Desert. The Mojave Desert is bounded on the west by the Sierra Nevada Mountains, on the south by the Transverse and Peninsular ranges, on the southeast and east by the Yuma and Colorado deserts, and on the north by the Great Basin. The western Mojave Desert encompasses several valleys, including Apple Valley, Victor Valley, Antelope Valley, Fremont Valley, and Lucerne Valley, along with the Mojave River and the Barstow area.

The results of the record search indicated that five previous investigations were conducted within 0.5 miles of the Project site. Ten (10) cultural resources were previously documented within 0.5 miles of the Project site. Seven were dated to the historic period and three were dated to the prehistoric period. The historic period resources include six refuse scatter sites and one structure. The prehistoric resources include two isolated flaked stone debitage and one lithic scatter site. None of the documented resources are within the proposed Project site. (Chronicle Heritage, 2025)

Pursuant to Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18), Native American outreach letters were sent to 24 individuals representing 13 local Native American tribal groups to elicit information on Native American cultural resources that may be in the vicinity of the Project site. Through AB 52/SB 18 consultation, it was determined the Project area could be considered culturally sensitive due to the proximity to previously recorded sites.



Refer to EIR Subsection 4.4, *Cultural Resources* and Subsection 4.14, *Tribal Cultural Resources*, for a more detailed discussion of the existing cultural and tribal cultural resources setting.

2.5.6 GEOLOGY

The site is located within the Mojave Desert Geomorphic Province. The Mojave Desert is bounded on the southwest by the San Andreas fault and the Transverse Ranges and on the northeast by the Garlock fault. The Mojave Desert is an ancient feature formed in response to the inception of movement on the San Andreas and Garlock faults. The region is characterized by broad alluviated basins that are burying the previously mountainous topography.

The Project site is located in an area of southern California that is subject to strong ground motions due to seismic events (i.e., earthquakes). The geologic structure of southern California is dominated mainly by northwest-trending faults associated with the San Andreas system. Research of available maps indicates that the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Furthermore, no evidence of faulting was identified during the Geotechnical Investigation. The nearest active fault zone to the Project site is the Helendale Fault Zone, located approximately 3.6 miles to the northeast. (SCG, 2022)

Refer to EIR Subsection 4.6, *Geology and Soils*, for a more detailed discussion of the existing geological setting.

2.5.7 HYDROLOGY

The Project site is located in the Mojave River Watershed, which is a hydrologically diverse area covering over 5,400 square miles in the California High Desert, in San Bernardino County. Under existing conditions, the Project site accepts offsite flows from the adjacent properties in the northeast. The Project site generally surface drains to the southwest and discharges into an earthen channel on the south side of the Project site. The channel runs west and into a larger earthen channel adjacent to the airport. (Thienes, 2024a)

Refer to EIR Subsection 4.9, *Hydrology and Water Quality*, for a more detailed discussion of the existing hydrologic setting.

2.5.8 NOISE

The primary sources of noise in the study area include vehicular traffic on highways and major arterials, railroad activities serving the nearby quarry, and general aviation aircraft noise from overhead flights and take-off and landings Apple Valley Airport. Noise is also related to mechanical and industrial activities associated with the currently limited development within the study area. The nearest existing noise-sensitive residential use is located approximately 492 feet east of the Project site. (Urban Crossroads, 2025e)

Refer to EIR Subsection 4.11, *Noise*, for a more detailed discussion of the existing noise setting.



2.5.9 UTILITIES AND SERVICE SYSTEMS

The Project site is located in the water supply service area of Liberty Utilities. Liberty serves approximately 19,000 customer connections, or approximately 80% of residential, commercial, industrial and institutional development in the Town. (Liberty Utilities, 2021)

Apple Valley owns, operates and maintains the local wastewater collection system. The Town discharges its wastewater to the Victor Valley Wastewater Reclamation Authority (VWVRA) regional wastewater treatment plant. VWVRA serves a 279 square mile area that includes Apple Valley, Hesperia, Victorville, Spring Valley Lake and Oro Grande. VWVRA treats about 12 million gallons of wastewater per day. (VWVRA, n.d.)

Solid waste disposal and recycling services for the proposed Project site would be provided by Burrtec Waste Industries. Non-hazardous solid waste generated in the Town's service area is currently deposited in the Victorville Landfill, which is currently operated by the County of San Bernardino. This landfill is located at 17080 Stoddard Wells Road in the northeastern portion of the City of Victorville. The operating permit for the Victorville landfill allows for a maximum of 3,000 tons a day. (CalRecycle, n.d.)

With respect to dry utilities, Southern California Edison (SCE) provides electricity services to a large majority of southern and central California, including the Project site. SCE serves 180 cities across 50,000 square miles of service area (SCE, 2024). Additionally, the Project site is located in the natural gas service area of Southwest Gas, which maintains local underground service lines in the Town of Apple Valley. (Apple Valley, 2009)

Refer to EIR Subsection 4.15, *Utilities and Service Systems*, for a more detailed discussion of the existing utility and service system setting.

2.5.10 RARE AND UNIQUE RESOURCES

As required by CEQA Guidelines Section 15125(c), the environmental setting should place special emphasis on resources that are rare or unique to that region and would be affected by the Project. Based on the existing conditions of the Project site and surrounding area described above and discussed in more detail in Section 4.0, *Environmental Analysis*, the Project site does not contain any resources that are rare or unique to the region.



3.0 PROJECT DESCRIPTION

This Section provides all of the information required of an EIR Project Description pursuant to CEQA Guidelines Section 15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's characteristics; a description of the intended uses of this EIR (including a list of the government agencies that are expected to use this EIR in their decision-making processes); a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

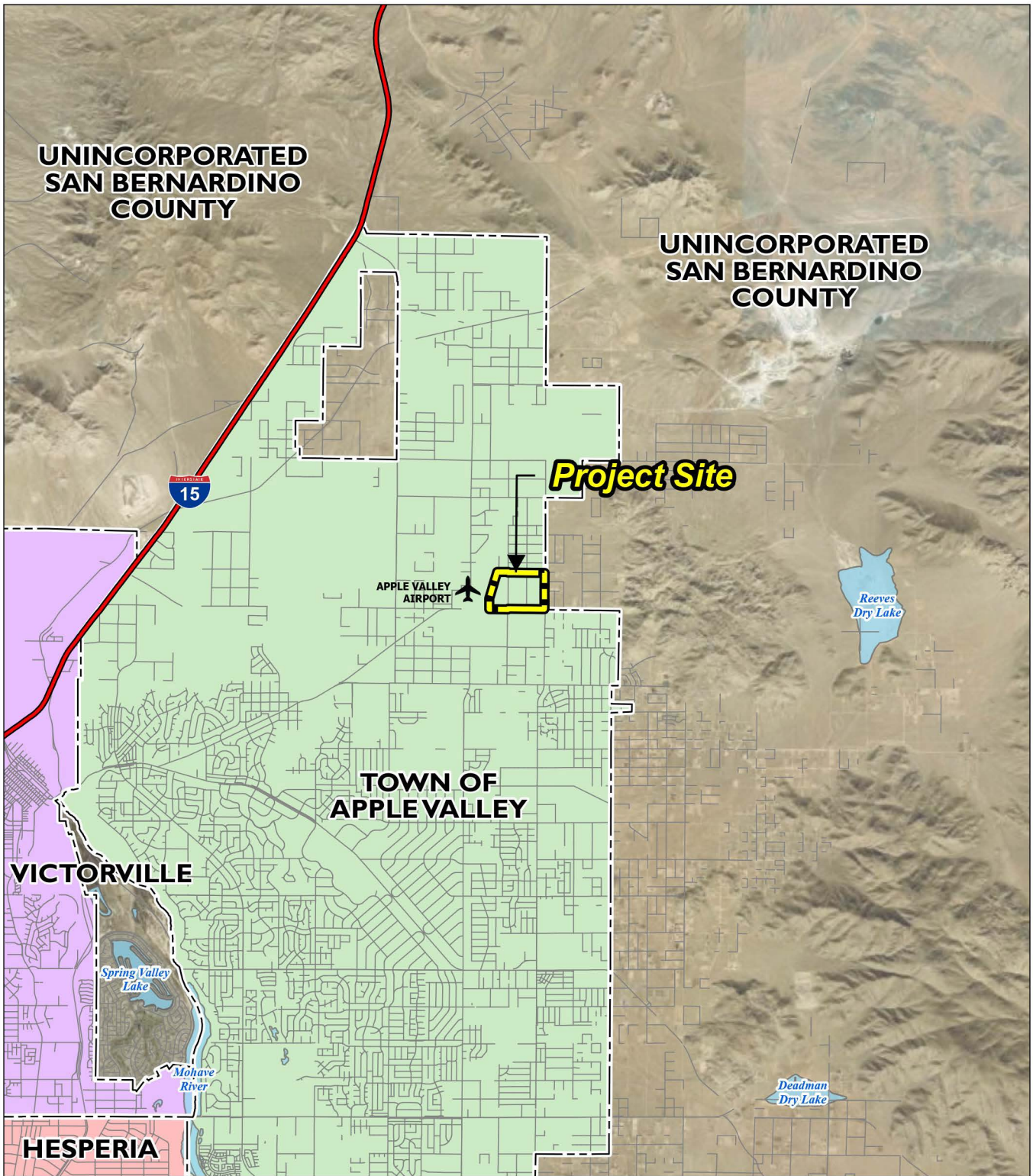
3.1 PROJECT LOCATION AND SETTING

As shown on Figure 3-1, *Regional Map*, the Project site is located in the Town of Apple Valley which is within the Victor Valley Area of San Bernardino County, California. The Town of Apple Valley is situated northeast of the City of Hesperia, east of the City of Victorville, and west and south of unincorporated San Bernardino County. The Project site is located approximately 4.6 miles east of Interstate 15 (I-15) and approximately 4.2 miles north of State Route 18 (SR-18).

At the local scale, the Project site is located immediately north of Corwin Road, west of Central Road, south of Gustine Street, and east of the Apple Valley Airport (see Figure 3-2, *Vicinity Map* and Figure 3-3, *USGS Topographic Map*). The Project site is comprised of five parcels that total approximately 226.75 gross acres in size (Assessor's Parcel Number (APN): 0463-373-01, -03, -04, -05, -06).

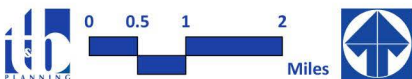
The Project site is located within the North Apple Valley Industrial Specific Plan (NAVISP) area. Under existing conditions, the Project site is vacant and undeveloped. The overall site slopes downward toward the southwest at a gradient of about two percent. The site topography is slightly rolling, with several northeast to southwest trending drainage courses. Two vegetation communities and land cover types are located on the site: approximately 449.06 acres of Creosote Bush Scrub and approximately 137.85 acres of Developed/Disturbed lands. Portions of the site have been subject to illegal dumping, and evidence residential trash, spent shell casings, and concrete rubble.

Property to the north of the Project site is vacant and undeveloped. To the east of the site are residential uses and vacant land zoned "Apple Valley/Rural Living" by the County of San Bernardino. Residences in the vicinity are located approximately 492 feet to 1,456 feet from the property line of the Project site. An Apple Valley Airport runway is located approximately 500 feet from the southern property line, as well as undeveloped land. Undeveloped land is located westerly adjacent to the site, beyond which is another Apple Valley Airport runway (approximately 700 feet away from the western property line).



Source(s): Esri, San Bernardino County (2023)

Figure 3-1

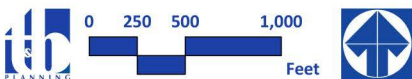


Regional Map

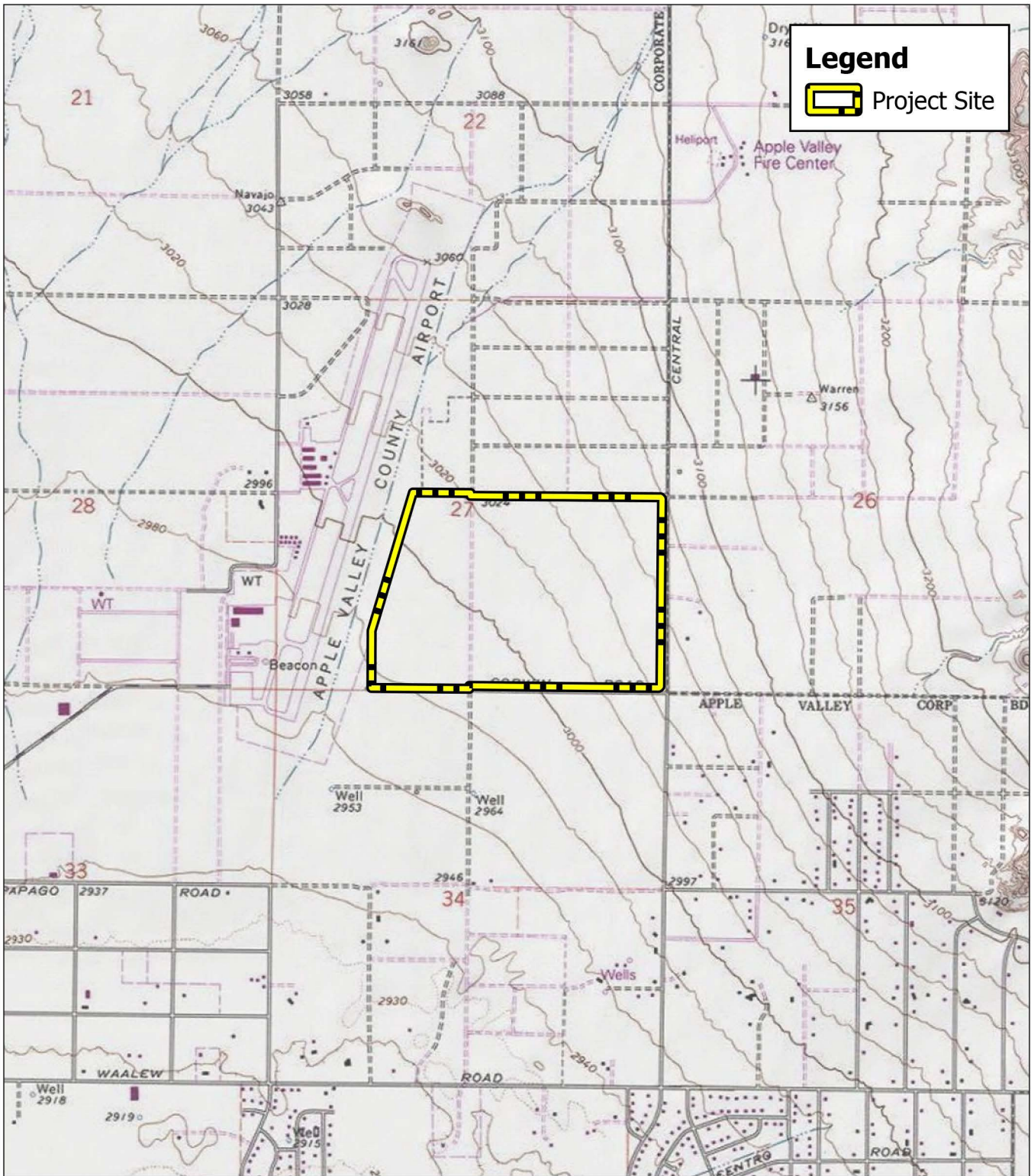


Source(s): Esri, Nearmap Imagery (July 2023), San Bernardino County (2024)

Figure 3-2

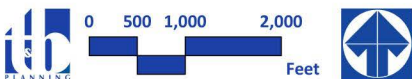


Vicinity Map



Source(s): Esri, USGS (2013)

Figure 3-3



USGS Topographic Map



3.2 STATEMENT OF OBJECTIVES

The underlying purpose and goal of the Lake Creek Logistics Center is to develop modern industrial uses in the Town of Apple Valley in close proximity to the State highway system in order to increase employment opportunities and improve the Town's economic competitiveness. The Project would achieve its underlying purpose and goal through the following objectives.

- A. To efficiently develop a vacant and underutilized property with industrial uses to help meet the regional demands for goods movement facilities.
- B. To expand economic development, facilitate job creation, and increase the tax base for the Town of Apple Valley by establishing new industrial development adjacent to established and planned industrial areas.
- C. To attract new businesses to the Town of Apple Valley and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.
- D. To make efficient use of a property in the Town of Apple Valley by maximizing its buildout potential for employment-generating uses.
- E. To develop Class A speculative industrial buildings in the Town of Apple Valley that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.
- F. To develop industrial buildings in close proximity to the I-15 and SR-18 freeways that can be used as part of the southern California goods movement network.

3.3 PROJECT'S COMPONENT PARTS AND DISCRETIONARY APPROVALS

The Project involves discretionary applications for Specific Plan Amendment (SPA) 2023-001, Site Plan Review 2022-003, and Tentative Parcel Map (TPM) No. 20659. The Town's Planning Commission would consider and make a recommendation to Town Council on the Project. Town Council is the decision-making authority for the project, due to the request for a Specific Plan Amendment. These principal discretionary actions required by the Town of Apple Valley to implement the Project are described in detail on the following pages. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-3, *Matrix of Project Approvals/Permits*, presented at the end of this Section.

Additionally, a Development Agreement is proposed between the Project Applicant and the Town of Apple Valley to provide long-term vested right to develop industrial buildings on the Project site.



3.3.1 SPECIFIC PLAN AMENDMENT 2023-001

To accommodate the Project's anticipated uses, the NAVISP designation of the southeasterly parcel has been proposed to be changed from C-G General Commercial to I-SP Specific Plan Industrial. See Figure 3-4, *Specific Plan Amendment Exhibit*. The Specific Plan Industrial designation is intended to support the development of a broad range of clean, well planned industrial, quasi-industrial and commercial support uses. Uses may range from manufacturing and warehousing to offices and retail facilities which support the employee population within the Specific Plan Area.

3.3.2 SITE PLAN REVIEW 2022-003

As shown on Figure 3-5, *Master Site Plan*, the Project proposes the construction and operation of three industrial buildings totaling approximately 3.48 million square feet. Due to the speculative nature of the Project and to account for potential future tenant needs, cold storage has been assumed to account for 10 percent of the Projects overall building footprint. The primary components of the Project are described below.

A. Building 1

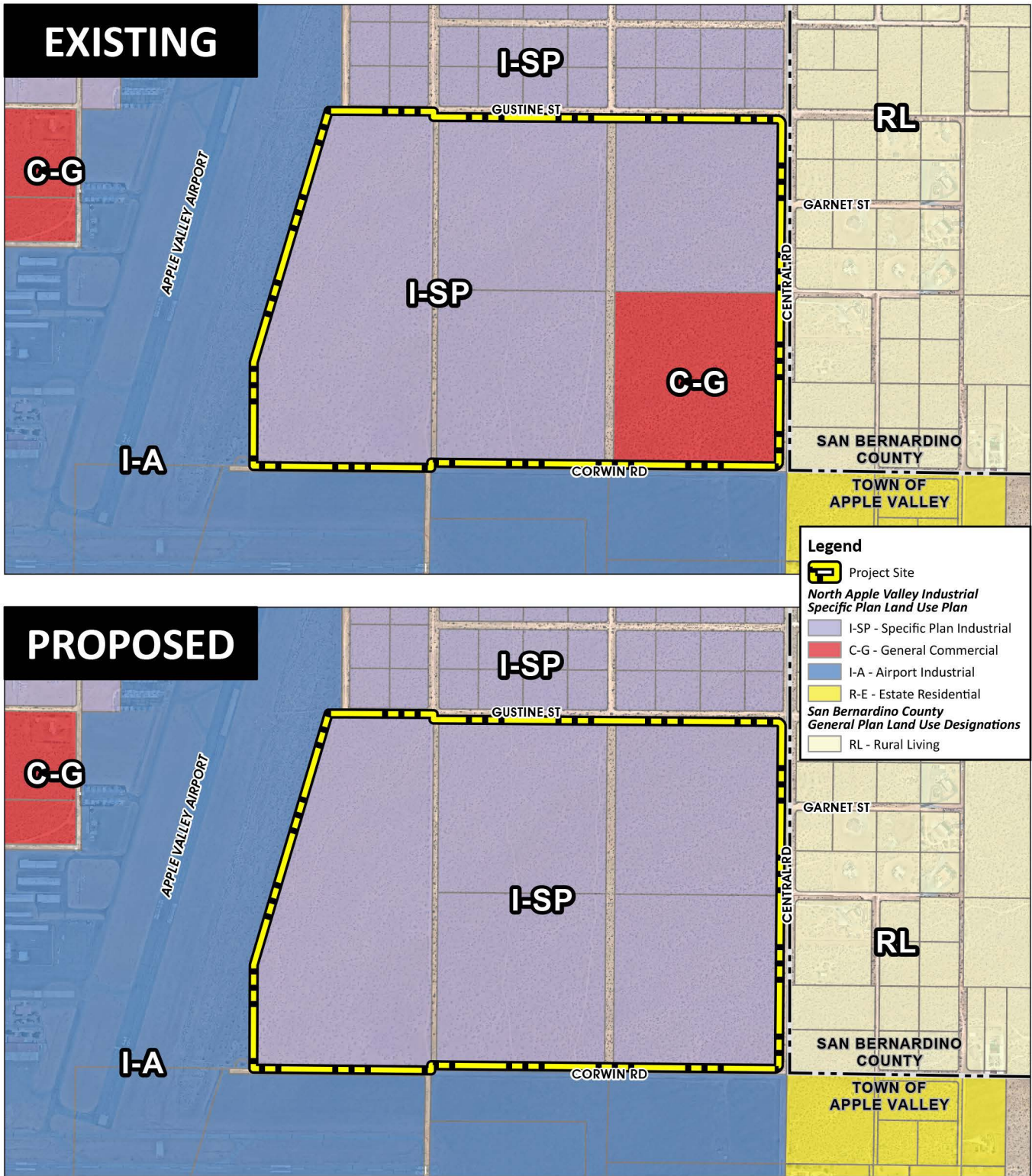
Parcels 0463-373-04 and -06 (approximately 76.60 gross acres) would be merged to form Parcel 1, measuring 76.36 net acres. Building 1 would encompass approximately 1,238,320 sf, including 20,000 sf of office space for a floor area ratio (FAR) of 0.37. Building 1 would provide 446 truck trailer parking spaces and 1,133 automobile parking spaces, including 20 spaces that would be compliant with Americans with Disabilities Act (ADA) standards, 4 ADA Van (12' wide) parking spaces, and 92 electronic vehicle (EV)-ready parking spaces.

B. Building 2

Parcels 0463-373-03 and -05 (approximately 80.08 gross acres) would be merged to form Parcel 2, measuring 80.08 net acres. Building 2 would consist of approximately 1,238,320 sf, including 20,000 sf of office space for an FAR of 0.36. Building 2 would provide 543 truck trailer parking spaces and 1204 automobile parking spaces including 20 ADA standard parking spaces, 4 ADA Van (12' wide) parking spaces, and 105 EV-ready parking spaces.

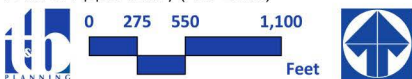
C. Building 3

The boundaries of Parcel 0463-373-01 would remain unchanged as "Parcel 3". Building 3 would consist of approximately 1,004,096 sf, including 20,000 sf of office space for an FAR of 0.34. Building 3 would provide 576 truck trailer parking spaces and 695 automobile parking spaces, including 20 ADA standard parking spaces, 4 ADA Van (12' wide) parking spaces, and 64 EV-ready parking spaces.

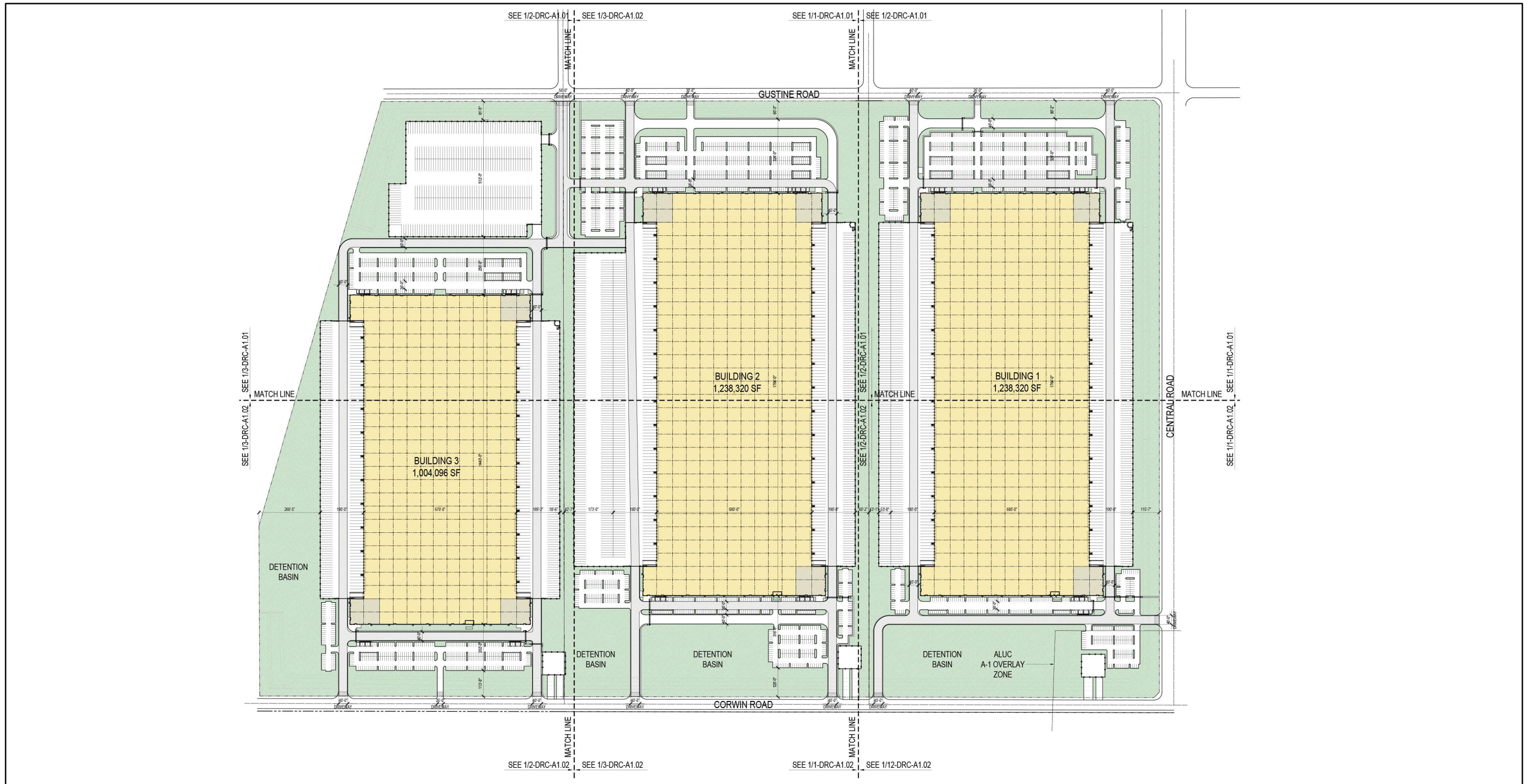


Source(s): Esri, Nearmap Imagery (July 2023), San Bernardino County (2024),
Town of Apple Valley (Nov 2022)

Figure 3-4

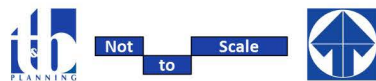


Specific Plan Amendment Exhibit



Source(s): SKH Architects (11-21-2024)

Figure 3-5



Master Site Plan



D. Architecture Plan

Architectural elevations for the Project are illustrated in Figure 3-6, *Proposed Architectural Elevations (Building 1)* through Figure 3-8, *Proposed Architectural Elevations (Building 3)*. The proposed architecture plan provides buildings with a maximum height of 48 feet above finished floor elevation (51 feet to top of parapet and architectural features). The buildings would be constructed with concrete tilt-up walls, with special architectural features and colors at the potential office locations of the building, which would feature blue tempered vision glass and concrete back spandrel glass. The proposed building's exterior color palette would be comprised of various shades of white, gray, and blue. Decorative building elements include panel reveals, parapets, mullions, canopies, and finished wood areas.

E. Landscape Plan

As shown in Figure 3-9, *Proposed Landscape Plan*, proposed landscaping includes 24" box trees, shrubs, and drought-tolerant accent plants in addition to a variety of groundcovers. Landscaping is proposed along the parcel boundaries of each building and in and around the associated parking lots.

F. Water and Sewer Infrastructure Improvements

The Town of Apple Valley has several privately owned water companies that provide water service to residents and businesses in Apple Valley. The two largest water companies are Liberty Utilities and Golden State Water Company. Water service to the Project site would be provided by Liberty Utilities. The Project proposes 12-inch Ductile Iron Pipe (DIP) connections along Corwin Road and Gustine Street, a 16-inch DIP connection along Central Road north to Lafayette Street, and an 8-inch pressure reducing valve (PRV).

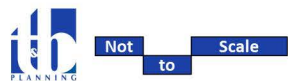
Sewer service to the Project site would be provided by the Town of Apple Valley Public Works Wastewater Division. Sewer infrastructure is not currently located immediately adjacent to the site. As such, the Project would install an approximately one-mile-long sewer line within the Corwin Road right-of-way westerly to an existing sewer main located at the intersection of Corwin and Ramona Roads. This alignment would require the sewer line to be installed under the Apple Valley Airport runway. The sewer line would be installed using trenchless construction techniques (jack and bore) so that the runway is not affected. A 10' wide sewer easement, extending westward from the terminus of Corwin Road, across Apple Valley Airport, would be dedicated by the County of San Bernardino to the Town. The San Bernardino County Department of Airports has reviewed the Project sewer plans and provided a letter of support.

The Project's off-site utility connections are illustrated in Figure 3-10, *Offsite Utility Improvements*.



Source(s): LHA (July 2024)

Figure 3-6

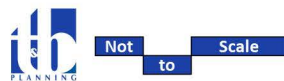


Proposed Architectural Elevations (Building 1)

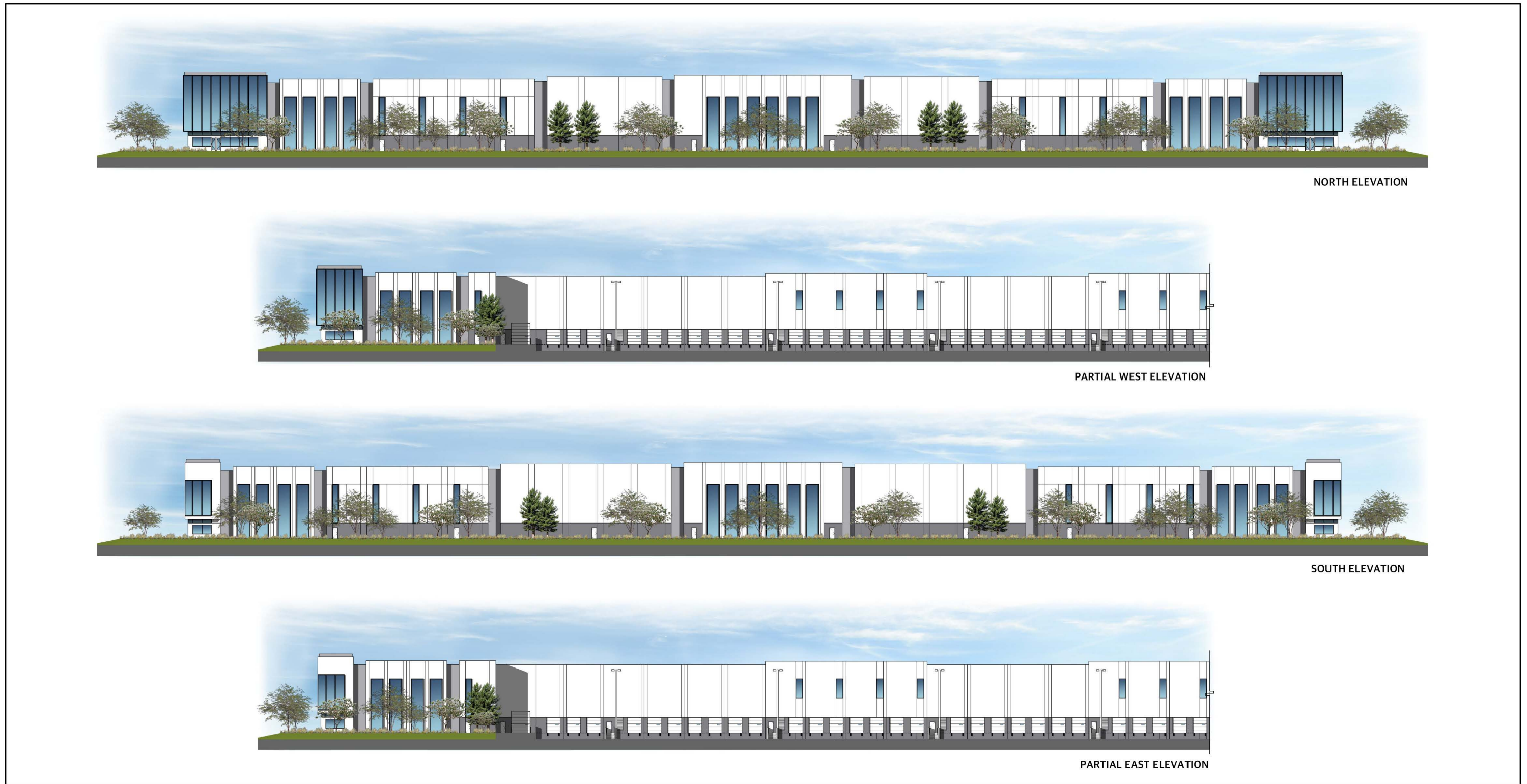


Source(s): LHA (July 2024)

Figure 3-7

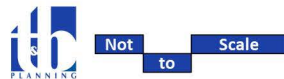


Proposed Architectural Elevations (Building 2)

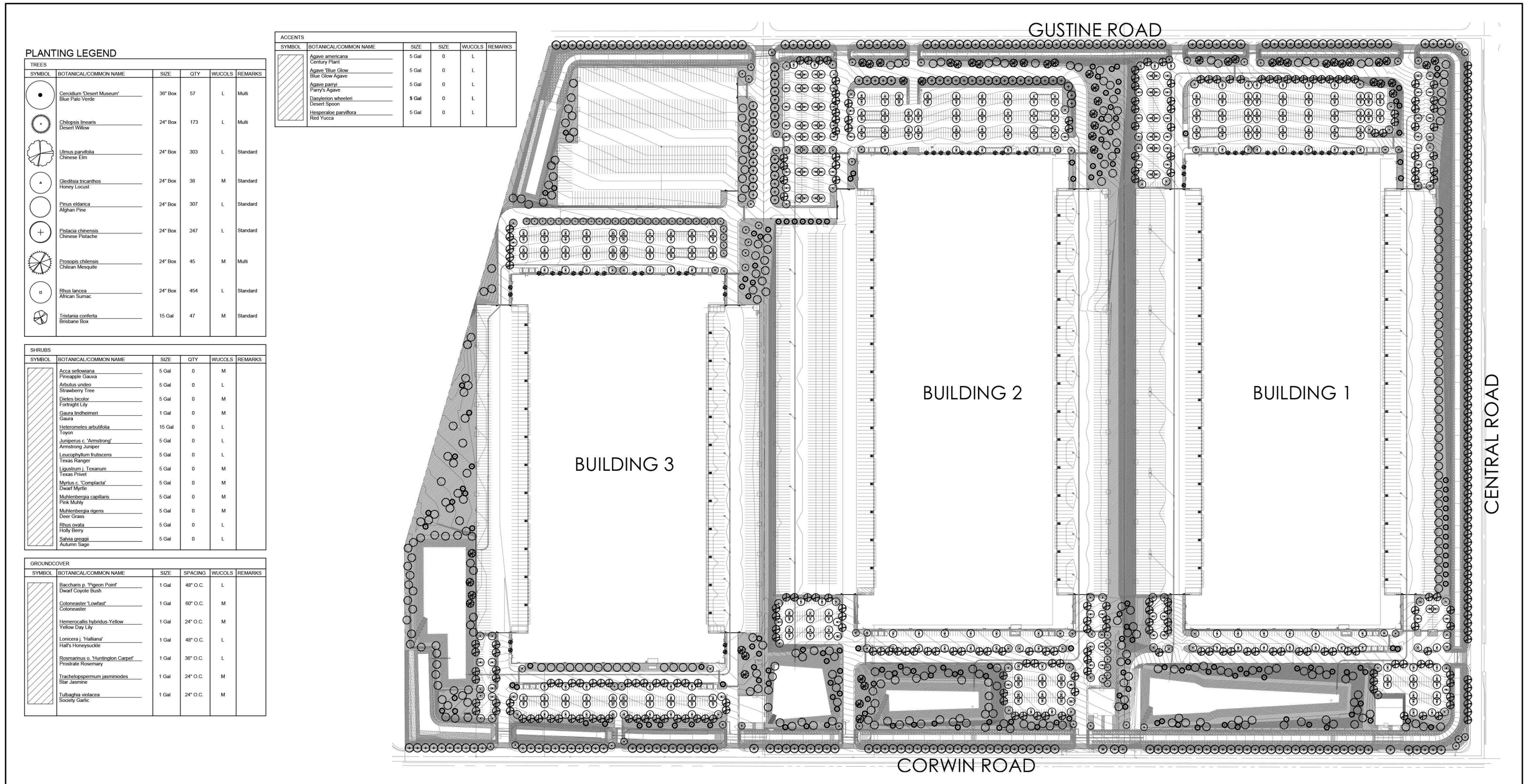


Source(s): LHA (July 2024)

Figure 3-8

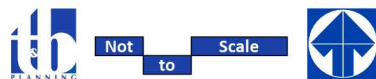


Proposed Architectural Elevations (Building 3)

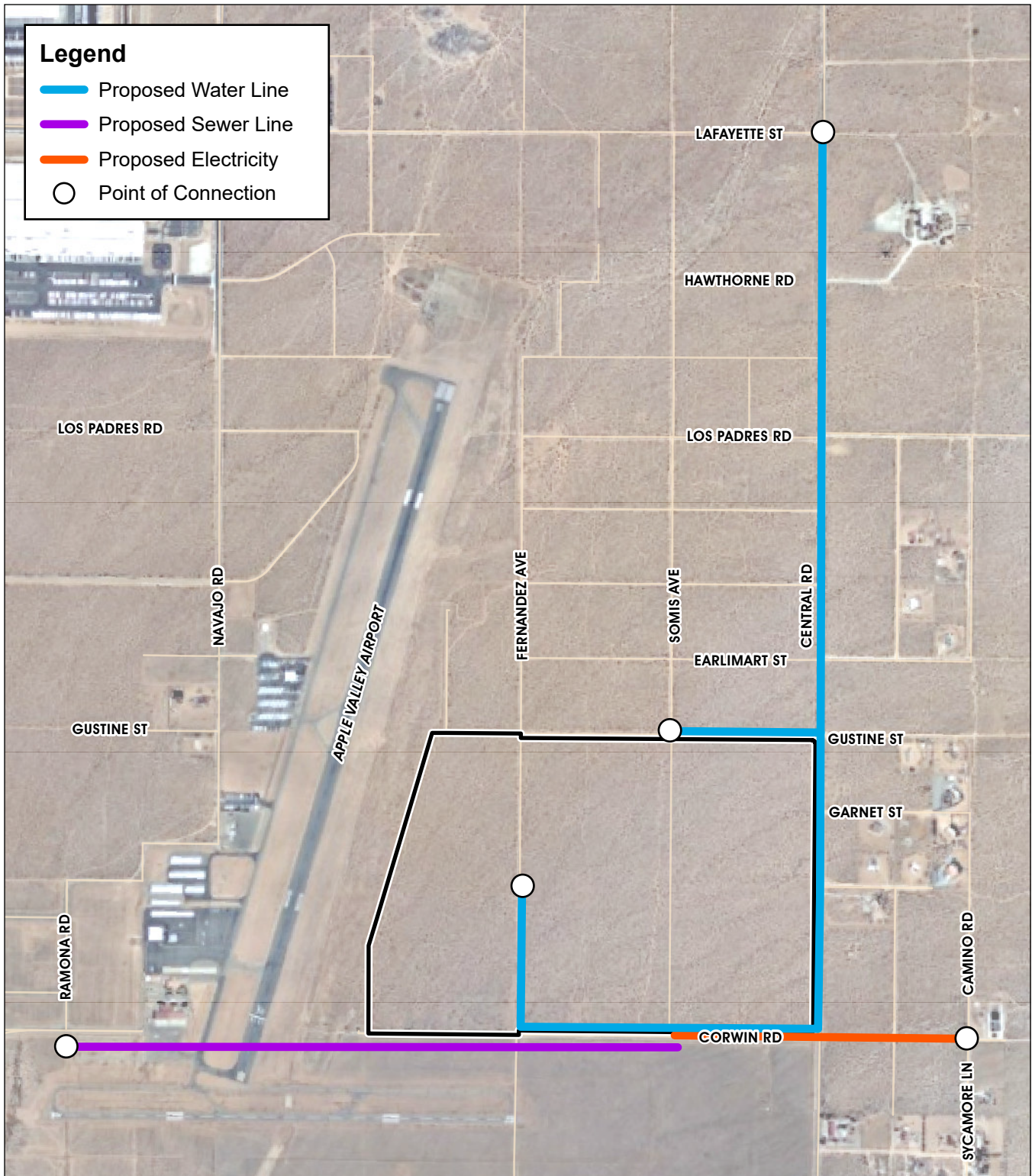


Source(s): Hunter Landscape (07-29-2024)

Figure 3-9

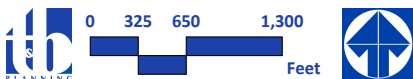


Proposed Landscape Plan



Source(s): Esri, Nearmap Imagery (July 2022), Thienes Engineering (2023)

Figure 3-10



Offsite Utility Improvements



G. Stormwater Drainage Infrastructure Improvements

The Project's drainage system has been designed to capture and convey offsite flows that run onto the Project site, as well as runoff generated onsite. In summary, drainage from all three buildings would be collected in catch basins located throughout the site. Each building will have multiple storm drain systems (Lines A-H, Line J, and Line P, discussed subsequently) which will discharge to one of four proposed detention basins. From the detention basins, flows will discharge by gravity via separate storm drain system to an onsite channel where it will eventually spillover to the westerly adjacent earthen channel. The proposed drainage system is described below.

Building 1: Runoff from the northerly parking lot would be intercepted in catch basins located in the southerly portion of the parking lot. Proposed Line E would then convey flows westerly around the building, southerly through the truck yard. Runoff from the westerly portion of the building and westerly truck yard would be intercepted by catch basins located in the truck yard and conveyed to Line E via several laterals. The storm drain continues south to Detention Basin #1.

Flows from the easterly half of the building would be intercepted in a catch basin located in the easterly truck yard. Proposed Line F would convey runoff southerly. The remaining vehicle parking at the southerly side of the building would drain to Line E, prior to discharging into Detention Basin #1.

Building 2: Runoff from the northerly parking lot would be intercepted in catch basins located in the southerly portion of the parking lot. Proposed Line D would then convey flows easterly around the building, southerly through the truck yard. Runoff from the northeasterly ramp, easterly portion of the building, and easterly truck yard would be intercepted by catch basins located in the truck yard and conveyed to Line D via several laterals. Line D will continue south around the building then westerly where it will pick up flows from all the vehicle parking lots via several laterals. The storm drain would discharge into Detention Basin #2.

Flows from the westerly half of the building, the westerly truck yard would be intercepted in catch basin located in the westerly truck yard. Proposed Line C would convey runoff southerly. The storm drain will continue south where it would discharge into Detention Basin #3.

Building 3: Runoff from the northerly parking lots would be intercepted in catch basins located at the southerly portion of each parking lot. Proposed Line A would convey flows westerly around the building, southerly through the truck yard. Runoff from the northwesterly ramp, westerly portion of the building, and westerly truck yard would be intercepted by catch basins located in the truck yard and conveyed to Line A via several laterals. Line A would continue south through the truck yard then westerly where it would discharge into Detention Basin #1.

Flows from the ramp at the northeast of the building, easterly half of the building, and the easterly truck yard would be intercepted in a catch basin located in the easterly truck yard. Proposed Line B would convey runoff southerly, before turning west around the building collecting flows from the



southerly parking lots via several laterals. The storm drain would continue west where it would discharge into Detention Basin #4.

Driveways: Runoff from the southwesterly driveway for building 3 would surface flow south into Line P via catch basin where flows would discharge into the south channel.

Runoff from the southeasterly driveway for building 3 would surface flow south into Line G via catch basin where flows would discharge into the south channel.

Runoff from the southwesterly driveway for building 2 would surface flow south into Line H via catch basin where they will discharge into the south channel.

Runoff for the southeasterly driveway for building 2 would surface flow south into Line J via catch basin where flows would discharge into the south channel.

H. Grading and Retaining Walls

As part of site preparation activities, a majority of the Project site would be subject to grading and disturbance. Specifically, grading activities on site would require approximately 1,406,071 cubic yards (CY) of cut and approximately 1,406,071 CY of fill. No import or export is required. A retaining wall would be constructed in the northeasterly portion of the site, between Building 1 and the earthen channel that runs along Central Road. The retaining wall would vary from approximately three feet to approximately 13 feet.

I. Energy

Electrical power for the Town is provided by Southern California Edison (SCE) and natural gas service is provided by the Southwest Gas Holdings, Inc. (Southwest Gas). No natural gas would be utilized on the Project site.

As illustrated in Figure 3-10, *Offsite Utility Improvements*, the Project would install electrical utility lines within/along Corwin Road approximately 1,300 feet east from the site boundary to Camino Road to connect to existing lines in the Project vicinity.

J. Roadway Improvements

As illustrated in Exhibit 1-4, *Site Access Recommendations*, of the Traffic Analysis (provided as Appendix K2), the following improvements to adjacent roadways would be completed as part of the Project:

- Construct six driveways (Driveways 1-6) on Gustine Street. All driveways will be stop-controlled and allow for full truck turning movements.



- Construct one driveway (Driveway 7) on Central Road. Driveway 7 will be stop-controlled and allow for full truck turning movements.
- Construct six driveways (Driveways 8-13) on Corwin Road. All driveways will be stop-controlled and allow for full truck turning movements.
- Construct Gustine Street, Central Road, and Corwin Road along the Project's frontages at their ultimate half-section width according to the Town of Apple Valley General Plan and consistent with the Town's standards. Additionally, the Project would provide an additional 12 feet of pavement width along Gustine Street and Corwin Road to accommodate one lane on the opposite side of the street. The Project includes constructing cul-de-sacs at the westerly termini of both Corwin Road and Gustine Street where they terminate at the airport property.

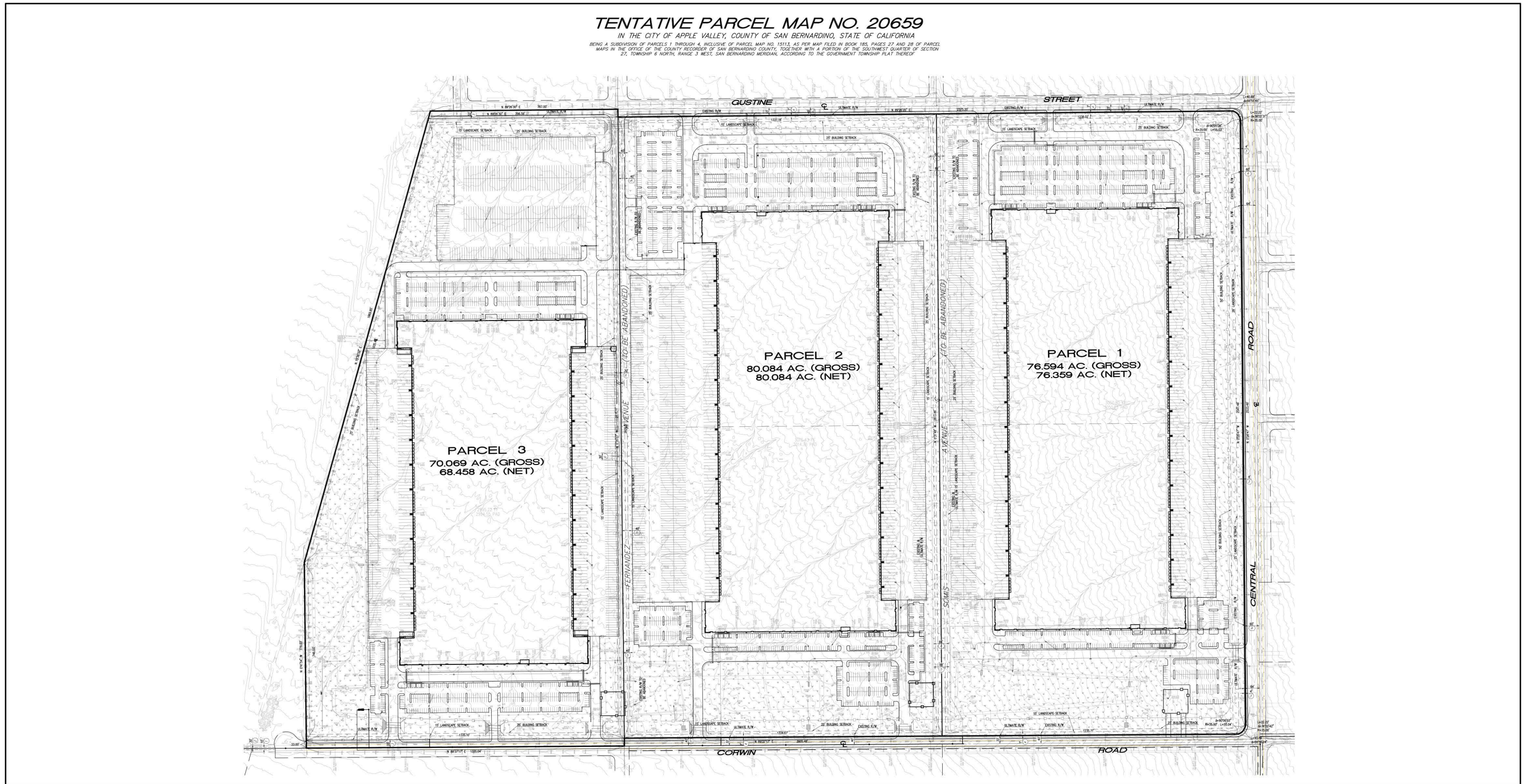
Curb, gutter, and sidewalk improvements would be installed along all Project site street frontages.

3.3.3 TENTATIVE PARCEL MAP NO. 20659

As shown on Figure 3-11, *Tentative Parcel Map No. 20659*, the Project would include a TPM to merge parcels 0463-363-03 and -05 to form Parcel 2 and merge parcels 0463-373-04 and -06 to form Parcel 3 to facilitate the implementation of the proposed Site Plan, as described above. The TPM will memorialize the abandonment of street segments across the site of Fernandez and Somis Avenues.

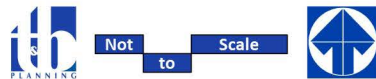
3.3.4 DEVELOPMENT AGREEMENT

The Project would include a development agreement between the Town and the Project Applicant pursuant to California Government Code Sections 65864 et seq. The development agreement would provide a long-term vested right to develop the Project and provide community benefits to the Town.



Source(s): Thienes Engineering, Inc. (02-23-2025)

Figure 3-11



Tentative Parcel Map No. 20659



3.4 SCOPE OF ENVIRONMENTAL ANALYSIS

3.4.1 PROJECT CONSTRUCTION CHARACTERISTICS

A. *Proposed Physical Disturbances*

As depicted on Figure 3-12, *Proposed Grading Plan*, as part of site grading activities, a majority of the Project site would be subject to grading and disturbance. Specifically, grading activities on site would require approximately 1,406,071 cubic yards (CY) of cut and approximately 1,406,071 CY of fill. No import or export is required.

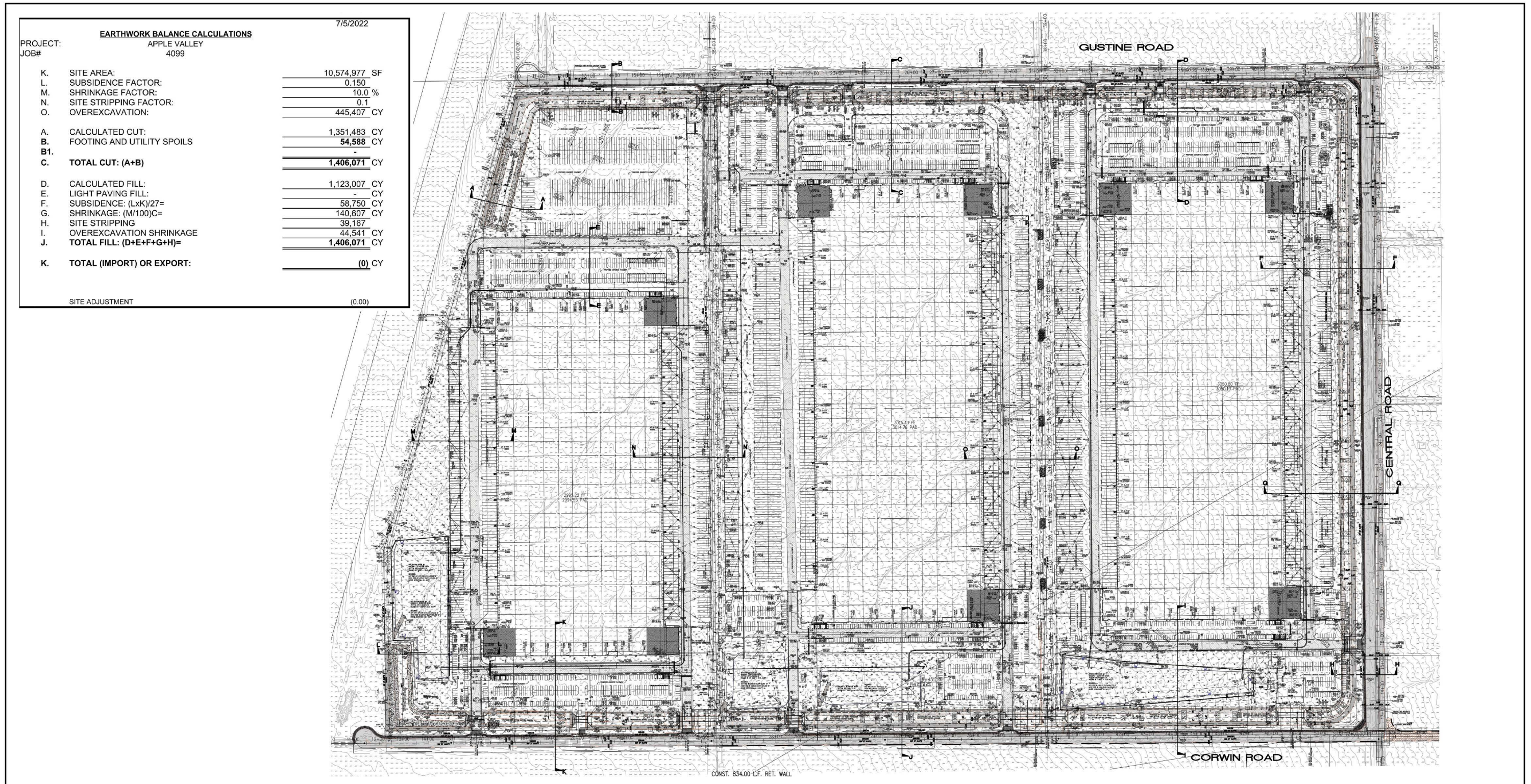
B. *Construction Activities Schedule and Equipment Fleet*

For purposes of analysis in this EIR, construction is assumed to commence in March 2025 and would last through December 2029. The construction schedule utilized in the analysis represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the CEQA Guidelines.

Table 3-1 Estimated Construction Schedule

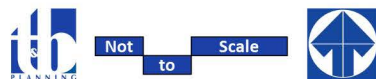
Phase	Start Date	End Date	Days
Site Preparation	03/04/2025	05/12/2025	50
Grading	05/13/2025	10/27/2025	120
Building Construction	10/28/2025	12/17/2029	1,080
Paving	09/12/2028	12/09/2028	64
Architectural Coating	06/08/2027	12/17/2029	660

Source: (Urban Crossroads, 2025a, Table 3-3)



Source(s): Thienes Engineering, Inc. (11-20-2024)

Figure 3-12



Proposed Grading Plan



Table 3-2 Estimated Construction Equipment Fleet

Phase	Equipment	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	5	8
	Crawler Tractors	6	8
Grading	Graders	2	8
	Excavators	3	8
	Scrapers	3	8
	Rubber Tired Dozers	2	8
	Crawler Tractors	3	8
Building Construction	Forklifts	5	8
	Generator Sets	2	8
	Cranes	2	8
	Welders	2	8
	Tractors/Loaders/Backhoes	5	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

Source: (Urban Crossroads, 2025a, Table 3-4)

3.4.2 PROJECT OPERATIONAL CHARACTERISTICS

A. *Proposed Site Activities*

Currently, there are no identified tenants for the proposed buildings. The NAVISP I-SP designation allows for a broad range of clean manufacturing and warehousing uses, ranging from furniture manufacture to warehouse distribution facilities. Appropriate land uses in this designation include manufacturing facilities with showrooms and offices, regional warehousing facilities, and support services for manufacturing and warehousing. Due to the speculative nature of the Project and to account for potential future tenant needs, cold storage has been assumed to account for 10 percent of the Projects overall building footprint. Additionally, since the tenants are unknown, hours of operation and employee count would vary, but is assumed for planning purposes to operate 24/7. Office workers would likely have typical shifts of Monday through Friday, 8:00AM to 5:00PM, while warehouse staff would work in day, evening, and night shifts (3 shifts). Specific hours of operation would be identified during the tenant improvement process.



B. Future Employment

Based on the estimated employment rates specified in Table II-B of the Employment Density Study Summary Report prepared by SCAG, warehouse uses within San Bernardino County generate approximately one employee per 1,195 s.f. of building space. As such, the Project may generate approximately 2,913 employees (3,480,646 s.f. ÷ 1,195 s.f./employee = 2,912.67 employees). (SCAG, 2001, Table II-B)

C. Traffic

During operation of the Project, employees, visitors, and vehicles hauling goods would travel to and from the Project site on a daily basis. The Project is anticipated to generate a total of 8,370 two-way vehicle trip-ends per day with 635 AM peak hour trips and 727 PM peak hour trips (actual vehicles). The Project is anticipated to generate a total of 10,518 Passenger Car Equivalent (PCE) trip ends per day with 740 AM PCE peak vehicle hour trips and 834 PM PCE peak hour vehicle trips.¹

Pursuant to State law, on-road diesel-fueled trucks are required to comply with various air quality and greenhouse gas emission standards, including but not limited to the type of fuel used, engine model year stipulations, aerodynamic features, and idling time restrictions. Compliance with State law is mandatory and inspections of on-road diesel trucks subject to applicable State laws are conducted by the California Air Resources Board (CARB).

3.5 SUMMARY OF REQUESTED ACTIONS

The Town of Apple Valley has primary approval responsibility for the proposed Project. As such, the Town of Apple Valley serves as the Lead Agency for this EIR pursuant to CEQA Guidelines Sections 15050 and 15051. The role of the Lead Agency was previously detailed in EIR Section 1.0, *Introduction*. The Town’s Planning Commission will evaluate this EIR and the Project Applicant’s requested discretionary applications (Specific Plan Amendment 2023-01, Site Plan Review 2022-003, and Tentative Parcel Map No. 20659) and make a recommendation to the Town Council as to whether the Project’s EIR should be certified, and the discretionary applications should be approved. As mentioned above, due to the request for a Specific Plan Amendment, the Town Council is the decision-making authority for the Project, will consider the Project along with the Planning Commission’s recommendations and make a final decision to approve, approve with changes, or deny the Project. The Town will consider the information contained in this EIR and the Project’s Administrative Record in its decision-making processes.

In the event of approval of the Project and certification of the EIR, the Town would conduct administrative reviews and grant discretionary and ministerial permits and approvals to implement Project requirements and conditions of approval. Table 3-3, *Matrix of Project Approvals/Permits*, lists

¹ PCE factors are applied to trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical “real-world” mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. (Urban Crossroads, 2024g)



the agencies that are expected to use this EIR and provides a summary of the subsequent actions associated with the Project. This EIR covers all federal, State, and local government and quasi-governmental approvals which may be needed to construct and implement the Project, whether or not they are explicitly listed in Table 3-3 or elsewhere in this EIR (CEQA Guidelines § 15124(d)).

Table 3-3 Matrix of Project Approvals/Permits

Public Agency	Approvals and Decisions
Proposed Project – Town of Apple Valley Discretionary Approvals	
Town of Apple Valley Planning Commission	<ul style="list-style-type: none"> • Provide recommendation to the Town Council regarding whether to certify the Project’s EIR. • Provide recommendations to the Town Council whether to approve SPA 2023-001, Site Plan Review 2022-003, TPM No. 20659.
Town of Apple Valley Town Council	<ul style="list-style-type: none"> • Certify the EIR along with appropriate CEQA Findings of Fact. • Approve SPA 2023-001, Site Plan Review 2022-003, TPM No. 20659.
Subsequent Town of Apple Valley Ministerial Approvals	
Town of Apple Valley Departments and Divisions	<ul style="list-style-type: none"> • Approve precise site plan(s) and landscaping/irrigation plan(s), as may be appropriate. • Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Approve Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). • Approve sewer infrastructure improvements and connections
Other Agencies – Subsequent Approvals and Permits	
Federal Aviation Administration	<ul style="list-style-type: none"> • Issue an encroachment permit for the proposed sewer alignment and NEPA compliance.
San Bernardino County Department of Airports	<ul style="list-style-type: none"> • Issue utility easement for the proposed sewer alignment.
Lahontan Regional Water Quality Control Board (RWQCB)	<ul style="list-style-type: none"> • Issue a Construction Activity General Construction Permit. • Assure compliance with National Pollutant Discharge Elimination System (NPDES) Permit. • Issue a Water Quality Certification pursuant to Section 401 of the federal Clean Water Act (CWA).
California Department of Fish and Wildlife (CDFW)	<ul style="list-style-type: none"> • Issue a Section 1602 Streambed Alteration Agreement pursuant to the California Fish and Wildlife Code.
San Bernardino County Flood Control District (SBCFCD)	<ul style="list-style-type: none"> • Approve the Project’s proposed drainage improvements.
Town of Apple Valley Fire Protection District	<ul style="list-style-type: none"> • Approve fire hydrant locations and fire protection features for the proposed building.



Public Agency	Approvals and Decisions
Mojave Desert Air Quality Management District (Mojave Desert AQMD)	<ul style="list-style-type: none">• Issue construction-related permits.
Liberty Utilities	<ul style="list-style-type: none">• Approve proposed water infrastructure improvements and connections.
Southern California Edison (SCE)	<ul style="list-style-type: none">• Approvals required for the installation of new SCE facilities/connections to service the Project.



4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with CEQA Guidelines Sections 15126-15126.4, this EIR Section includes analyses of potential direct, indirect, and cumulatively considerable impacts that could result from the planning, construction, and/or operation of the proposed Project.

In compliance with the procedural requirements of CEQA, the Town of Apple Valley filed a Notice of Preparation (NOP) with the State Clearinghouse of the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project’s potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to potential Responsible Agencies, Trustee Agencies, and other interested parties on February 9, 2024, for a 30-day public review period. The NOP was distributed for public review to solicit responses to inform the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. In addition, a publicly noticed EIR Scoping Meeting was held on February 26, 2024. The EIR Scoping Meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of potential environmental concerns addressed in this EIR.

Taking all known information and public comments into consideration, 15 primary environmental subject areas are evaluated in this Section 4.0, as listed below. Each Subsection of Section 4.0 evaluates several specific subject matters related to the general topic of the Subsection. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein. Environmental issues and their corresponding Subsections are:

- | | |
|-------------------------------------|-------------------------------------|
| 4.1 Aesthetics | 4.9 Hydrology and Water Quality |
| 4.2 Air Quality | 4.10 Land Use and Planning |
| 4.3 Biological Resources | 4.11 Noise |
| 4.4 Cultural Resources | 4.12 Public Services |
| 4.5 Energy | 4.13 Transportation |
| 4.6 Geology and Soils | 4.14 Tribal Cultural Resources |
| 4.7 Greenhouse Gas Emissions | 4.15 Utilities and Services Systems |
| 4.8 Hazards and Hazardous Materials | |

After consideration of all comments received by the Town of Apple Valley on the scope of this EIR and documented in the Town’s records, the Town determined that the Project had no potential to result in significant impacts under five primary environmental subject areas: Agriculture and Forestry Resources; Mineral Resources; Population and Housing; Recreation; and Wildfire. These five subjects are addressed in Section 5.0, *Other CEQA Considerations*.



4.0.2 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

Subsections 4.1 through 4.15 of this EIR evaluate the 15 environmental subjects warranting detailed analysis as determined by the Town of Apple Valley in consideration of preliminary research findings, public comments, and technical analyses. The format of the discussions is standardized as much as possible in each section for ease of review. The environmental setting and regulatory framework is discussed first, followed by the thresholds of significance and a discussion of the potential environmental impacts that would result from implementation of the Project. The thresholds of significance used in this EIR are based on the thresholds of significance identified in Appendix G to the CEQA Guidelines, as most recently updated. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, and whether the impact would be significant or less than significant.

Serving as the CEQA Lead Agency for this EIR, the Town of Apple Valley is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the independent judgment of the Town of Apple Valley, taking into consideration the Town of Apple Valley General Plan; the Town of Apple Valley Municipal Code and adopted Town policies; the judgment of the technical experts that prepared this EIR's technical appendices; performance standards adopted, implemented, and monitored by regulatory agencies; and significance standards recommended by regulatory agencies.

As required by CEQA Guidelines Section 15126.2(a), Project-related effects on the environment are characterized in this EIR as direct, indirect, cumulatively considerable, short-term, long-term, onsite, and/or offsite impacts. A summarized "impact statement" is provided in each Subsection following the analysis. Each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project and its implementing actions are required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. For any impact identified as significant and unavoidable, the Town of Apple Valley would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines Section 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.0.3 TERMINOLOGY USED IN THIS EIR

The level of significance is identified for each impact in this EIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines:

- **No Impact.** The Project would not adversely affect the environment.



- **Less than Significant.** The Project would not cause any substantial, adverse change in the environment.
- **Significant Impact.** A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

Each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- **Less than Significant with Mitigation Incorporated.** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measure(s).
- **Significant and Unavoidable.** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

4.0.4 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines Section 15130(a)(1)). As defined in CEQA Guidelines Section 15355:

'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) *The individual effects may be changes resulting from a single project or a number of separate projects.*
- (b) *The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future*



projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

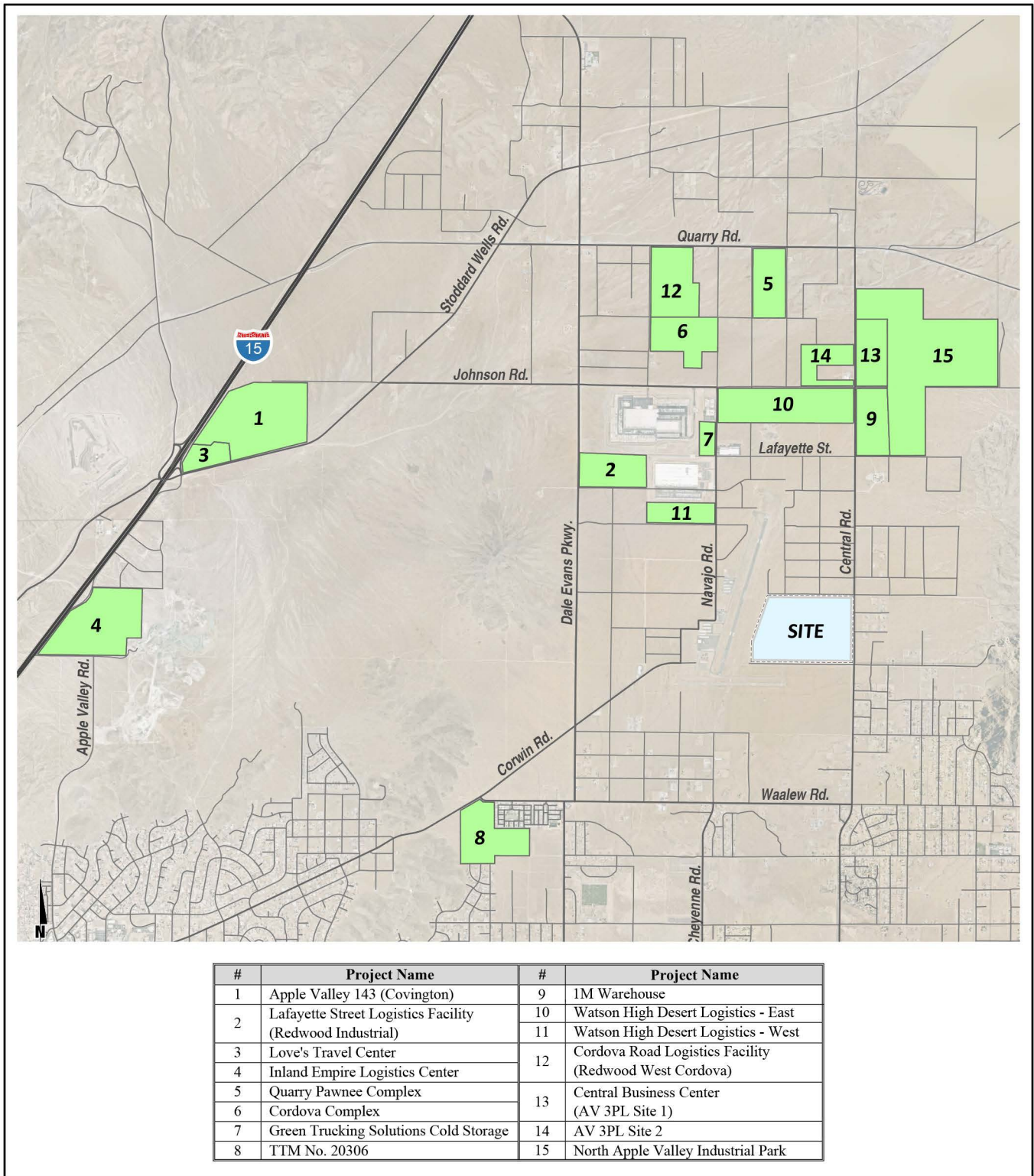
CEQA Guidelines Section 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting cumulative impact analyses. These two approaches include: “1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency [‘the list of projects approach’], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact [‘the summary of projections approach’].”

Both a summary of projections and list of projects approach were considered in this EIR. The Town determined the combined approach to be appropriate because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effects for all subject areas, as applicable. The list of projects include the 15 other known past, present, and reasonably foreseeable projects described in Table 4.0-1, *Cumulative Development Land Use Summary* and depicted on Figure 4.0-1, *Cumulative Development Location Map*, in addition to the summary of projections.

Table 4.0-1 Cumulative Development Land Use Summary

#	Project Name	Land Use	Quantity Units ¹
1	Apple Valley 143 (Covington)	High-Cube Fulfillment Center	2,518.500 TSF
2	Lafayette Street Logistics Facility (Redwood Industrial)	High-Cube Fulfillment Center High-Cube Cold Storage	1,026.412 TSF 181.132 TSF
3	Love's Travel Center	Travel Center Recreational Vehicle Stop	25 VFP 80 Spaces
4	Inland Empire Logistics Center	High-Cube Fulfillment Center	2,600.000 TSF
5	Quarry Pawnee Complex	High-Cube Fulfillment Center	1,460.000 TSF
6	Cordova Complex	High-Cube Fulfillment Center	1,560.000 TSF
7	Green Trucking Solutions Cold Storage	High-Cube Cold Storage	385.004 TSF
8	TTM No. 20306	Single Family Detached Residential	160 DU
9	1M Warehouse	High-Cube Fulfillment Center	1,080.000 TSF
10	Watson High Desert Logistics - East	High-Cube Fulfillment (Non-Sort)	2,800.00 TSF
11	Watson High Desert Logistics - West	High-Cube Fulfillment (Non-Sort)	900.000 TSF
12	Cordova Road Logistics Facility (Redwood West Cordova)	High-Cube Fulfillment Center High-Cube Cold Storage	1,144.330 TSF 201.940 TSF
13	Central Business Center (AV 3PL Site 1)	Warehousing	2,134.000 TSF
14	AV 3PL Site 2	Warehousing	2,134.000 TSF
15	North Apple Valley Industrial Park	Warehousing	5,821.709 TSF

¹DU = Dwelling Units; TSF = Thousand Square Feet
Source: (Urban Crossroadsa, 2025f, Table 4-4)



Source(s): Urban Crossroads (06-23-2025)

Figure 4.0-1



Cumulative Development Location



Cumulative impact analyses for each topical section are also based on the most appropriate geographic boundary for the respective impact. For example, cumulative air quality and greenhouse gas emission impacts are based on the Mojave Desert Air Basin (MDAB), within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAB encompasses desert portions of Kern, Los Angeles, Riverside and San Bernardino counties. The cumulative study area for evaluation is identified and defined in each Subsection of Chapter 4.0. The cumulative study area varies depending on the subject area. Please refer to the cumulative impact analysis provided in each Subsection in Chapter 4.0 for an issue-specific discussion of the cumulative study area.



4.1 AESTHETICS

The following analysis is based on information obtained from site photos taken by T&B Planning Inc. staff; Google Earth Pro (Google Earth, 2025); Town of Apple Valley General Plan (Apple Valley, 2009); Town of Apple Valley Municipal Code (Town of Apple Valley, 2024); and Project plans. All references used in this Subsection are listed in EIR Section 7.0, *References*.

4.1.1 ENVIRONMENTAL SETTING

A. *Regional Setting*

The approximate 226.75-acre Project site is located in the northern part of the Town of Apple Valley (Town), which is within the Victor Valley region of San Bernardino County.

The Town of Apple Valley is located primarily on alluvial slopes of the Mojave River floodplain, at the southern edge of the Mojave Desert. Elevations in the Town range from approximately 2,800 feet above sea level near the Mojave River, to approximately 3,200 feet above sea level at the northeast corner of Town. The topography gradually inclines toward the Juniper Flats foothills of the San Bernardino Mountains to the south, as well as to the scattered knolls and mountains to the north and east of the Town. Turtle and Black Mountains are located to the north of the Town, Fairview Mountain to the northeast and the Granite Mountains to the southeast. From these elevated topographical features, panoramic vistas exist across the Town of Apple Valley. (Apple Valley, 2009)

B. *Existing Physical Conditions*

1. *Project Site*

The Project site is currently undeveloped and vacant, and slopes to the southwest. Under existing conditions, portions of the site have been subject to illegal dumping, and evidence residential trash, spent shell casings, and concrete rubble. (Noreas, 2025) (SCG, 2022) Central Road and Corwin Road are both paved, and form the site's eastern and southern boundaries, respectively.

Property to the north of the Project site is vacant and undeveloped. To the east of the site are residential uses and vacant land zoned "Apple Valley/Rural Living" by the County of San Bernardino. Residences in the vicinity are located approximately 492' to 1,456' from the property line of the Project site. An Apple Valley Airport runway is located approximately 500' from the southern property line, as well as undeveloped land. Undeveloped land is located westerly adjacent to the site, beyond which is another Apple Valley Airport runway (approximately 700 feet away from the western property line).

2. *Existing Views of the Project Site*

Existing conditions of the Project site are depicted in Figure 4.1-1 and Figure 4.1-2, and are described in detail below. Surrounding views are illustrated in Figure 4.1-3.

- View 1 (Figure 4.1-1): View 1 depicts the views on Central Road looking west towards Corwin Road and the Project site from the intersection of Corwin Road and Central Road



at the southeast corner of the Project site. Existing vegetation associated with the Project site and Corwin Road can be seen along with distant views of the Apple Valley Airport (approximately 0.5 miles west) and scattered knolls.

- View 2 (Figure 4.1-1): View 2 depicts the views on Central Road looking northwest towards the Project site from the intersection of Corwin Road and Central Road at the southeast corner of the Project site. Existing vegetation associated with the Project site can be seen along with distant views of the Apple Valley Airport (approximately 0.8 miles northwest), scattered knolls, Big Lots Distribution Center (approximately 1.7 miles northwest), and Walmart Distribution Center (approximately 2.0 miles northwest).
- View 3 (Figure 4.1-1): View 3 depicts the views on Central Road looking southwest towards the Project site from Central Road at the mid-point of the Project site. Existing vegetation associated with the Project site can be seen along with distant views of the Apple Valley Airport (approximately 0.6 miles southwest), scattered residences (approximately 1.6 miles southwest), and San Gabriel mountains (over 20 miles southwest).
- View 4 (Figure 4.1-1): View 4 depicts the views on Central Road looking west towards the Project site from Central Road at the mid-point of the Project site. Existing vegetation associated with the Project site can be seen. Distant views consist of the Apple Valley Airport (approximately 0.7 miles west), scattered knolls, Big Lots Distribution Center (approximately 1.4 miles northwest), and Walmart Distribution Center (approximately 1.8 miles northwest).
- View 5 (Figure 4.1-2): View 5 depicts the views on Central Road looking northwest towards the Project site from Central Road at the mid-point of the Project site. Existing vegetation associated with the Project site can be seen. Distant views consist of the Apple Valley Airport, hills, Big Lots Distribution Center, and Walmart Distribution Center.
- View 6 (Figure 4.1-2): View 6 depicts the views on Central Road looking south from the intersection of Gustine Street and Central Road at the northeast corner of the Project site. Distant views of the San Gabriel Mountains can be seen.
- View 7 (Figure 4.1-2): View 7 depicts the views on Central Road looking southwest towards the Project site from the intersection of Gustine Street and Central Road at the northeast corner of the Project site. Existing vegetation associated with the Project site can be seen. Distant views consist of the Apple Valley Airport and scattered knolls.
- View 8 (Figure 4.1-2): View 8 depicts the views on Central Road looking west towards the Project site from the intersection of Gustine Street and Central Road at the northeast corner of the Project site. Existing vegetation associated with the Project site can be seen. Distant views consist of the Apple Valley Airport and scattered knolls.



Site Photo 1: View from the southeastern corner of the Project Site at the intersection of Corwin Road and Central Road looking west.



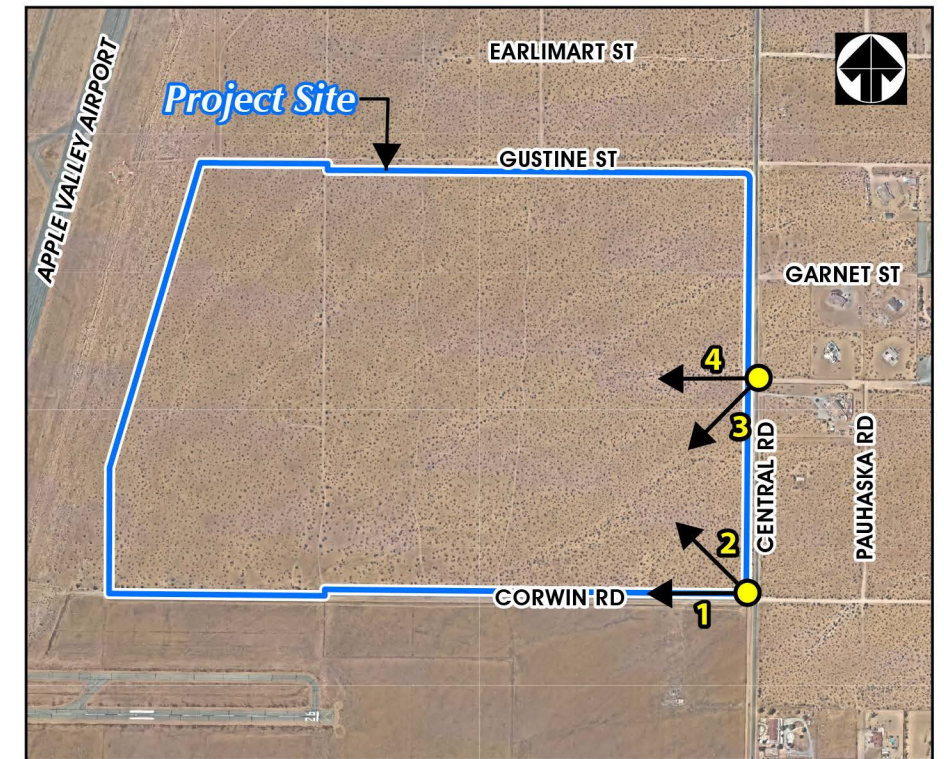
Site Photo 2: View from the southeastern corner of the Project Site at the intersection of Corwin Road and Central Road looking northwest.



Site Photo 3: View from the eastern boundary of the Project Site along Central Road looking southwest.



Site Photo 4: View from the eastern boundary of the Project Site along Central Road looking west.



Source(s): Esri, Nearmap Imagery (2023)

Figure 4.1-1



Site Photo 5: View from the eastern boundary of the Project Site along Central Road looking northwest.



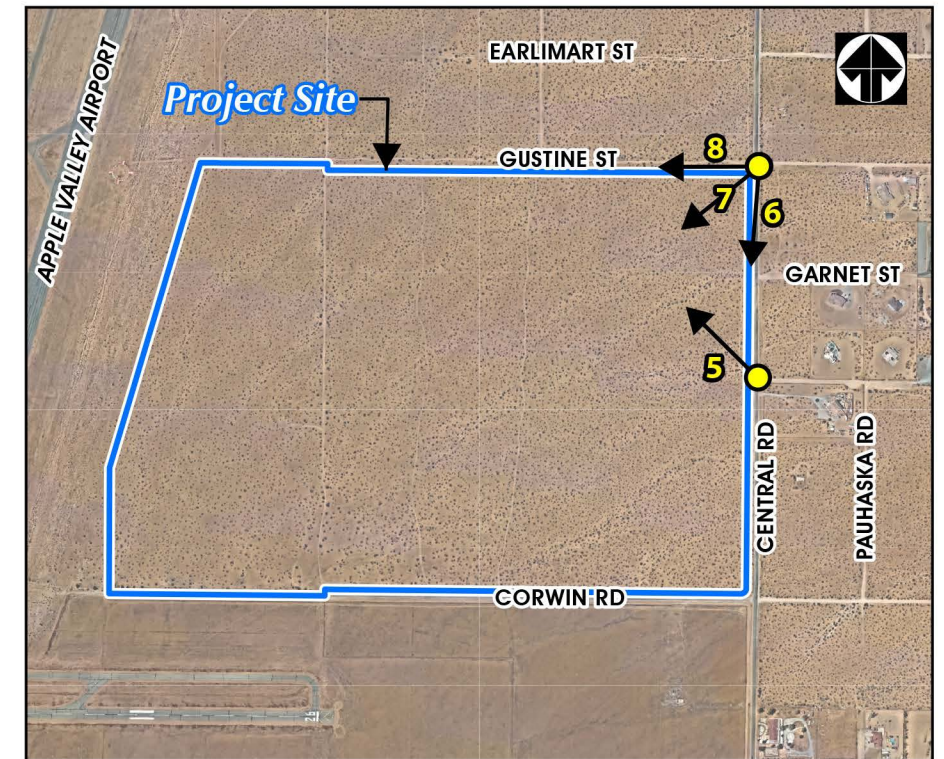
Site Photo 6: View from the northeastern corner of the Project Site at the intersection of Gustine Street and Central Road looking southwest.



Site Photo 7: View from the northeastern corner of the Project Site at the intersection of Gustine Street and Central Road looking southwest.

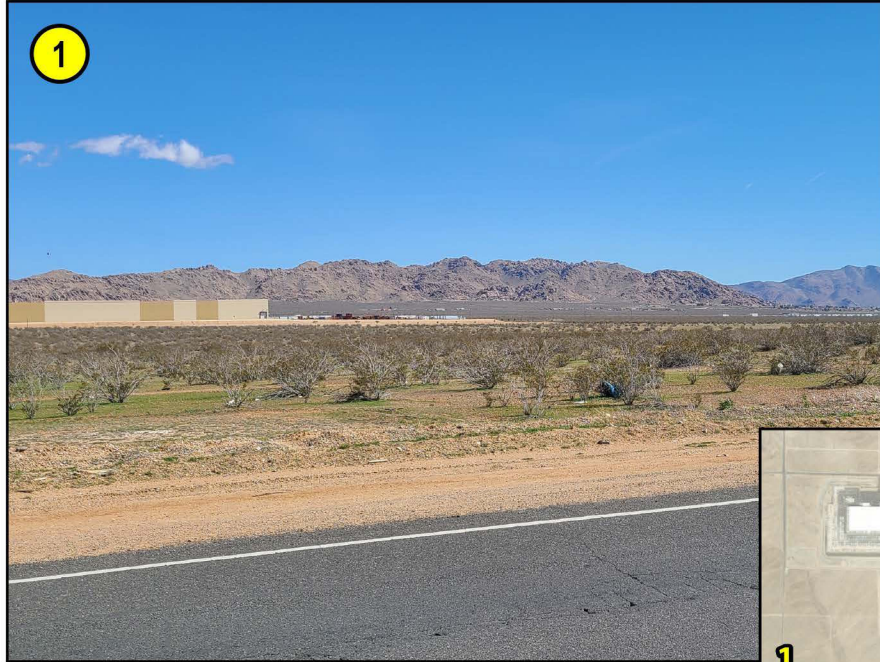


Site Photo 8: View from the northeastern corner of the Project Site at the intersection of Gustine Street and Central Road looking west.



Source(s): Esri, Nearmap Imagery (2023)

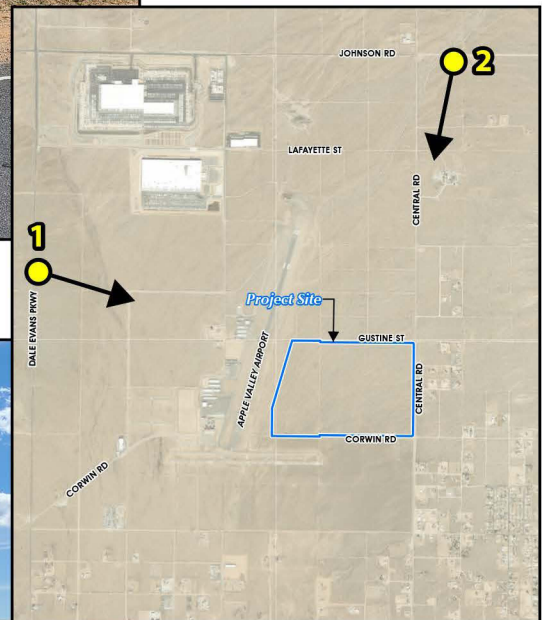
Figure 4.1-2



Site Photo 1: West of the Project Site along Dale Evans Parkway looking east.

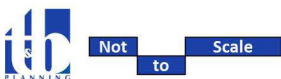


Site Photo 2: View from North of the Project site along Johnson Road looking south.



Source(s): Esri, Nearmap Imagery (2023)

Figure 4.1-3



Surrounding View



3. *Surrounding Land Uses*

The Project site is surrounded by undeveloped land to the north, scattered residences to the east, and the Town of Apple Valley Airport to the west and south. A description of the surrounding uses is provided below.

- **North:** The area immediately north of the Project site is under the jurisdiction of the Town of Apple Valley within the North Apple Valley Industrial Specific Plan (NAVISP) and zoned Industrial-Specific Plan (I-SP). Property to the north of the Project site is vacant and undeveloped.
- **East:** The area immediately east of the Project site is under the jurisdiction of San Bernardino County and zoned Apple Valley/Rural Living. There is undeveloped land and single-family residences located to the east of the Project site. The residences in the Project vicinity are located approximately 492 feet to 1,456 feet from the property line of the Project site.
- **South:** The area immediately south of the Project site is under the jurisdiction of the Town of Apple Valley within the NAVISP and zoned Airport Industrial (I-A). There is undeveloped land and an Apple Valley Airport runway located to the south of the Project site.
- **West:** The area immediately west of the Project site is under the jurisdiction of the Town of Apple Valley within the NAVISP and zoned Airport Industrial (I-A). The Apple Valley Airport is located to the west of the Project site.

C. *Scenic Vistas and Scenic Resources*

The Town of Apple Valley identifies the Mojave River, surrounding knolls, hillsides, mountains, and the natural desert environment as scenic resources. Surrounding mountains and ridgelines are the most prominent features of the landscape.

Scenic vistas are typically broad views of scenic resources such as landforms and waterways that are visible from publicly accessible viewpoints. The Town's General Plan provides a definition for a scenic corridor, which is land area outside of the highway right-of-way within the line of sight which can be realistically subjected to protective land use controls.

Natural visual resources that provide the planning area with special character include uninterrupted expanses of "wide skies" and panoramic vistas of distant mountains. Characteristic views of the Mojave River floodplain bluffs and terraces, areas of riparian forest flora, Turtle Mountain, Fairview Mountain, Sidewinder Mountain, the Black Mountains, the San Bernardino and San Gabriel Mountain ranges and the surrounding Victor Valley, along with neighboring hillsides and the natural desert environment also occur. The low-lying landscape surrounding the Town allows unobstructed, distant views in all directions. According to the Town's General Plan, although the visual character of most



parts of the Town area have been impacted to some extent by residential, commercial, and industrial development, many acres of undeveloped desert lands remain that provide unobstructed views of the scenic vistas.

Relative to the Project site, undisturbed areas of the natural desert environment and valley surround the Project site. The Mojave River is located approximately 16 miles to the southwest of the Project site; Turtle Mountain is located approximately 5.4 miles to the north, Black Mountain is located approximately 5.2 miles northeast, Fairview Mountain is located approximately 2.5 miles to the east, Sidewinder Mountain is located approximately 7.8 miles to the northeast, and the foothills and elevated terrain within the San Gabriel and San Bernardino Mountains are located approximately 21 miles to the south. Since the surrounding area contains most of the natural desert landscape of the Town, the area holds scenic value that could comprise a scenic vista. Although scattered industrial, institutional, and rural residential development exists in the area, scenic resources identified by the Town's General Plan are visible in the vicinity of the Project site.

Several washes and natural water courses traverse the Town and are identified in the Town's General Plan. These include the Mojave River and the Oro Grande Wash. The nearest well-defined wash area to the Project site is the Bell Mountain Wash, which flows at an angle in a general southeast to southwest direction, approximately 6.8 miles west of the Project site. Given that this watercourse is below the grade of the general topography and consists of intervening vegetation, views of this water course are not available from the Project site. Several other unnamed ephemeral dry washes are located throughout the Project area but given their minimal streambed definition and lack of aquatic vegetation, these features do not provide significant visual interest in the Project area's viewshed. Moreover, these features are often obscured by existing desert shrubs and low growing vegetation, minimizing their presence as character-defining features within the landscape. (Apple Valley, 2009)

D. Scenic Highways

There are no officially designated State scenic highways near the Project site. The nearest officially designated State scenic highway is SR-2 located approximately 32 miles southwest of the Project site. The nearest eligible scenic highway is SR-247 located approximately 12 miles east of the Project site (Caltrans, 2018).

E. Light and Glare

Artificial light is associated with the evening and nighttime hours, and sources may include streetlights, illuminated signage, and vehicle headlights. Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use.

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broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use. As the Project site does not contain any highly polished surfaces and is vacant and undeveloped, the Project site does not currently support any existing sources of light or glare. Existing sources of light and glare in the Project area include vehicular headlights and exterior building lights from the Town of Apple Valley Airport and scattered residences to the east.

4.1.2 REGULATORY FRAMEWORK

The following is a brief description of local environmental laws and related regulations governing the protection of aesthetic resources.

A. State

1. *California Scenic Highways*

The California Department of Transportation (Caltrans) manages the State Scenic Highway Program, established in 1963 through Senate Bill 1467, Streets and Highways Code, §§ 260 through 263 to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated as scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Scenic corridors consist of land that is visible from, adjacent to, and outside the highway right-of-way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. Existing law provides Caltrans with full possession and control of all State highways, while this legislation places the Scenic Highway Program under the stewardship of Caltrans. The legislation further declares the intent of the State to assign responsibility for the regulation of land use and development along scenic highways to the appropriate State and local governmental agencies. Scenic highways are classified as either 'officially designated' or 'eligible' for designation and Caltrans maintains the lists of these highways. There are no officially designated scenic road or highway corridors within the Town of Apple Valley. (Caltrans, 2022)

B. Local

1. *Town of Apple Valley General Plan*

The Town of Apple Valley identifies policies that relate to aesthetic resources within the Town. The specific policies outlined in the Town's General Plan that are related to aesthetics and that apply to the proposed Project are listed in the General Plan Consistency Analysis table presented in EIR Section 4.10, *Land Use and Planning*.

2. *Town of Apple Valley Municipal Code*

The Town provides landscaping guidelines and regulations through Chapter 9.47, Industrial Development Standards, (Section 9.47.050 Landscaping and 9.47.080 Architecture), Chapter 9.65 – Airport Overlay Districts, and Chapter 9.75, Water Conservation/Landscaping Regulations, (Section



9.75.050 Water Conserving Landscape Design Standards) of the Municipal Code. The purpose of these chapters is to provide standards and guidelines that will promote the general welfare of the Town's residents by creating a responsible outdoor environment compatible with existing development. The landscape regulations aim to achieve a diversity of drought-tolerant landscaping appropriate to the high-desert environment and that creates aesthetically pleasing views and vistas along public streets. The architecture regulations aim to reflect the Town's desert setting and long-term traditional value.

Additionally, the Town of Apple Valley has established sign regulations in Chapter 9.74, Signs and Advertising Displays, of the Municipal Code. Section 9.74.110, General Design Criteria and Standards, allows for high quality, efficient signage within the Town. The Town's Municipal Code Chapter 8.20 – Construction Site Maintenance and Trash Containment establishes minimum standards for construction site maintenance including the collection, storage containment and removal of construction site trash, rubbish or debris. (Town of Apple Valley, 2024)

C. North Apple Valley Industrial Specific Plan

Chapter III, Development Standards and Guidelines, of the NAVISP serves as the NAVISP's Development Code. The NAVISP establishes land use districts to encourage the development of well-planned projects which are consistent with the goals and objectives of the Town's General Plan. Four of the five parcels are zoned Industrial - Specific Plan (I-SP) and the southeast parcel (APN 0463-373-06) is zoned General Commercial (C-G). Chapter III includes development standards, design standards, and guidelines to shape development consistent with the development vision of the I-SP District. In addition, Chapter III of the NAVISP includes Design Standards and Guidelines pertaining to architecture, landscaping, lighting, walls and fences, and signage. The NAVISP specifies that projects subject to site plan review shall be reviewed by the Town's Planning Department to ensure that projects are consistent with the General Plan, the NAVISP, the Development Code, and the development policies and standards of the Town. (Apple Valley, 2006).

4.1.3 METHODOLOGY

The Project site and surrounding areas were reviewed to determine the site's existing conditions and aesthetic features. On March 4, 2024, T&B Planning visited the Project site and took photographs from the public rights-of-way surrounding the site to document the site's current conditions. Additionally, the Town's General Plan and Municipal Code were evaluated to determine the potential impacts of the proposed Project regarding light, glare, and aesthetics.

4.1.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

- a. *Have a substantial adverse effect on a scenic vista;*



- b. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
- c. *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;*
- d. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

4.1.5 IMPACT ANALYSIS

Threshold a: Would the Project have a substantial adverse effect on a scenic vista?

Scenic vistas are generally described in two ways: (1) panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance); and (2) focal views (visual access to a particular object, scene, or feature of interest). Development projects have the potential to impact scenic vistas in two ways: 1) physically alter a designated scenic resource (e.g., disturb or develop upon a ridgeline, hillside, peak or shoreline) and 2) block or substantially obscure the public views of a scenic vista (e.g., designated scenic views from public roads, trails, parks, landmarks, etc.).

The Apple Valley General Plan identifies the Mojave River, surrounding knolls, hillsides, mountains, and the natural desert environment as local scenic resources. As shown in General Plan Exhibit III-3, the Project site is not located within an area identified for scenic preservation. (Apple Valley, 2009) There are no scenic vistas within the Project site. The Project would not otherwise adversely affect a designated scenic vista because the existing scenic resources are over 2 miles away from the Project site and the surrounding knolls, hillsides, mountains, and the natural desert environment would remain visible from public right-of-way. Accordingly, the potential for development of the Project site to result in a substantial adverse effect on a scenic vista is considered less than significant.

Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no officially designated State scenic highways near the Project site. The nearest officially designated State scenic highway is SR-2 located approximately 32 miles southwest of the Project site. The nearest eligible scenic highway is SR-247 located approximately 12 miles east of the Project site (Caltrans, 2018). Due to distance and intervening terrain, the Project would not affect these highways. Therefore, no impacts associated with scenic resources within a state scenic highway would occur.



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

The Project site is located in an area that meets the U.S. Census Bureau’s definition of an “urbanized area” and is planned for urban uses by the Town General Plan; therefore, the following discussion analyzes the Project’s potential to conflict with applicable zoning and other regulations governing scenic quality.

A. Construction

During construction, the Project would result in a temporary change to the visual character of the Project site from a predominantly undeveloped site to an active construction site with construction equipment, staging areas, construction machinery, and temporary fencing. Following the completion of the construction activities, all construction equipment would be removed from the Project site. The Town’s Municipal Code Chapter 8.20 – Construction Site Maintenance and Trash Containment establishes minimum standards for construction site maintenance including the collection, storage containment and removal of construction site trash, rubbish or debris. The temporary presence of construction equipment within a property under construction is common and Project construction activities would be required to comply with Chapter 8.20 which would routinely keep the Project site clean of any trash, rubbish, or debris. Project-related changes to local visual character and quality during Project construction would be less than significant due to construction site maintenance in accordance with the Town’s Municipal Code Chapter 8.20 and removal of construction equipment after completion. Therefore, Project construction activities would not conflict with applicable zoning and other regulations governing scenic quality.

B. Operation

Project-applicable goals and policies and a discussion of the Project’s potential to conflict with applicable General Plan policies with the purpose of avoiding or mitigating an environmental effect related to aesthetics are shown on Table 4.1-1, *General Plan Aesthetics Consistency Analysis* and also discussed in Section 4.10, *Land Use and Planning*, Table 4.10-1, *General Plan Consistency Analysis*, of this EIR. As shown, the Project would not conflict with General Plan policies governing scenic quality. The Project’s design, including the site layout, architecture, and landscaping is discussed and illustrated in detail in EIR Section 3.0, *Project Description*. The Project would be required to comply with the Town’s Municipal Code Title 9 – Development Code which includes design standards related to building size, height, floor area ratio, and setbacks, as well as landscaping, signage, and other visual considerations. These design standards help adjacent land uses to be visually consistent with one another and their surroundings and reduces the potential for conflicting visual elements.



Table 4.1-1 General Plan Aesthetics Consistency Analysis

General Plan Policy	Consistency
Land Use Element	
<i>Goal 2: A well planned, orderly development pattern that enhances community values, and assures development of adequate infrastructure.</i>	
Policy 2.B: All new development and redevelopment proposals shall be required to install all required infrastructure, including roadways and utilities, and shall have complied with requirements for public services prior to occupancy of the project.	No Conflict. As discussed in Section 3.0, <i>Project Description</i> , the Project includes the installation of all infrastructure necessary to support the proposed land uses. Installation of all infrastructure would occur consistent with Town/affected purveyor requirements.
Policy 2.C The Town shall require quality design in all development and redevelopment proposals and shall encourage the enhancement of existing development.	No Conflict. The Project has been designed consistent with approved NAVISP Design Standards and Guidelines pertaining to architecture, landscaping, lighting, walls and fences, and signage (see Table 4.1-1).
<i>Goal 3 Minimal impact to existing neighborhoods.</i>	
Policy 3.A The Town will support measures that buffer both new and established residences from commercial, industrial and agricultural uses.	No Conflict. The Project site is located in an area anticipated for urban uses. The Project would include fencing and landscaping along the perimeter of the site, acting as a buffer between onsite uses and existing rural residential uses to the east, across Central Road.
<i>Goal 7 Industrial development which supports a broad-based economy, and encourages the jobs-housing balance.</i>	
Policy 7.A Industrial development shall be permitted only in areas with provisions for adequate circulation, utilities, infrastructure and public services.	No Conflict. The Project site is located in an area planned for industrial development. As discussed in Section 3.0, <i>Project Description</i> , the Project would include connections to existing utility infrastructure. As discussed in Section 4.12, <i>Public Services</i> , there is adequate capacity from fire protection and police protection services to serve the Project. Additionally, the Project would construct roadway improvements necessary to serve the proposed uses and would improve emergency access to the Project site and surrounding areas (<i>EIR Technical Appendix K2</i>).
Open Space & Conservation Element	
<i>Goal 2 The Town shall encourage the preservation of significant native trees, native vegetation, landforms and wildlife habitat.</i>	
Policy 2.C The Town will encourage the planting and preservation of native species of trees and plants to enhance the environment.	No Conflict. The Project landscape plan incorporates California native species of trees and plants, including the Desert Willow, Blue Palo Verde, Deer Grass, and Dwarf Coyote Bush. Please refer to Figure 3-8.
Geotechnical Element	
<i>Goal The protection and safety of human life, land, and property from the effects of seismic and geotechnical hazards shall be increased.</i>	
Policy 1.C The Town shall require that future development avoid disturbing unique rock outcroppings within the Town boundary and Sphere of Influence.	No Conflict. There are no rock outcroppings located within or adjacent to the Project site. The Project would not disturb unique rock outcroppings.



Table 4.1-2, *Zoning Development Standards Consistency Analysis*, discusses the Project’s consistency with the development standards provided within the NAVISP.

Table 4.1-2 Zoning Development Standards Consistency Analysis

Applicable Development Standard	Project Consistency
Industrial – Specific Plan (I-SP)	
Lot Standard: <ul style="list-style-type: none"> • Minimum Lot Size: 2 acres • Minimum Lot Width: 100 feet • Minimum Lot Depth: 100 ft 	No conflict. The Project would not conflict with the minimum lot size, width, and depth requirements. The Project proposes the creation of three lots with Lot 1 being approximately 76.60 gross acres, Lot 2 being approximately 80.08 gross acres in size and Lot 3 being approximately 70.07 gross acres, exceeding and complying with the minimum lot size of 2 acres. Additionally, the proposed lots well exceed the minimum lot width and depth requirements.
Min. Front Setback or Street Side Setback (Feet) <ul style="list-style-type: none"> • Landscaping <ul style="list-style-type: none"> ○ On Central Road: Not Applicable ○ On Corwin Road: Not Applicable ○ On any other road: 15 feet • Building <ul style="list-style-type: none"> ○ On Central Road: Not Applicable ○ On Corwin Road: Not Applicable ○ On any other road: 25 feet Min. Building Rear Setback (Feet): 15 feet Min. Building Interior Side Yard Setback (feet): 0 feet	No conflict. As shown in Figure 3-4, <i>Site Plan</i> and as discussed in Section 3.0, <i>Project Description</i> , the Project would provide the minimum building and landscaping setback.
Min. Building Setback (feet) from rock outcropping: 50 feet	Not applicable. There are no rock outcroppings on or near the Project site.
Maximum Building Coverage (%): 45%	No conflict. As discussed in Section 3.0, <i>Project Description</i> , Building 1 has an FAR of 0.37, Building 2 has an FAR of 0.36, and Building 3 has an FAR of 0.34. The Project would not conflict with the maximum building coverage of 45%.
Maximum Height within Airport Influence Area (A-2) (Feet): 50 feet	No conflict. All three proposed buildings are located within Zone A-2 and depict a maximum height of 48 feet from grade to roof decks with architectural features at approximately 51. Town staff has reviewed the elevations and determined that the Project meets this standard. Furthermore, the San Bernardino County Department of Airports have accepted the heights as proposed.
Minimum Landscape Requirement: 5% of interior parking surface area	No conflict. The Project would provide a minimum of 5% landscape coverage throughout paved parking areas, and would meet this standard.

Source: (Town of Apple Valley, 2006, Table III-2)

As demonstrated above, the Project would not conflict with applicable zoning or other regulations governing scenic quality. Compliance with the Town’s General Plan, Development Code, and NAVISP would preclude significant impacts in this regard. Therefore, impacts are less than significant.



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

Implementation of the Project would introduce new sources of lighting on buildings and along streets, parking areas, and pedestrian walkways. The Project would be required to comply with Title 9, Development Code, of the Town's Municipal Code, and Chapter III of the NAVISP, which contain general performance standards related to light and glare.

Nighttime concrete pouring activities could occur as a part of Project building construction activities. Nighttime lighting would be focused directly on work activity areas as required by the Town's Municipal Code Chapter 9.74.090 – Lighting which requires lighting to be used only for the functional requirements of safety, security, and identification. Unnecessary lighting is prohibited in the interest of energy efficiency and preservation of the night sky views.

Additionally, because the Project site is located within Airport Overlay Districts, the Project would comply with the lighting standards within the Airport Overlay District as required by the Town's Municipal Code Chapter 9.65 – Airport Overlay Districts which requires all exterior lighting to have sharp cut-off reflectors in which virtually no light leaves the fixture above an angle of about seventy (70) degrees, as measured from straight down.

Conformance with existing regulations would minimize the potential for substantial adverse light and glare impacts. Additionally, the Project includes various architectural elements that are intended to effectively avoid monotony and repetition in building elevations and further minimize glare. Based on the preceding, the potential for the Project to create a new source of substantial light or glare is considered less than significant.

4.1.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The Project site is not located within an area identified for scenic preservation. There are no scenic vistas within the Project site, nor would the Project otherwise adversely affect a designated scenic vista.

Threshold b: No Impact. The Project site is not located within the viewshed of a designated State scenic highway and does not contain scenic resources. No impacts would occur.

Threshold c: Less than Significant Impact. The Project would not conflict with applicable zoning or other regulations governing scenic quality. Compliance with the Town's General Plan, Development Code, and NAVISP would preclude significant impacts in this regard.

Threshold d: Less than Significant Impact. Compliance with the Town's Municipal Code and NAVISP requirements would ensure Project light and glare impacts would be less than significant.



4.1.7 MITIGATION

The Project would result in less than significant impacts related to aesthetics and no mitigation is required.

4.1.8 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area when considering potential cumulative aesthetics and light/glare issues includes areas that are currently, or are anticipated to be, subject to design guidelines and performance standards of the Town General Plan, Municipal Code, and NAVISP.

New development proposed by the Project would alter the existing visual attributes of the Project site. However, urbanization of the Project site is anticipated under the General Plan. Development of the Project site, including its design and aesthetic attributes, would be directed under the NAVISP, as approved by the Town. As discussed within this Subsection, implementation of the Project would not result in potentially significant impacts to any scenic vistas, scenic resources, or scenic highways. Nor would the Project degrade the existing visual character of the site, its surroundings, or result in potentially significant light and glare impacts.

As with the Project, all cumulative development would be required to demonstrate compliance with the applicable provisions of the Town Municipal Code. Additionally, all future development within the NAVISP would be required to conform to the Development Standards and Design Guidelines presented therein, ensuring that aesthetic and light/glare impacts would be less than significant.

Based on the preceding discussion, the Project's potential contribution to cumulative impacts in regard to aesthetic and light/glare impacts is not considerable, and the cumulative effects of the Project are determined to be less than significant.



4.2 AIR QUALITY

Information presented within the Subsection is summarized from the following documents:

- Lake Creek Logistics Center, Air Quality Impact Analysis, Town of Apple Valley (Urban Crossroads, Inc.) February 26, 2025.
- Lake Creek Logistics Center, Construction and Operational Health Risk Assessment, Town of Apple Valley (Urban Crossroads, Inc.) February 26, 2025.

These documents are provided as *Technical Appendices B1* and *B2*, respectively. Please also refer to EIR Section 7.0, *References*.

4.2.1 ENVIRONMENTAL SETTING

A. *Mojave Desert Air Basin (MDAB)*

The Project site is located in the Mojave Desert Air Basin (MDAB), within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAB encompasses desert portions of Kern, Los Angeles, Riverside and San Bernardino counties. The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. (Urban Crossroads, 2025a)

B. *Regional Climate*

Air quality in the Project area is not only affected by various emissions sources (mobile, industry, etc.) but is also affected by atmospheric conditions such as wind speed, wind direction, temperature, and rainfall.

Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The Mojave Desert is bordered on the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser pass lies between the San Bernardino Mountains and the Little San Bernardino Mountains in the Morongo Valley. The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley), whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

During the summer, the MDAB is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with



at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate that at least three months have maximum average temperatures over 100.4° F.

Snow is common above 5,000 feet in elevation, resulting in moderate snowpack and limited spring runoff. Below 5,000 feet, any precipitation normally occurs as rainfall. Pacific storm fronts normally move into the area from the west, driven by prevailing winds from the west and southwest. During late summer, moist high-pressure systems from the Pacific collide with rising heated air from desert areas, resulting in brief, high-intensity thunderstorms that can cause high winds and localized flash flooding. (Urban Crossroads, 2025a)

C. Air Quality Pollutants and Associated Human Health Effects

The federal government and State of California have established maximum permissible concentrations for common air pollutants that may pose a risk to human health or would otherwise degrade air quality and adversely affect the environment. These regulated air pollutants are referred to as “criteria pollutants.” An overview of the common criteria air pollutants in the SCAB, their sources, and associated effects to human health are summarized below.

- **Carbon Monoxide (CO)** is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O₃), motor vehicles operating at slow speeds are the primary source of CO in the MDAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. CO is generated by any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating. Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes. (Urban Crossroads, 2025a) **Sulfur Dioxide (SO₂)** is a colorless, extremely irritating gas or liquid. SO₂ enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfates (SO₄). Collectively, these pollutants are referred to as sulfur oxides (SO_x). SO₂ is generated by coal or oil burning power plants and industries, refineries, and diesel engines. A few minutes of exposure to low levels of SO₂ can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO₂. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO₂. Animal studies suggest



that despite SO₂ being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO₂ levels. In these studies, efforts to separate the effects of SO₂ from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor. (Urban Crossroads, 2025a)

- **Nitrogen Oxides (NO_x)** consist of nitric oxide (NO), nitrogen dioxide (NO₂) and nitrous oxide (N₂O) and are formed when nitrogen (N₂) combines with oxygen (O₂). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO₂ is a criteria air pollutant, and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere, and reduced visibility. Of the nitrogen oxide compounds, NO₂ is the most abundant in the atmosphere. As ambient concentrations of NO₂ are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO₂ than those indicated by regional monitoring stations. NO_x is generated by any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating. Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO₂ considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O₃ exposure increases when animals are exposed to a combination of O₃ and NO₂. (Urban Crossroads, 2025a)
- **Ozone (O₃)** is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, warm temperatures, and light wind conditions are favorable to the formation of this pollutant. Ozone is formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O₃ effects. Short-term exposure (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.



Elevated O₃ levels are associated with increased school absences. In recent years, a correlation between elevated ambient O₃ levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O₃ levels. Ozone exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O₃ may be more toxic than exposure to O₃ alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes. (Urban Crossroads, 2025a)

- **Particulate Matter less than 10 microns (PM₁₀) and Particulate Matter less than 2.5 microns (PM_{2.5})** are major air pollutants consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols that are 10 microns or smaller or 2.5 microns or smaller, respectively. Particulate matter pollution is a major cause of reduce visibility (haze) which is caused by the scattering of light and consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM₁₀ is considered a criteria air pollutant. Sources of PM₁₀ include road dust, windblown dust, and construction. PM₁₀ also is formed from other pollutants (acid rain, NO_x, SO_x, and organics). Incomplete combustion of any fuel also can generate PM₁₀.

PM_{2.5} is a similar air pollutant to PM₁₀ consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO₂ release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. PM_{2.5} is a criteria air pollutant. PM_{2.5} comes from fuel combustion in motor vehicles, equipment and industrial sources, residential, and agricultural burning. PM_{2.5} also is formed from reaction of other pollutants (acid rain, NO_x, SO_x, and organics).

A consistent correlation between elevated ambient fine particulate matter (PM₁₀ and PM_{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in PM_{2.5} concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM₁₀ and PM_{2.5}. (Urban Crossroads, 2025a)



- **Lead (Pb)** is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. Historically, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. The major sources of lead emissions are ore and metals processing, particularly lead smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. Sources of lead include metal smelters, resource recovery, leaded gasoline, and the deterioration of lead paint. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers. (Urban Crossroads, 2025a)

The MDAQMD's primary focus is to achieve the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria pollutants. However, it also has a broader mandate to control emissions of air contaminants and safeguard public health. As a result, MDAQMD regulates additional pollutants beyond criteria pollutants, including reactive organic gases (ROGs), VOCs, and odors. Additional pollutants, their typical sources, and health effects are identified below.

- **Volatile Organic Compounds (VOCs) and Reactive Organic Gasses (ROGs)** are a family of hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. Both VOCs and ROGs are precursors to ozone and contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Individual VOCs and ROGs have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, including such common VOCs as gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs and ROGs are criteria pollutants since they are a precursor to O₃, which is a criteria pollutant. Odors generated by VOCs and ROGs can irritate the eye, nose, and throat, and can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several. The terms VOC and ROG are used interchangeably. (Urban Crossroads, 2025a)
- **Odor** means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves. Odors can come from many sources including animals, human activities, industry, nature, and vehicles. Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory



nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. (Urban Crossroads, 2025a)

D. Existing Air Quality

Existing air quality is measured at established MDAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 4.2-1, *Ambient Air Quality Standards*.

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. The most recent state and federal standards were updated by CARB on May 4, 2016 and are presented in Table 4.2-1. The air quality in a region is considered to be in attainment by the State if the measured ambient air pollutant levels for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, PM₁₀, and PM_{2.5} are not exceeded. All other monitored contaminant levels (such as lead, visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride) are not equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status. Attainment status for a pollutant means that the Air District meets the standards set by the EPA or the California Environmental Protection Agency (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area. (Urban Crossroads, 2025a)



Table 4.2-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		National Standards			
		Concentration	Method	Primary	Secondary	Method	
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)			
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		—			
Fine Particulate Matter (PM _{2.5})	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³			15 µg/m ³
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)	
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—			
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence	
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)			Same as Primary Standard
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)	
	3 Hour	—		—			0.5 ppm (1300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas)			—
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)			—
Lead	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas)			Same as Primary Standard
	Rolling 3-Month Average	—		0.15 µg/m ³			
Visibility Reducing Particles	8 Hour	See Table 2-3 of the AQIA	Beta Attenuation and Transmittance through Filter Tape	No National Standards			
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

ppm = Parts Per Million

µg/m³ – microgram per cubic meter

-- = data not available

Source: (Urban Crossroads, 2025a)



E. Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O₃, particulate matter (PM₁₀ and PM_{2.5}), NO₂, and SO₂ which are known as criteria pollutants. The MDAQMD monitors levels of various criteria pollutants at six permanent monitoring stations. On December 28, 2021, California Air Resources Board (CARB) posted the 2023 amendments to the state and national area designations. Table 4.2-2, *Attainment Status of Criteria Pollutants in the MDAB*, shows the attainment designations for the MDAB and the Southeast Desert Air Basin (SDAB).

Table 4.2-2 Attainment Status of Criteria Pollutants in the MDAB

Criteria Pollutant	State Designation	Federal Designation
O ₃ – 1-hour standard	Nonattainment	--
O ₃ – 8-hour standard	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Nonattainment
PM _{2.5}	Attainment	Unclassifiable/Attainment
CO	Attainment	Unclassifiable/Attainment
NO ₂	Attainment	Unclassifiable/Attainment
SO ₂	Attainment	Unclassifiable/Attainment
PB ¹	Attainment	Unclassifiable/Attainment

“—” = The national 1-hour O₃ standard was revoked effective June 15, 2005

Source: (Urban Crossroads, 2025a)

F. Local Air Quality

Relative to the Project site, the nearest long-term air quality monitoring site for O₃, CO (for the year 2021), NO₂, PM₁₀, and PM_{2.5} was obtained from the MDAQMD Victorville-Park Avenue, located approximately 9.05 miles southwest of the Project site in Victorville. The most recent three (3) years of data available is shown on Table 4.2-3, *Project Area Air Quality Monitoring Summary 2021-202*, and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} was obtained using the CARB iADAM: Air Quality and Data Statistics and the Air Quality and Meteorological Information System (AQMIS). Data for SO₂ has been omitted as attainment is regularly met and few monitoring stations measure SO₂ concentrations. (Urban Crossroads, 2025a)



Table 4.2-3 Project Area Air Quality Monitoring Summary 2021-2023

Pollutant	Standard	Year		
		2021	2022	2023
O ₃				
Maximum Federal 1-Hour Concentration (ppm)		0.112	0.100	0.097
Maximum Federal 8-Hour Concentration (ppm)		0.098	0.090	0.088
Number of Days Exceeding Federal 1-Hour Standard	> 0.09 ppm	0	0	0
Number of Days Exceeding State 1-Hour Standard		8	3	2
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	34	44	32
Number of Days Exceeding State 8-Hour Standard	> 0.075 ppm	18	23	13
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.515	N/A	N/A
NO ₂				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.057	0.054	0.060
Maximum State 1-Hour Concentration	> 0.180 ppm	0.056	0.053	0.060
Annual Federal Standard Design Value		13	13	11
Annual State Standard Design Value		12	12	12
Number of Days Exceeding Federal 1-Hour Standard	> 0.100 ppm	0	0	0
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
PM ₁₀				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	591.6	372.1	160.4
Annual Federal Arithmetic Mean (µg/m ³)		33.9	33.6	28.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	1	2	1
PM _{2.5}				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	87.1	24.6	25.6
Maximum State 24-Hour Concentration (µg/m ³)		87.1	24.6	25.6
Annual Federal Arithmetic Mean (µg/m ³)	>12 µg/m ³	10.2	8.9	7.9
Annual State Arithmetic Mean (µg/m ³)	>12 µg/m ³	10.3	9.0	7.9
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m ³	1	0	0

ppm = Parts Per Million

µg/m³ – microgram per cubic meter

-- = data not available

Source: (Urban Crossroads, 2025a)



4.2.2 REGULATORY FRAMEWORK

The following is a brief description of the federal, State, and local environmental laws and related regulations governing air quality emissions.

A. Federal

1. Federal Clean Air Act

The Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO_x), sulfur dioxide (SO₂), particulate matter (PM₁₀), PM_{2.5}, and lead (Pb).

One of the goals of the CAA was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The CAA was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines.

The sections of the federal CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions address the urban air pollution problems of O₃ (smog), CO, and PM₁₀. Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet Federal air quality standards designed to protect public health. Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO_x on a phased-in basis that began in model year 1994. Automobile manufacturers also are required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas.

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, CAA established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source.

For major sources, Section 112 requires that EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred



to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category, EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk.

2. *National Emissions Standards for Hazardous Air Pollutants (NESHAPs) Program*

National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The EPA develops national enforcement initiatives that focus on significant environmental risks and noncompliance patterns. For Fiscal Years 2014 to 2016, the Cutting Hazardous Air Pollutants National Initiatives Strategy focuses on categories of sources that emit HAPs.

Sources subject to NESHAPs are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, sources are generally required to monitor control device operating parameters which are established during the initial performance test. Sources may also be required to install and operate continuous emission monitors to demonstrate compliance. Consistent with EPA's Clean Air Act Stationary Source Compliance Monitoring Strategy, NESHAP sources that meet the Clean Air Act definition of "major source" generally receive a full compliance evaluation by the state or regional office at least once every two years.

B. *State*

1. *California Clean Air Act (CCAA)*

The California Clean Air Act (CCAA) establishes numerous requirements for district plans to attain state ambient air quality standards for criteria air contaminants. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State's ambient air quality standards, the California Ambient Air Quality Standards (CAAQS), by the earliest practical date. The California Air Resources Board (CARB) established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. Generally, the CAAQS are more stringent than the NAAQS. For districts with serious air pollution, its attainment plan should include the following: no net increase in emissions from new and modified stationary sources; and best available retrofit technology for existing sources. (SCAQMD, n.d.)

2. *Air Toxic "Hot Spots" Information and Assessment Act*

The Air Toxic "Hot Spots" Information and Assessment Act of 1987, commonly known as AB 2588, (Health & Safety Code §§ 44300, et seq.) requires facilities emitting specified quantities of pollutants to conduct risk assessments describing the health impacts to neighboring communities created by their emissions of numerous specified hazardous compounds. If the district determines the health impact to be significant, neighbors must be notified. In addition, state law requires the facility to develop and implement a plan to reduce the health impacts to below significance, generally within five years. Additional control requirements for hazardous emissions from specific industries are established by the state and enforced by districts. (SCAQMD, n.d.)



3. *Air Quality Management Planning*

The California Air Resources Board (CARB) and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies. (CARB, 2012)

4. *California Air Resources Board Rules*

The CARB enforces rules related to air pollutant emissions in the State of California. Rules with applicability to the Project include, but are not limited to, those listed below.

- CARB Rule 2480 (13 CCR 2480): Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools, which limits nonessential idling for commercial trucks and school buses within 100 feet of a school.
- CARB Rule 2485 (13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, which limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449 (13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, which limits nonessential idling to five minutes or less for diesel-powered off-road equipment.

5. *Mojave Desert Air Quality Management District Rules*

The Mojave Desert Air Quality Management District (MDAQMD) enforces rules related to air pollutant emissions in the SCAB. Rules with applicability to the Project include, but are not limited to, those listed below.

- MDAQMD Rule 201: Permit to Construct
- MDAQMD Rule 401: Visible Emissions
- MDAQMD Rule 402: Nuisance
- MDAQMD Rule 403: Fugitive Dust Control
- MDAQMD Rule 431: Sulfur Content of Fuels
- MDAQMD Rule 1113: Architectural Coatings



6. *Truck & Bus Regulation*

Under the Truck and Bus Regulation, adopted by CARB in 2008, all diesel truck fleets operating in California are required to adhere to an aggressive schedule for upgrading and replacing heavy-duty truck engines. Older, more polluting trucks are required to be replaced first, while trucks that already have relatively clean engines are not required to be replaced until later. Pursuant to the Truck and Bus Regulation, all pre-1994 heavy trucks (trucks with a gross vehicle weight rating greater than 26,000 pounds) were removed from service on California roads by 2015. Between 2015 and 2020, pre-2000 heavy trucks were equipped with PM filters and upgraded or replaced with an engine that meets 2010 emissions standards. The upgrades/replacements occurred on a rolling basis based on model year. By 2023, all heavy trucks operating on California roads must have engines that meet 2010 emissions standards. Lighter trucks (those with a gross vehicle weight rating of 14,001 to 26,000 pounds) adhered to a similar schedule, and were all replaced by 2020. (CARB, n.d.)

7. *Advanced Clean Truck Regulation*

In June, 2020, CARB adopted a new Rule requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California will be required to be zero-emission. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. CARB reports that as of 2020, most commercially-available models of zero-emission vans, trucks and buses operate less than 100 miles per day. Commercial availability of electric-powered long-haul trucks is very limited. However, as technology advances over the next 20 years, zero-emission trucks will become suitable for more applications, and several truck manufacturers have announced plans to introduce market ready zero-emission trucks in the future. (CARB, 2021)

8. *Senate Bill 535 – Disadvantaged Communities*

Senate Bill 535 (“SB 535”; De León, Chapter 830, 2012) asserts that low-income and disadvantaged communities are vulnerable to poor air quality. Disadvantaged communities in California are specifically targeted for investment of proceeds from the State’s cap-and-trade program. These investments are aimed at improving public health, quality of life, and economic opportunity in California’s most burdened communities while at the same time reducing pollution that causes climate change. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the State’s cap-and-trade program is one of several strategies that California uses to reduce greenhouse gas emissions that cause climate change. The funds must be used for programs that further reduce emissions of greenhouse gases. SB 535 requires that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as



analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). (OEHHA, 2022)

9. *Senate Bill 1000 – Environmental Justice in Local Land Use Planning*

In an effort to address the inequitable distribution of pollution and associated health effects in low-income communities and communities of color, the Legislature passed and Governor Brown signed Senate Bill 1000 (SB 1000) in 2016, requiring local governments to identify environmental justice communities (called “disadvantaged communities”) in their jurisdictions and address environmental justice in their general plans. This new law has several purposes, including facilitating transparency and public engagement in local governments’ planning and decision-making processes, reduce harmful pollutants and the associated health risks in environmental justice communities, and promote equitable access to health-inducing benefits, such as healthy food options, housing, public facilities, and recreation. SB 1000 requires environmental justice elements to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the community’s exposure to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities. (OAG, n.d.)

10. *Assembly Bill 617*

Assembly Bill 617 (AB 617) was enacted into law in 2017, and relates to criteria air pollutants and toxic air contaminants from sources other than vehicles. In response to AB 617, the California Air Resources Board (CARB) established the Community Air Protection Program (CAPP or Program). The Program’s focus is to reduce exposure in communities most impacted by air pollution. Communities around the State are working together to develop and implement new strategies to measure air pollution and reduce health impacts. This first-of-its-kind statewide effort includes community air monitoring and community emissions reduction programs. In addition, the Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State. This new effort provides an opportunity to continue to enhance air quality planning efforts and better integrate community, regional, and State level programs to provide clean air. (CARB, n.d.)

C. *Regional*

1. *Mojave Desert Air Quality Management District*

The MDAQMD has primary responsibility for regulating stationary sources of air pollution located within its jurisdictional boundaries. The District implements air quality programs required by state and federal mandates, enforces rules and regulations based on air pollution laws and educates businesses and residents about their role in protecting air quality and the risks of air pollution.



The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert sets forth a comprehensive set of programs that will lead the MDAB into compliance with federal and State air quality standards. The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments.

D. Local

1. Town General Plan Policies

The Town of Apple Valley General Plan identifies policies that relate to air quality within the Town. The specific policies outlined in the Town’s General Plan that are related to air quality and that apply to the Project are listed in a General Plan Consistency Analysis table in EIR Section 4.10, *Land Use and Planning* (refer to Table 4.9-2).

4.2.3 METHODOLOGY

A. California Emissions Estimator Model

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including MDAQMD, released California Emissions Estimator Model (CalEEMod) 2022 in May 2022. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine air quality emissions. (Urban Crossroads, 2025a)

B. Project Construction Emissions

Construction activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction-related emissions are expected from the following construction activities: site preparation, grading, building construction, paving, architectural coating, and construction workers commuting.

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions”. Fugitive dust emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Based on data provided by the Project engineer, it is anticipated that the Project will balance. Therefore, no import or export will be required.

The Project would require offsite utility improvements, as described in EIR Section 3.3. These offsite construction activities would not take place at one location for the entire duration of construction. Impacts associated with these activities are not expected to exceed the emissions identified for Project-related construction activities since the offsite construction areas would have physical constraints on the amount of



daily activity that could occur. The physical constraints would limit the amount of construction equipment that could be used, and any offsite and utility infrastructure construction would not use equipment totals that would exceed the equipment totals assumed for the Project as a whole.

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors trucks commuting to and from the site. Worker-related trips are based on CalEEMod defaults which are based on extensive, region-specific data and well-documented methodologies. Using these defaults ensures consistency with standard air quality modeling practices in the absence of project-specific trip data. Appendix D of the CalEEMod User Guide, titled Technical Source Documentation for Emission Calculations, provides details on the methodology and data sources used to estimate worker trips.

In CalEEMod, vendor trips are specifically assigned to the building construction phase because they are defined as the trips associated with the delivery of materials and equipment to the construction site during the actual building process. Though CalEEMod assigns vendor trips exclusively to the building construction phase, it could be assumed that vendor trips also occur during other construction phases, where materials and equipment deliveries are still necessary. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. By applying vendor trips to other construction phases, a more realistic scenario of construction-related traffic impacts could be modeled.

For the purposes of evaluating the Project's construction-related air quality impacts, construction of the Project is expected to commence in March 2025 and would last through December 2029. The construction schedule utilized in the analysis was previously depicted in EIR Table 3-1 in Section 3.0, and represents a "worst-case" analysis scenario because emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent; thus, if Project construction takes place at a later date, the level of emissions could be less than what is disclosed herein.

The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet, as required by CEQA. Consistent with industry standards and typical construction practices, each piece of equipment is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the Town code. A detailed summary of construction equipment assumptions by phase was previously depicted in EIR Table 3-2 in Section 3.0. (Urban Crossroads, 2025a)

Refer to Section 3.4 of *Technical Appendix B1* for more detail on the methodology utilized to calculate the Project's estimated construction-related regional pollutant emissions.

C. Project Operational Emissions

Operational activities associated with the proposed Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from area source emissions, energy source emissions, mobile source emissions, stationary source emissions, on-site cargo handling equipment emissions, and transportation refrigeration unit (TRU) emissions for cold storage uses.



Area source emissions include emissions from architectural coatings, consumer products, and landscape maintenance equipment. Energy source emissions include emissions associated with the combustion of natural gas and electricity. Mobile sources emissions include Project-related traffic, including both passenger vehicles and large trucks, and were calculated based on the results of the Project's Traffic Assessment (EIR *Technical Appendix K2*).

Stationary source emissions would result from the emergency fire pumps utilized on-site. Three 300-horsepower diesel-powered fire pumps (one for each building) would be installed at the Project site. The fire pumps were estimated to operate for up to one hour per day, one day per week for up to 50 hours per year for maintenance and testing purposes.

On-site equipment emissions include the operation of exterior cargo handling equipment in the building's truck court areas, and it is assumed that such equipment would include up to 13 compressed natural gas cargo handling equipment operating four hours a day for 365 days of the year.

TRU calculations are based on the EMFAC Offroad Emissions, developed by the CARB. EMFAC does not provide emission rates per hour or mile as with the on-road emission model and only provides emission inventories. Emission results are produced in tons per day while all activity, fuel consumption and horsepower hours were reported at annual levels. The emission inventory is based on specific assumptions including the average horsepower rating of specific types of equipment and the hours of operation annually. These assumptions are not always consistent with assumptions used in the modeling of project level emissions. Therefore, the emissions inventory was converted into emission rates to accurately calculate emissions from TRU operation associated with project level details. This was accomplished by converting the annual horsepower hours to daily operational characteristics and converting the daily emission levels into hourly emission rates based on the total emission of each criteria pollutant by equipment type and the average daily hours of operation. In order to meet the proposed Project's electrical demands, the proposed Project will utilize prime natural gas-powered generators for up to 10 years or until the electrical utility upgrades the Project's connection to the electrical grid. Based on information provided by the Project Applicant, it is anticipated that two generators would be utilized for each building, for a total of six generators for the Project. It is estimated that each engine would be rated at approximately 530 horsepower, and may operate up to 24 hours per day, 365 days per year. Stationary generator emissions were calculated based on emission factors provided by the engine manufacturer. (Urban Crossroads, 2025a)

For additional information regarding the calculation of Project operational emissions, please refer to Section 3.5 of the Project's Air Quality Impact Analysis (*Technical Appendix B1*).

D. Health Risk Assessment

The MDAQMD identifies that if a Project is expected to generate/attract heavy-duty diesel trucks, which emit diesel particulate matter (DPM), preparation of a mobile-source Health Risk Assessment (HRA) is recommended. The Project's HRA, which is included as *Technical Appendix B2*, has been prepared in accordance with the relevant documentation available including "Health Risk Assessment Guidance for



Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis” and is composed of all relevant and appropriate procedures presented by the United States Environmental Protection Agency (EPA), Cal EPA, and MDAQMD. Cancer risk is expressed in terms of expected incremental incidence per million population.

The Lakes AERMOD View (Version 12.0.0) was used to calculate annual average particulate concentrations associated with site operations. Modeled sensitive receptors were placed at residential and non-residential locations. Receptors may be placed at applicable structure locations for residential and worker property and not necessarily the boundaries of the properties containing these uses because the human receptors (residents and workers) spend a majority of their time at the residence or in the workplace’s building, and not on the property line. It should be noted that the primary purpose of receptor placement is focused on long-term exposure. Notwithstanding, as a conservative measure, receptors were placed at either the outdoor living area or the building façade, whichever is closer to the Project site. Discrete receptors were placed in all directions nearest to the Project site and Project truck routes in order to account for the predominant wind directions in the Project vicinity. For purposes of the HRA, receptors include both residential and non-residential (school children and worker) land uses in the vicinity of the Project site. These receptors are included in the HRA since residents, workers, and school children may be exposed at these locations over a long-term duration of 30, 25, and 9 years, respectively. This methodology is consistent with MDAQMD and OEHHA recommended guidance. Any impacts to residents or workers located further away from the Project site than the modeled residential and workers in a given direction would have a lesser impact than what has already been disclosed in the HRA at the MEIR, MEISC, and MEIW because concentrations dissipate with distance. (Urban Crossroads, 2025b)

For additional information regarding the calculation of Project DPM emissions, please refer to Section 2 of the Project’s HRA (*Technical Appendix B2*).

E. Sensitive Receptors

Receptors in the Project study area are described below and shown in Figure 4.2-1, *Sensitive Receptor Locations*. All distances are measured from the Project sites boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project sites. The selection of receptor locations is based on Federal Highway Administration (FHWA) guidelines and is consistent with additional guidance provided by Caltrans and the Federal Transit Administration (FTA). Distance is measured in a straight line from the project boundary to each receptor location.

- R1: Location R1 represents the existing residence at 22672 Earlimart Street, approximately 1,456 feet northeast of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R1 is placed at the building façade.

- R2: Location R2 represents the existing residence at 22425 Gustine Street, approximately 504 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R2 is placed at the building façade.



- R3: Location R3 represents the existing residence at 17805 Central Road, approximately 492 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R3 is placed at the building façade.
- R4: Location R4 represents the existing residence at 22522 Corwin Road Sherman Rd., approximately 1,420 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R4 is placed at the building façade.
- R5: Location R5 represents the existing residence at 17525 Central Road, approximately 793 feet southeast of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R5 is placed at the building façade.
- R6: Location R6 represents the potential worker receptor located approximately 7,009 feet northwest of the Project site.

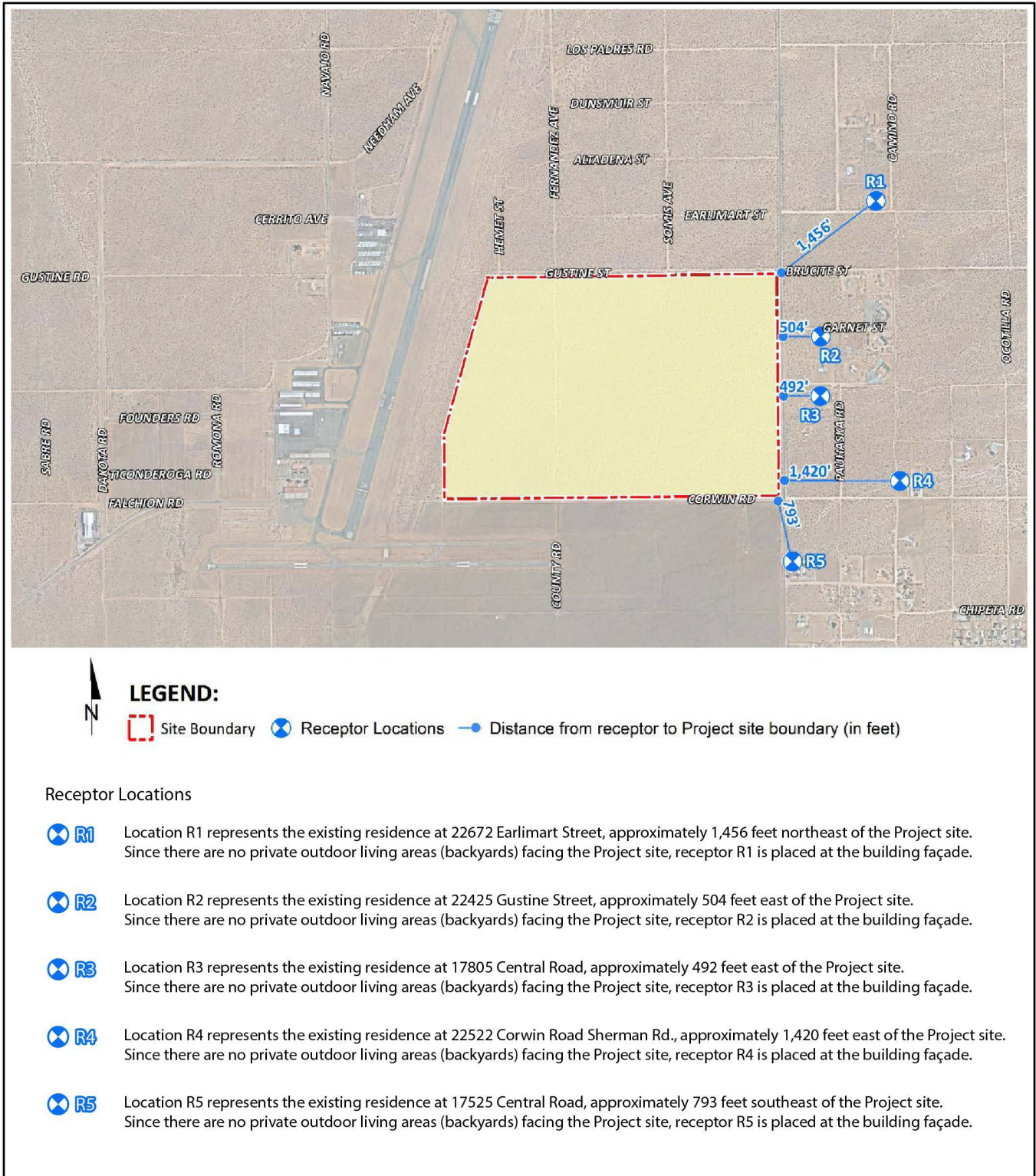
The nearest sensitive receptor is Receptor R3, a residence located at 17805 Central Road, approximately 492 feet east of the Project site. (Urban Crossroads, 2025a)

4.2.4 BASIS FOR DETERMINING SIGNIFICANCE

Section II of Appendix G to the CEQA Guidelines addresses typical adverse effects due to air quality, and includes the following threshold questions to evaluate the Project's impacts to air quality:

- a. *Would the Project conflict with or obstruct implementation of the applicable air quality plan?*
- b. *Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*
- c. *Would the Project expose sensitive receptors to substantial pollutant concentrations?*
- d. *Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The MDAQMD has developed regional significance thresholds for regulated pollutants, as summarized in Table 4.2-4, *Maximum Daily Regional Emissions Thresholds*. The MDAQMD's Guidelines indicate that any projects in the MDAB with daily regional emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.



Source(s): Urban Crossroads (11-11-2024)

Figure 4.2-1



Not to Scale



Sensitive Receptor Locations



Table 4.2-4 Maximum Daily Regional Emissions Thresholds

Pollutant	Regional Thresholds (lbs/day)
CO	548 lbs/day
NO _x	137 lbs/day
VOC	137 lbs/day
SO _x	137 lbs/day
PM ₁₀	82 lbs/day
PM _{2.5}	65 lbs/day

Source: (Urban Crossroads, 2025a)

With respect to health risks, the MDAQMD has established an incidence rate of ten (10) persons per million as the maximum acceptable incremental cancer risk due to DPM exposure from a project such as the proposed Project. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulatively considerable impact. The MDAQMD also has established non-carcinogenic risk parameters for use in HRAs. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index of less than one (1.0) means that adverse health effects are not expected. Non-carcinogenic exposures of less than 1.0 are considered less-than-significant. Both the cancer risk and non-carcinogenic risk thresholds are applied to the nearest sensitive receptors. (Urban Crossroads, 2025b)

4.2.5 IMPACT ANALYSIS

Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

As discussed previously, the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert set forth a comprehensive set of programs that will lead the MDAB into compliance with federal and State air quality standards. The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with these attainment plans for development projects is determined by demonstrating compliance the indicators discussed below.

1. Consistency Criterion No. 1

Local Land Use Plan and/or Population Projections

The growth forecasts used in the MDAQMD’s Federal Particulate Matter Attainment Plan and Ozone Attainment Plan to calculate future regional emissions levels are based on land use planning data provided by lead agencies via their general plan documentation. Development projects that increase the intensity of use on a specific property beyond the respective general plan’s vision may result in increased stationary area source



emissions and/or vehicle source emissions when compared to the Plan assumptions. The existing General Plan designation of the site is “Specific Plan.” The Project is consistent with the existing General Plan designation; No General Plan land use amendments are necessary to accommodate the Project.

2. Consistency Criterion No. 2

All MDAQMD Rules and Regulations

The Project would be required to comply with all applicable MDAQMD Rules and Regulations, including, but not limited to, Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust Control). As stated above, the Project also would be required to comply with MDAQMD Rule 1113 (Architectural Coatings). Because the Project would not conflict with any MDAQMD rules or regulations, the Project would be meet consistency criterion No. 2. (Urban Crossroads, 2025a)

3. Consistency Criterion No. 3

Demonstrating That the Project Will Not Increase the Frequency or Severity of a Violation in the Federal or State Ambient Air Quality Standards

As discussed in detail under the analysis of Threshold b, below, Project construction-source emissions for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} would not exceed applicable MDAQMD significance thresholds. Operational-source emissions for SO_x and PM_{2.5} would not exceed significance thresholds but would exceed applicable MDAQMD regional thresholds for emissions of VOCs, NO_x, CO and PM₁₀. This exceedance indicates that the Project could contribute to elevated pollutant levels in the region, potentially worsening the existing air quality conditions. Consequently, the Project may increase the frequency or severity of violations of federal and State ambient air quality standards. (Urban Crossroads, 2025a)

4. Conclusion

The Project is consistent with the site’s existing General Plan designation; No General Plan land use amendments are necessary to accommodate the Project. As such, the Project is considered consistent with the MDAQMD’s growth forecasts used to prepare their Federal Particulate Matter Attainment Plan and Ozone Attainment Plan. However, the Project would exceed the applicable regional thresholds during operation for emissions of VOCs, NO_x, CO and PM₁₀. The Project is therefore considered to be inconsistent with the AQMP. Impacts would be potentially significant. (Urban Crossroads, 2025a)

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

A. Construction Emissions Impact Analysis

Construction activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction-related emissions are expected from the following construction activities: Site Preparation; Grading; Building Construction; Paving; Architectural Coating; and Construction Workers Commuting. Please refer to Table 3-1, *Estimated Construction Schedule*, presented previously in Section 3.0,

Project Description, for the assumed phasing of construction activities. Additionally, previous Section 4.2.3, *Methodology*, details the sources and assumptions utilized in developing the Project-related construction emissions presented below in Table 4.2-5, *Project Construction Emissions Summary*,

Table 4.2-5 Project Construction Emissions Summary

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
2025	6.74	61.60	55.10	0.12	13.00	7.47
2026	9.74	41.40	144.00	0.17	24.30	6.56
2027	37.80	41.60	158.00	0.17	28.10	7.40
2028	39.30	46.00	160.00	0.18	28.40	7.61
2029	38.80	44.60	151.00	0.18	28.40	7.55
Winter						
2025	9.34	61.70	114.00	0.17	24.40	7.47
2026	8.88	43.00	107.00	0.17	24.30	6.56
2027	36.90	43.20	117.00	0.17	28.10	7.40
2028	38.40	47.60	121.00	0.18	28.40	7.61
2029	37.20	45.40	116.00	0.18	28.40	7.55
Maximum Daily Emissions	39.30	61.60	160.00	0.18	28.40	7.61
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: (Urban Crossroads, 2025a)

As shown above, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the MDAQMD. As such, emissions generated during Project construction would be less than significant.

B. Operational Emissions Impact Analysis

Operational activities associated with the proposed Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from mobile source emissions, area source emissions, energy source emissions, stationary source emissions, on-site cargo handling equipment emissions, and TRU emissions. Previous Section 4.2.3, *Methodology*, details the sources and assumptions utilized in developing the Project-related operational emissions summarized in Table 4.2-6, *Project Operation Emissions Summary (Without Mitigation)*. As shown, the Project’s daily regional emissions from on-going operations would exceed the MDAQMD significance thresholds for emissions of VOCs, NO_x, CO, and PM₁₀. This is a potentially significant impact.



Table 4.2-6 Project Operation Emissions Summary (Without Mitigation)

Source	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Mobile Source	31.80	149.00	361.00	2.09	124.00	34.30
Area Source	105.00	1.27	151.00	0.01	0.27	0.20
Emergency Fire Pump Source	1.48	4.13	3.77	0.01	0.22	0.22
TRU Source	38.58	36.58	4.68	0.00	1.28	1.18
Cargo Handling Equipment Source	1.53	4.88	213.78	0.00	0.38	0.35
Total Maximum Daily Emissions	178.39	195.85	734.23	2.11	126.15	36.25
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	YES	YES	YES	NO	YES	NO
Winter						
Mobile Source	29.30	158.00	281.00	2.01	124.00	34.30
Area Source	79.90	0.00	0.00	0.00	0.00	0.00
Emergency Fire Pump Source	1.48	4.13	3.77	0.01	0.22	0.22
TRU Source	38.58	36.58	4.68	0.00	1.28	1.18
Cargo Handling Equipment Source	1.53	4.88	213.78	0.00	0.38	0.35
Total Maximum Daily Emissions	150.79	203.58	503.23	2.02	125.88	36.05
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	YES	YES	NO	NO	YES	NO

Source: (Urban Crossroads, 2025a)

C. Summary

Consistent with SCAQMD guidance, individual projects that do not generate operational or construction emissions that exceed the MDAQMD’s recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Conversely, individual project-related construction and operational emissions that exceed MDAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

As shown in Table 4.2-5, Project construction would not result in an increase of any criteria pollutant for which the region is non-attainment under MDAQMD standards. As shown in Table 4.2-6, Project operations would exceed the MDAQMD significance thresholds for emissions of VOCs, NO_x, CO, and PM₁₀. Since the region



is non-attainment for PM₁₀ emissions, Project operations would result in a significant impact on a Project-specific and cumulative basis.

Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?

During both construction and operation, the Project has the potential to expose nearby sensitive receptors to substantial pollutant concentrations. The following provides an analysis of the Project's potential to result in or contribute to CO "hot spots," and an analysis of the Project's potential to result in cancer risks and non-cancer health hazards.

A. CO Hot Spot Impact Analysis

A CO hotspot is defined as a localized concentration of CO exceeding the State one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. At the time the most recent CEQA Air Quality Handbook (1993) was published by SCAQMD, the air basin was designated as non-attainment, requiring projects to perform hotspot analyses to ensure they did not worsen the existing conditions. Over the last two decades, background CO concentrations have been significantly reduced due to regulatory controls on tailpipe emissions, which have culminated in the air basin achieving attainment status for CO.

The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

In 2003, the SCAQMD as part of its AQMP development process, prepared modeling to determine the potential for CO Hotspots at the four busiest intersections in the air basin. As summarized in the 2003 AQMP, even at one of the busiest intersections at that time, only 0.7 ppm of CO is attributable to vehicular traffic and the remaining 7.7 ppm were due to ambient background conditions. The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the State's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns. (Urban Crossroads, 2025a)

B. Toxic Air Contaminants Impact Analysis

A Project-specific HRA was prepared for the Project based on MDAQMD guidelines to produce conservative estimates of risk posed by exposure to DPM. The Project's HRA is included as *Technical Appendix B2* to this EIR. Refer to Section 2 of the Project's HRA for a discussion of the recommended methodology, emissions estimation, exposure quantification, carcinogenic chemical risk, and non-carcinogenic exposure used as inputs to the analysis. Provided below is a summary of the results of the HRA for the Maximally Exposed Individual Receptor (MEIR), Maximally Exposed Individual Worker (MEIW), and Maximally Exposed Individual School Child (MEISC) during both construction and long-term operation.



1. *Construction Impacts*

The land use with the greatest potential exposure to Project construction DPM source emissions is Location R3 which is located approximately 492 feet east of the Project site at an existing residence located at 17805 Central Road. Because there are no private outdoor living areas (backyards) facing the Project site, R3 is placed at the building façade. The construction HRA components are based on an assumed mix of construction equipment and hauling activity. Construction-related DPM emissions are expected to occur primarily as a function of heavy-duty construction equipment that would be operating on-site. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to Project construction DPM source emissions is estimated at 2.24 in one million, which is less than the Mojave Desert Air Quality Management District (MDAQMD) significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity. Location R3 is the nearest receptor and would experience the highest concentrations of DPM during Project construction due to its proximity to the Project site as well as meteorological conditions (wind speed and direction) in the Project vicinity. As such, all other receptors during construction activity would experience less risk than what is identified for this location. Accordingly, impacts would be less than significant. (Urban Crossroads, 2025b)

2. *Operational Impacts*

Residential Exposure Scenario

The residential land use with the greatest potential exposure to Project TAC emissions is Location R2 which is located approximately 504 feet east of the Project site at an existing residence located at 22425 Gustine Street. Because there are no private outdoor living areas facing the Project site, R2 is placed at the building façade. At the MEIR, the maximum incremental cancer risk attributable to Project TAC emissions is estimated at 1.75 in one million, which is less than the MDAQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable significance threshold of 1.0. Although Location R2 is not the nearest receptor, it would experience the highest concentrations of DPM during Project operation due to meteorological conditions (wind speed and direction) in the Project vicinity. As such, all other receptors would experience less risk than what is identified for this location. As such, the Project would not cause a significant human health or cancer risk to nearby residences, and impacts would be less than significant. (Urban Crossroads, 2025b)

*Worker Exposure Scenario*¹

The worker receptor land use with the greatest potential exposure to Project TAC emissions is Location R6, which represents the potential worker receptor approximately 7,009 feet northwest of the Project site. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact is 0.06 in one

¹ Mojave Desert AQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the document OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines – The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2003), also indicate that it is not necessary to examine the health effects to on-site workers unless required by RCRA (Resource Conservation and Recovery Act) / CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) or the worker resides on-site.



million which is less than the MDAQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be <0.01 , which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors would experience lower concentrations of DPM due to meteorological conditions (wind speed and direction) in the Project vicinity, all other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent workers. As such, the Project would not cause a significant human health or cancer risk to nearby workers, and impacts would be less than significant. (Urban Crossroads, 2025b)

School Child Exposure Scenario

Proximity to sources of toxics is critical to determining the impact. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center. The 1,000-foot evaluation distance is supported by research-based findings concerning TAC emission dispersion rates from roadways and large sources showing that emissions diminish substantially between 500 and 1,000 feet from emission sources.

A one-quarter mile radius, or 1,320 feet, is commonly utilized for identifying sensitive receptors, such as schools, that may be impacted by a proposed project. This radius is more robust and therefore provides a more health protective scenario for evaluation than the 1,000-foot impact radius identified above.

There are no schools within one-quarter mile of the Project site. The nearest school is Sycamore Rocks Elementary School, which is located approximately 8,700 feet southeast of the Project site. Because there is no reasonable potential that TAC emissions would cause significant health impacts at distances of more than one-quarter mile from the air pollution source, there would be no impact that would occur to any schools in the vicinity of the Project. (Urban Crossroads, 2025b)

3. Construction and Operational Impacts – Toxic Air Contaminants

The land use with the greatest potential exposure to Project construction and operational TAC emissions is Location R2 which is located approximately 504 feet east of the Project site at an existing residence located at 22425 Gustine Street. Because there are no private outdoor living areas facing the Project site, R2 is placed at the building façade. At the MEIR, the maximum incremental cancer risk attributable to Project construction and operational TAC emissions is estimated at 3.82 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01 , which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction and operational activity. All other receptors during construction and operational activity would experience less risk than what is identified for this location. Therefore, Project impacts due to TACs would be less than significant. (Urban Crossroads, 2025b)



4. Valley Fever

Coccidioidomycosis, more commonly known as “valley fever,” is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The fungus is very prevalent in the soils of California’s San Joaquin Valley, particularly in Kern County. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils. (Urban Crossroads, 2025b)

San Bernardino County is not considered a highly endemic county (i.e., highly endemic meaning more than 20 cases annually of valley fever per 100,000 people) based on the incidence rates reported through 2023. The latest report from the California Department of Public Health indicates that San Bernardino County had 128 cases in 2023, or 5.8 cases per 100,000 people. (Urban Crossroads, 2025b)

Construction of the proposed Project has the potential to generate substantial amounts of fugitive dust that may suspend coccidioides spores and expose sensitive receptors. The City is located in an area with low Valley Fever activity; however, there is still a potential for exposure. (Urban Crossroads, 2025b) As previously stated, the Project would be required to comply with all applicable MDAQMD Rules and Regulations, including Rule 403 (Fugitive Dust). Implementation of Rule 403 would reduce fugitive dust minimizing exposure of coccidioides spores to workers and receptors. Therefore, impacts related to Valley Fever from the proposed Project would be less than significant.

Threshold d: Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)

Land uses generally associated with odor complaints include agricultural uses (livestock and farming), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The Project does not propose or require land uses that would use substantive sources of objectionable odors.

Potential temporary and intermittent construction-related odor sources associated with the Project may result from construction equipment exhaust and application of asphalt and architectural coatings during construction activities. Temporary and intermittent construction-source emissions are controlled through existing requirements and industry Best Management Practices (BMPs) addressing proper storage of and application construction materials. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and are thus considered less than significant.

Over the life of the Project, odors may result from storage of municipal solid waste pending its transport to area landfills. Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the Town of Apple Valley’s solid waste regulations.

The Project would also be required to comply with MDAQMD Rule 402. Rule 402 provides that “[a] person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or



which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”

Based on the preceding analysis, the potential for the Project to create objectionable odors affecting a substantial number of people would be less than significant. (Urban Crossroads, 2025a)

4.2.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. The Project proposes land uses that are consistent with development anticipated under the site’s existing General Plan designation, and would therefore conform to local land use plans. However, the Project would exceed the applicable regional thresholds during operation for emissions of VOCs, NO_x, CO, and PM₁₀. The Project is therefore considered to be inconsistent with the AQMP. This is a potentially significant impact.

Threshold b: Potentially Significant Impact. Project construction-source air pollutant emissions would not result in exceedances of MDAQMD thresholds. Therefore, Project construction-source emissions would be considered less than significant. However, Project operational-source air pollutant emissions would result in exceedances of MDAQMD thresholds for emissions of VOCs, NO_x, CO, and PM₁₀. This is a potentially significant impact.

Threshold c: Less Than Significant Impact. Project emissions would not cause or contribute to a CO “Hot Spot.” Additionally, the maximum incremental cancer risk attributable to Project construction and operational DPM source emissions is estimated at 3.82 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.01, which would not exceed the applicable threshold of 1.0. As such, the Project would not cause a significant human health or cancer risk to nearby land uses as a result of Project construction and operational activity. Because all other receptors during construction and operational activity would experience less risk than what is identified for this location, Project impacts due to TACs would be less than significant.

Threshold d: Less Than Significant Impact. The Project does not propose land uses typically associated with emitting objectionable odors. Any construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction. Additionally, it is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the Town’s solid waste regulations. The Project also would be required to comply with MDAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

4.2.7 TOWN REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

Applicable Town Regulations and Design Requirements

- The Project is required to comply with the provisions of Mojave Desert Air Quality Management District Rule 402, which requires that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance



to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- The Project is required to comply with the provisions of Mojave Desert Air Quality Management District Rule 403, “Fugitive Dust Control” by implementing the following dust control measures during construction activities, such as earth-moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the Town of Apple Valley shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by Town staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.
 - All clearing, grading, earth-moving, or excavation activities shall be reduced when winds exceed 25 miles per hour (mph) per MDAQMD guidelines in order to limit fugitive dust emissions. A reduction in Earth-Moving Activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance.
 - The construction contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are subject to periodic watering for short-term stabilization of disturbed surfaces. Use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance.
 - The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.
- The Project is required to comply with the provisions of Mojave Desert Air Quality Management District Rule 113, *Architectural Coatings*, by requiring that all architectural coatings must consist of low VOCs.
- The Project is required to comply with the provisions of MDAQMD Rule 402, “Nuisance” which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.

Mitigation

MM 4.2-1 **Construction Equipment Idling Restrictions.** The idling of heavy construction equipment for more than 5 minutes shall be prohibited. Signage shall be posted throughout the construction site informing construction personnel of the idling time limit. Idling time limits shall be noted in construction specifications. Subject to all other idling restrictions, heavy construction equipment shall not be left in the “on position” for more than 8 hours per day.

MM 4.2-2 The Project Applicant or successor in interest shall implement the following measures:



- The Project's landscape plan shall incorporate drought-tolerant plants and use water-efficient irrigation techniques.
- All appliance fixtures shall be Energy Star-rated.
- All fixtures installed in restrooms and employee break areas shall be U.S. Environmental Protection Agency (U.S. EPA) WaterSense certified or equivalent.

MM 4.2-3 Prior to the certificate of occupancy for each building, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity.

MM 4.2-4 **Solar Power².** Prior to the issuance of building permits, the roofs of the warehouse buildings shall be designed to provide the structural capacity to accommodate roof-top solar panels.

Prior to the issuance of certificate of occupancy for each building, the Project Applicant or successor in interest shall install rooftop solar panels that generate sufficient power to meet at least 10 percent (%) of the Project's total operational base energy requirements from within the Project's building envelope. The Town of Apple Valley shall verify the size and scope of the solar energy system based upon the analysis of the projected power requirements and generating capacity as well as the available solar panel installation space. In the event sufficient space is not available on the Project site to accommodate the needed number of solar panels to produce the operation's base power use, the Project Applicant or successor in interest shall demonstrate how all available space has been maximized (e.g., roof) for solar energy system use. Areas that provide for truck movement may be excluded from these calculations unless otherwise deemed acceptable by the supplied reports and applicable building standards. The operation of the system shall commence only when it has received permission to operate from the applicable utility. The solar energy system owner shall be responsible for maintaining the system at not less than 80% of the rated power for 20 years. At the end of the 20-year period, the owners, operators, or tenants shall install a new photovoltaic system meeting the capacity and operational requirements of this measure, or continue to maintain the existing system, for the life of the Project. As the Project's demand for solar power increases, additional solar panels may be added to the Project.

MM 4.2-5 **Sustainable Design/LEED Measures.** The Project shall be designed so that it is able to achieve LEED certification at the time of building permit application. Documentation shall be provided to the Town of Apple Valley demonstrating that the Project meets this requirement prior to the issuance of building permits.

² The proposed mitigation measure exceeds the requirements of Title 24 by establishing a performance-based goal for on-site renewable energy production. While Title 24 mandates a minimum size for solar based on a building's conditioned floor area or available roof space, it does not ensure that a specific portion of the building's energy is offset. Mitigation Measure MM 4.2-4 mandates that rooftop solar panels must produce at least 10% of the Project's total electricity consumption. This approach ensures a more substantial and quantifiable reduction in electricity use, surpassing standards set by Title 24.



- MM 4.2-6 **Sustainable Concrete Building Materials.** The Project shall be designed with sustainable materials that will reduce 35% of the overall carbon footprint compared to other traditionally designed concrete tilt warehouses. The following measures shall be implemented:
- The Project shall reduce overall concrete in the tilt walls by 30% by providing 4-inch foam insulation in the middle of the concrete panel (also known as composite panels). The foam insulation will result in an R value of R-19, while traditional concrete tilt walls have no R value, thereby reducing overall energy consumption and increasing occupant comfort.
 - The roof shall have a 10% reduction in steel because of the lighter concrete tilt walls due to the foam insulation.
 - The Project specifications shall require the use of sustainable concrete to reduce the Project's overall carbon footprint by 35%.
- MM 4.2-7 **Electrical Infrastructure for Electric Equipment and Vehicles.** The Project shall be designed to include electrical infrastructure to accommodate the required number of electric vehicle (EV) charging stations, the anticipated number charging stations for electric cargo handling equipment, and the potential installation of additional automobile and truck EV charging stations per Title 24, Part 11: California Green Building Standards Code (CALGreen). Electrical conduit shall be installed within reasonable locations (e.g., parking areas, at or near dock doors) at the time of building construction to satisfy this requirement. The Project's electrical rooms shall be of sufficient size to accommodate the upsizing of electrical equipment to accommodate potential future electrical loads.
- MM 4.2-8 **EV Charging Stations.** Prior to issuance of a Certificate of Occupancy, Level 2 (or faster) EV charging stations shall be installed on-site for employees for the percentage of employee parking spaces commensurate with CALGreen requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater.
- MM 4.2-9 **Sustainable Energy, Waste, and Water Design Measures.** The Project Applicant or successor in interest shall implement the following measures:
- Structures shall be equipped with outdoor electric outlets in the front and rear of the structures to facilitate use of electrical lawn and garden equipment.
 - Storage areas shall be provided for recyclables and green waste, as well as food waste storage if a pick-up service is available.
 - The roof shall provide R-19 insulation to decrease overall energy consumption and increase occupant comfort.
 - A timer system for lighting to ensure that lights shall be switched off during times of non-operation shall be installed on the Project site.
- MM 4.2-10 **Design of Ingress/Egress Points.** Entry gates into the loading dock/truck court areas shall be sufficiently positioned to ensure that all truck and other vehicles are contained on site and



inside the property line. Queuing, or circling of vehicles, on public streets immediately pre- or post-entry to the Project shall be strictly prohibited unless queuing occurs in a deceleration lane or right turn lane exclusively serving the Project site.

MM 4.2-11 **Measures to Reduce the Urban Heat Island Effect.** The following measures shall be implemented to reduce the urban heat island effect:

- The Project's roof structures shall be designed to include "cool roof" materials with a minimum aged reflectance and thermal emittance values that are equal to or greater than those specified in the current edition of CALGreen, Table A5.106.11.2.3 for Tier 1 standards.
- Sufficient shade trees shall be provided throughout the Project site so that at least 30% of the automobile parking areas will be shaded within 15 years after Project construction is complete (excluding the truck courts where trees cannot be planted due to interference with truck maneuvering).

MM 4.2-12 **Truck Requirements and Restrictions.** The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility:

- Only haul trucks meeting California Air Resources Board (CARB) model year 2010 (or newer) engine emission standards shall be used for the on-road transport of materials to and from the Project site. In addition, tenants shall be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation. The building manager or their designee shall be responsible for enforcing these requirements.

MM 4.2-13 **Idling Time Restriction.** The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility:

- Upon commencement of operations, the tenant/operator of the Project shall be required to restrict truck idling on site to a maximum of 3 minutes, subject to exceptions defined by the CARB's commercial vehicle idling requirements. The building manager or their designee shall be responsible for enforcing this requirement.

MM 4.2-14 **Anti-Idling Implementation Measures.** The following measures shall be implemented to reduce air pollutant emissions from idling:



- **Signage.** Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify the Project's three-minute idling restriction. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; (3) telephone numbers of the building facilities manager and CARB to report violations; and (4) that penalties apply for violations. Prior to the issuance of an occupancy permit, the Town of Apple Valley shall conduct a site inspection to ensure that the signs are in place.
- **Efficient Load Management.** The facility operator(s) shall be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- **Anti-Idling Training.** Tenants and operators on the Project site shall ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free, one-day Course #512).

MM 4.2-15 **Truck Routing Plan.** The Project Applicant or successor in interest shall establish and submit for approval to the Town of Apple Valley a Truck Routing Plan that provides for routes between the Project site and the State Highway System. The Truck Routing Plan shall include measures, such as signage, pavement markings, and enforcement, for preventing truck queuing, circling, stopping, and parking on public streets. The Truck Routing Plan shall make every effort to avoid passing sensitive receptors, to the greatest extent possible, unless otherwise superseded by an applicable truck routing ordinance adopted by the Town of Apple Valley. The tenant/operator of the Project shall be responsible for enforcement of the Truck Routing Plan. A revised plan shall be submitted to the Town of Apple Valley prior to a business license being issued by the Town of Apple Valley for any new tenant/operator of the Project site. The revised plan shall expand upon the original Truck Routing Plan and describe the operational characteristics of the use of the tenant/operator, including, but not limited to, hours of operations, types of items to be stored within the building, and whether any modifications to the Project's designated truck routes are necessary. The Town of Apple Valley shall have discretion to determine if changes to the Truck Routing Plan are necessary including any additional measures to alleviate truck routing and parking issues that may arise during the life of the Project. Signs and drive aisle pavement markings shall clearly identify the on-site circulation pattern to minimize unnecessary on-site vehicular travel.

MM 4.2-16 **Transportation Demand Management Plan.** For occupants with more than 250 employees, a Transportation Demand Management (TDM) program to reduce employee commute vehicle emissions shall be established, subject to review and approval by the Town of Apple Valley. The TDM plan shall apply to Project tenants through tenant leases. The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation



such as carpooling, taking transit, walking, and biking. Examples of trip reduction measures may include, but are not limited to:

- Transit passes
- Car-sharing programs
- Telecommuting and alternative work schedules
- Ride sharing programs

MM 4.2-17 **Yard Sweeping to Reduce Fugitive Dust.** The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility:

- Yard and parking area sweeping shall be periodically conducted to minimize dust generation from the Project site. The building manager or their designee shall be responsible for enforcing this requirement.

MM 4.2-18 **Provision of Information Regarding Programs to Reduce Emissions from Trucks.** Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that occupants/tenants of the Project site have been provided informational documentation regarding:

- Funding opportunities that provide incentives for using cleaner than-required engines and equipment, such as the Carl Moyer Program and Voucher Incentive Program. The U.S. EPA SmartWay Program, which assists freight shippers, carriers, logistics companies, and other stakeholder partner with the U.S. EPA to measure, benchmark, and improve logistics operations and reduce air pollutant emissions from transport of cargo.

MM 4.2-19 **Fire Pump Requirements.** All diesel-fueled fire pump shall meet U.S. EPA-certified Tier 4 Interim emissions standards, at a minimum.

MM 4.2-20 The Project Applicant/Developer/Owner shall require tenants to use zero-emission light- and medium-duty trucks as part of business operations, if such trucks are commercially available, as reasonably determined by the Lead Agency.

4.2.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Mitigation Measures MM 4.2-5 through MM 4.2-20 would reduce operational emissions; however, the reductions associated with these measures are not easily quantified. Therefore, emission credits or reductions from the implementation of these measures have not been taken. Accordingly, the following Table 4.2-7 reflects only reductions realized with the implementation of Mitigation Measures MM 4.2-1 through MM 4.2-4.

Threshold a: Significant and Unavoidable Impact. The Project is consistent with the existing General Plan land use designations of the site. However, as shown in Table 4.2-7, mitigated Project operational-source emissions would still exceed the applicable regional thresholds during operation for emissions of VOCs, NO_x, and PM₁₀. As such, the Project is considered to be inconsistent with the AQMP.

Threshold b: Significant and Unavoidable Impact. Mitigation Measures MM 4.2-2 through MM 4.2-20, above, are designed to reduce Project operational-source VOC, NO_x, and PM₁₀ emissions. However, as shown in Table 4.2-7, mitigated Project operational-source emissions would still be considered significant and unavoidable.

Table 4.2-7 Project Operation Emissions Summary (With Mitigation)

Source	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Mobile Source	31.80	149.00	361.00	2.09	124.00	34.30
Area Source	105.00	1.27	151.00	0.01	0.27	0.20
Emergency Fire Pump Source	1.48	4.13	3.77	0.01	0.22	0.22
TRU Source	38.58	36.58	4.68	0.00	1.28	1.18
Cargo Handling Equipment Source	0.00	0.00	0.00	0.00	0.00	0.00
Total Maximum Daily Emissions	176.86	190.98	520.45	2.11	125.77	35.90
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	YES	YES	NO	NO	YES	NO
Winter						
Mobile Source	29.30	158.00	281.00	2.01	124.00	34.30
Area Source	79.90	0.00	0.00	0.00	0.00	0.00
Emergency Fire Pump Source	1.48	4.13	3.77	0.01	0.22	0.22
TRU Source	38.58	36.58	4.68	0.00	1.28	1.18
Cargo Handling Equipment Source	0.00	0.00	0.00	0.00	0.00	0.00
Total Maximum Daily Emissions	149.26	198.71	289.45	2.02	125.50	35.70
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	YES	YES	NO	NO	YES	NO

Source: (Urban Crossroads, 2025a)



4.2.9 CUMULATIVE IMPACT ANALYSIS

The MDAQMD relies on the SCAQMD guidance for determining cumulative impacts. The SCAQMD has recognized that there is typically insufficient information to quantitatively evaluate the cumulative contributions of multiple projects because each project applicant has no control over nearby projects.

The SCAQMD published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. In this report the SCAQMD clearly states (Page D-3):

“...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is $HI > 1.0$ while the cumulative (facility-wide) is $HI > 3.0$. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.”

Consistent with the above SCAQMD guidance, individual projects that do not generate operational or construction emissions that exceed the MDAQMD’s recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Conversely, individual project-related construction and operational emissions that exceed MDAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

1. *Construction Impacts*

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project construction-source air pollutant emissions would not result in exceedances of MDAQMD thresholds. Therefore, Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

2. *Operational Impacts*

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project operational-source air pollutant emissions would result in exceedances of MDAQMD thresholds for emissions



of VOCs, NO_x, and PM₁₀. Therefore, Project operational-source emissions would be considered significant and unavoidable on a Project-specific and cumulative basis.

3. *Health Risk Impacts*

The Project-specific evaluation of health risk impacts presented in the preceding analysis demonstrates that Project emissions would not cause or contribute to a CO “Hot Spot.” Additionally, the maximum incremental non-cancer and cancer risks attributable to Project construction and operational DPM source emissions would be less than applicable thresholds. Therefore, Project health risk impacts would be considered less than significant on a Project-specific and cumulative basis.



4.3 BIOLOGICAL RESOURCES

The following analysis is based primarily on information obtained from the following technical report:

- *Lake Creek Logistics Center Project General Biological Resources Assessment* (Noreas Environmental Engineering and Science) January 2025.

The Biological Resources Assessment includes assessments for special-status plant and wildlife species and focused assessments of Burrowing Owl, Desert Tortoise, Mohave Ground Squirrel (MGS), and Delineation of Waters of the United States (WOTUS) and the State (WOTS). The Biological Resources Assessment is included in its entirety as EIR *Appendix C*. Refer also to EIR Section 7.0, *References*, for a complete list of reference sources.

4.3.1 ENVIRONMENTAL SETTING

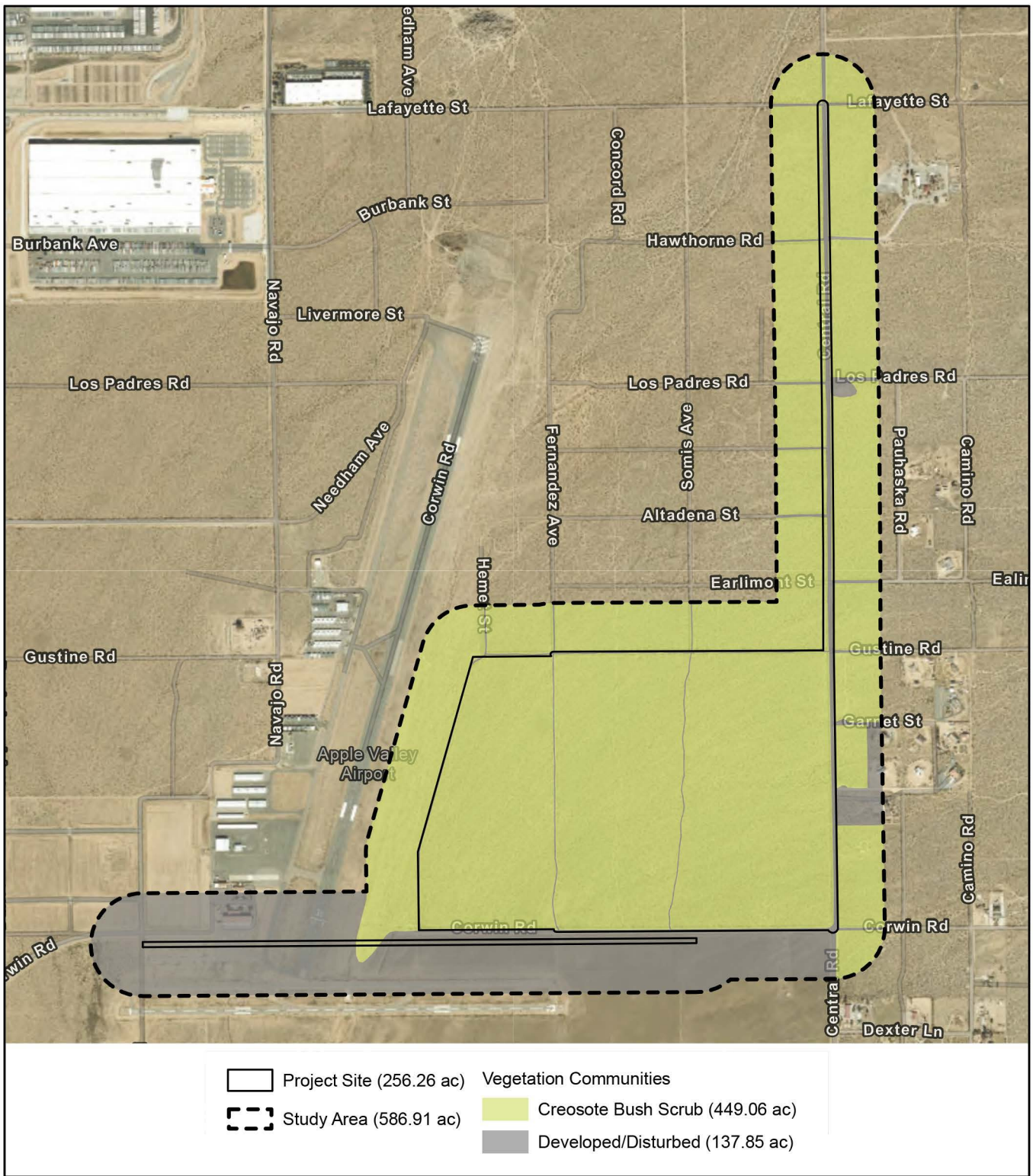
A. Vegetation Communities

Two vegetation communities and land cover types were observed within the study area: approximately 449.06 acres of Creosote Bush Scrub and approximately 137.85 acres of Developed/Disturbed lands (see Figure 4.3-1, *Vegetation Communities and Land Cover Types*). Creosote Bush Scrub within the study area is dominated by widely spaced creosote (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), cheesebush (*Ambrosia Salsola*), and sweetbush (*Bebbia juncea*) with bare ground between them. Many species of herbs and annuals may appear depending on sufficient fall / winter rains. Other common species present included wall barley (*Hordeum murinum*), red brome (*Bromus madritensis subsp. rubens*), and Mediterranean grass (*Schismus barbatus*). There are erosional signatures, rills, and tire ruts throughout this type.

Developed or disturbed lands include areas that have been disked, cleared, paved, or otherwise altered by human activities. This cover type within the study area includes off-highway vehicle routes, paved roads, an abundance of trash from illegal dumping, spent shell casings and cleared lands. Common non-native plants species within this land cover type included red brome and Mediterranean grass.

B. Wildlife

Wildlife species observed within the study area consisted of commonly-occurring species including, but not limited to, house finch (*Haemorhous mexicanus*), western meadowlark (*Sturnella neglecta*), common raven (*Corvus corax*), and cottontail (*Sylvilagus audubonii*). Refer to the Project's Biological Resources Assessment (EIR *Appendix C*) for a complete list of wildlife species observed within the Project study area.



Source(s): NOREAS (01-17-2025)

Figure 4.3-1



Not to Scale



Vegetation Communities and Land Cover Types



C. Special-Status Plants

No federal or State-listed plant species were observed within the Project site during the 2022, 2023 or 2024 field surveys. The study area does not include any USFWS-designated critical habitats for plants. Based on the results of the targeted plant species, there are no special status plants present within the Project site. Several species of native cactus, which are protected by local ordinance, are located within the Project site. Refer to the Project's Biological Resources Assessment (EIR *Appendix C*) for a complete list of plant species observed within the study area, and the focused native plant survey.

D. Special-Status Animals

No federally-listed wildlife species were observed within the study area during the 2022, 2023 or 2024 field surveys. The study area does not include any USFWS-designated critical habitat for wildlife.

One Burrowing Owl was observed within the Project site and a burrow with evidence of owl activity was observed within the study area (but outside of the Project site limits). The single owl was not consistently observed. Additionally, the owl was not part of a breeding pair, but it did sporadically occupy a burrow on site throughout the survey period. Two burrows (one within the Project site and one outside of the Project site limits within the study area) contained owl sign such as pellets, excrement and feathers. Furthermore, numerous (albeit low quality) potential burrows (two within the Project site and four outside of the Project site limits within the study area), and burrow complexes were also detected. The vast majority of the burrows observed lacked evidence of owl sign (i.e., tracks, molted feathers, cast pellets, prey remains, eggshell fragments, owl white wash, and nest burrow decoration materials). The lack of consistent burrowing owl activity and observations - over consecutive years of assessment, is likely a result of marginal habitat quality and high predation pressure. As the study area is a relatively disturbed landscape with few natural prey burrows and numerous predators (e.g. coyotes, raptors, ravens), which discourage burrowing owl nesting. Disturbed or poor-quality habitats with abundant predators tend to have lower occupancy and breeding success. In this instance, the study area is disturbed (off-road vehicle trails, trash dumping, airport activity) and supports numerous predators of burrowing owls (hawks, ravens, crows, coyotes, snakes, etc.). These factors make the area unattractive or risky for sustained owl breeding and habitation. The USFWS notes that an "increased presence of predators" is a known threat that can suppress burrowing owl populations in developed landscapes.

The Desert Tortoise was not detected during the survey and assessment efforts in 2022, 2023, or 2024. Anthropogenic interference has significantly diminished the habitat quality of the study area, making it unfavorable for tortoise habitation.

The Mohave Ground Squirrel (MGS) is not expected to be present within the Project site, as the site lacks the essential habitat attributes needed to support the species. The current vegetation composition, lack of a viable water source, and absence of functional wildlife corridors between the Project site and the closest core population, render the site unsuitable for the habitation of MGS.

Additionally, the comprehensive biological assessment indicated that the Project site and study area lack the essential habitat elements required for the survival and reproduction of the Crotch's



Bumblebee. The determination was based on the following: lack of suitable foraging habitat; disturbed and degraded habitat; fragmented and limited native vegetation; and proximity to higher-quality habitat.

The Project's Biological Resources Assessment, *Appendix C* of this EIR, provides a complete list of special-status species evaluated for potential of occurrence within the study area.

E. Wetlands and Waterways

At nine specific locales within the Project site, ephemeral non-riparian streambeds which total 8,668 linear feet were mapped. As illustrated in Figure 3 of the Delineation of Waters of the State (provided in the Project's Biological Resources Assessment, *Appendix C* of this EIR), the results of the biological surveys indicate that there are 1.9 acres of WOTS within the Project site that are subject to regulation under Section 1600 (et seq.) of the California Fish and Game Code and Section 13260 of the California Water Code (CWC).

The delineation resulted in the identification of no WOTUS within the Project site. As there are no signatures within the Project site that possess a relatively permanent - or continuous and uninterrupted, surface water connection to any (a)(1) through (a)(5) Waters, as described in Title 33 CFR Part 328(a).

There is no physical evidence of a relatively permanent surface water connection from the Project site to a Traditional Navigable Water (TNW), to any Relatively Permanent Waters (RPW) or to the Mojave River. The Project site is isolated from any TNW, RPW and the Mojave River, as it lacks a connection to the Mojave River, which is the most significant watercourse in the Apple Valley region. Nonetheless, the Mojave River is an ephemeral river itself, meaning it only has surface flows during significant rainfall events. Still, due to the nature of ephemeral flows in the area, and the arid environment, flows from the Project site lack a continuous or relatively permanent surface water connection to the Mojave River. The signatures detected within the Project site are ephemeral features that drain into intermittent channels or alluvial fans, where water quickly disperses, infiltrates or evaporates before making their way to any noteworthy watercourse.

F. Native Plants

Several species of native plants were identified onsite during the Native Plant Inspection (provided in the Project's Biological Resources Assessment, *Appendix C*), including Branched Pencil Cholla, Golden Cholla, and Mojave Yucca. The location of these species is illustrated in Figure 5 of the Native Plant Inspection. These species are subject to Municipal Code Chapter 9.76, *Plant Protection and Management Policy*, as discussed subsequently.



4.3.2 REGULATORY FRAMEWORK

A. *Federal*

1. *Endangered Species Act (ESA)*

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department’s National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. “Endangered” means a species is in danger of extinction throughout all or a significant portion of its range. “Threatened” means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened.

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” Through regulations, the term “harm” is defined as “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants.

Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation, the “action” agency receives a “biological opinion” or concurrence letter addressing the proposed action. In the relatively few cases in which the USFWS or NMFS makes a jeopardy determination, the agency offers “reasonable and prudent alternatives” about how the proposed action could be modified to avoid jeopardy. It is extremely rare that a project ends up being withdrawn or terminated because of jeopardy to a listed species.

Section 10 of the ESA may be used by landowners including private citizens, corporations, tribes, states, and counties who want to develop property inhabited by listed species. Landowners may receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to avoid, minimize, and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat and by addressing economic development with a focus on species conservation. (USFWS, 2017)



2. *Clean Water Act Section 404*

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities).

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation’s waters would be significantly degraded. Applications for permits must, to the extent practicable: (1) demonstrate steps have been taken to avoid wetland impacts; (2) demonstrate that potential impacts on wetlands have been minimized; and (3) provide compensation for any remaining unavoidable impacts. Proposed activities are regulated through a permit review process.

An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers (USACE), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption.

3. *Migratory Bird Treaty Act (16 USC Section 703-712)*

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, n.d.)



B. State

1. California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The CDFW works with interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met.

Section 2081 subdivision (b) of the California Fish and Game Code (CFGF) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs).

If a species is listed by both the federal ESA and CESA, CFGF Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA.

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, n.d.)

2. Natural Community Conservation Planning Act (NCCP)

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly.

An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous



activities that compose the development of an NCCP. CDFW and USFWS provide the necessary support, direction, and guidance to NCCP participants.

There are currently 17 approved NCCPs (including 6 subarea plans) and more than 9 NCCPs in various stages of planning (includes 2 subarea plans), which together cover more than 8 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, n.d.)

3. *California Fish and Game Code, Section 1600, et seq.*

CFGF section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (3) deposit debris, waste or other materials that could pass into any river, stream, or lake. The CFGF indicates that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, n.d.)

4. *Native Plant Protection Act (NPPA) of 1977*

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, n.d.)

5. *Unlawful Take or Destruction of Nests or Eggs (CFGF Sections 3503.5-3513)*

Section 3503.5 of the CFGF specifically protects birds of prey, stating: "It is unlawful to take, possess, or destroy any . . . [birds-of-prey] or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 of the CFGF duplicates the federal protection of migratory birds, stating: "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act."



C. *Local*

1. *Town of Apple Valley General Plan*

The Town of Apple Valley General Plan Biological Resources Element provides goals, policies, and programs that address biological resources. The element is intended to identify the variety of biological resources within the Town and vicinity and provide management strategies for the preservation and protection of the natural environment and the many biological resources that are present in the area. Project-applicable goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, presented in EIR Section 4.10, *Land Use and Planning*.

2. *Town of Apple Valley Municipal Code*

Municipal Code Chapter 9.76, *Plant Protection and Management Policy*, contains the Town's Protected Plant Policies and includes policies for desert native plants, riparian plant conservation, and Western Joshua Trees.

3. *Apple Valley Multi-Species Conservation Plan*

There are approximately 30 sensitive species found throughout the Town and within the Sphere of Influence, including State and/or federally listed species such as the Desert Tortoise and the Least Bell's vireo. These listed species are protected by the State and/or federal ESAs. Individual development projects (private or public) proposed within the Town that may impact a listed species are currently processed separately through State and/or federal permit processes to address compliance with the CESA and/or ESA. Depending on the project and the biological impacts associated with it, the process takes a year or more to complete. The processes are both time-consuming and expensive. The Town is currently undertaking the preparation of a Multiple Species Habitat Conservation Plan (MSHCP), which will enable the Town to streamline the development entitlement process while ensuring protection of sensitive environmental resources.

4.3.3 METHODOLOGY

As previously stated, the analysis presented within this Section is summarized from the information presented within the site-specific Biological Resources Assessment prepared for the Project, provided as *Appendix C* to this EIR. As a conservative measure, the Biological Resources Assessment assessed the Project site as well as a 500-foot buffer area ("study area," see Figure 2 of EIR *Appendix C*, Biological Resources Assessment).

Preparation of the Biological Resources Assessment included a literature review of federal register listings, protocols, and species data provided by the USFWS in conjunction with anticipated federally-listed species potentially occurring within the study area. The USFWS Critical Habitat Mapper and File Data, USFWS San Bernardino County Field Office Species list, Wetlands Inventory database, Regional South Coast Missing Linkages Project Report, California Natural Diversity Database (CNDDDB), and CNPS electronic inventory were reviewed for pertinent information regarding the



locations of known occurrence of sensitive species in the vicinity of the site. Pedestrian-based field surveys were performed to assess land cover, general and dominant vegetation communities, habitat types, and species present within communities.

Focused surveys were conducted in 2022, 2023, and 2024 for special-status plant species, burrowing owl, desert tortoise, mohave ground squirrel, and crotch's bumble bee. Weather conditions during the surveys included clear to cloudy skies, temperatures ranging from 52–98°F, with winds fluctuating from 0 to 20 miles per hour (mph). Representative photos of the study area are provided in the Project's Biological Resources Assessment (EIR *Appendix C*).

The evaluation of wetlands and waterways was completed using data acquired from current and historic imagery, hydrologic databases, analytic tools, physical on the ground analyses/measurements, and a review of the regulations, manuals, and guidance documentation created to identify the geographic limits of WOTUS and WOTS (including but not limited to surface water conveyance features, riparian plant communities, riverine land cover types and wetlands and vernal pools).

4.3.4 BASIS FOR DETERMINING SIGNIFICANCE

Section IV of Appendix G to the CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project's impacts to biological resources:

- a. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*
- b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;*
- c. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*
- d. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*
- e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*

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



4.3.5 IMPACT ANALYSIS

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

A. Special-Status Plants

As previously discussed, no special-status or federal or State-listed plant species were observed within the study area during the field surveys. The study area does not include any USFWS-designated critical habitats for plants. Refer to the Biological Resources Assessment (EIR *Appendix C*) for a complete list of plant species observed within the study area and the focused native plant survey. The Project would not result in any significant impacts to any special-status plant species.

B. Special-Status Animals

No federally-listed wildlife species were observed within the study area during the 2022, 2023 or 2024 field surveys. The study area does not include any USFWS-designated critical habitat for wildlife.

Burrowing Owl

One Burrowing Owl was observed within the Project site and a burrow with evidence of owl activity was observed within the study area (but outside of the Project site limits). The single owl was not consistently observed. Additionally, the owl was not part of a breeding pair, but it did sporadically occupy a burrow throughout the survey period. Two burrows (one within the Project site and one outside of the Project site limits within the study area) contained owl sign such as pellets, excrement and feathers. Furthermore, numerous (albeit low quality) potential burrows (two within the Project site and four outside of the Project site limits within the study area), and burrow complexes were also detected. The vast majority of the burrows observed lacked evidence of owl sign (i.e., tracks, molted feathers, cast pellets, prey remains, eggshell fragments, owl white wash, and nest burrow decoration materials). The lack of Burrowing Owl observations within the study area is likely a result of the depauperate landscape, anthropogenic disturbance regime (adjacent active airfield, paved road, etc.) and the presence of owl predators (e.g., Red-Tailed Hawk, Cooper's hawk, Turkey vulture, Common raven, American crow, Coyote, Mojave rattlesnake, and Gopher snake).

Across 15 focused surveys from March 2023 through December 2024, only 2 of the 7 potential burrows detected showed any indication of Burrowing Owl use. Burrow 1, located on-site (teal colored burrow within Figure 3 of the Owl Report), was associated with a single unpaired owl observed briefly on March 18–19, 2023, but the bird never established residence, paired, or bred, and was not detected again in any subsequent surveys. Burrow 2, located off-site (teal colored burrow within Figure 3 of the Owl Report), exhibited early-season sign (pellets and whitewash) but never yielded a visual detection of an owl.

The remaining five burrows across the 256-acre Project Site showed no sign of owl interest. This equates to a burrow density of only 0.027 burrows per acre, far below what is expected for viable



nesting territories. By comparison, high-quality Burrowing Owl habitats typically support much higher burrow densities. Intact grasslands with active ground squirrel colonies often have several burrows per acre, and studies have documented densities exceeding 5 burrows/acre in occupied owl habitats (e.g. in parts of California) (Trulio 1997; Rosenberg & Haley 2004) and even up to ~63 burrows/acre in extreme cases (Trulio,1999). Against these benchmarks, the Project's rate of <0.1 burrow per acre is extremely low, highlighting the suboptimal nature of the habitat for sustaining any resident owl population. Combined with the depauperate prey base, lack of perennial water to sustain invertebrate prey populations for owls, and the abundance of predators (e.g., Red-tailed Hawk, Raven, Coyote, Gopher snake), the habitat is marginal at best.

No breeding or paired burrowing owls were detected and habitat for the owls is marginal; however, it is possible for Burrowing Owls to occupy the site prior to grading; therefore, impacts are determined to be potentially significant.

Desert Tortoise

The Desert Tortoise was not detected during the survey and assessment efforts in 2022, 2023, or 2024. Anthropogenic interference has significantly diminished the habitat quality of the study area, making it unfavorable for tortoise habitation. Regardless, as a conservative measure, the Biological Resources Assessment recommended a pre-construction survey to ensure the continued absence of the Tortoise. The Project has the potential to impact lands that could be utilized by the Desert Tortoise as habitat. This would be a potentially significant impact.

Mohave Ground Squirrel

The MGS is not expected to be present within the Project site, as the site lacks the essential habitat attributes needed to support the species. The current vegetation composition, lack of a viable water source, and absence of functional wildlife corridors between the Project site and the closest core population, render the site unsuitable for the habitation of MGS. Project implementation would neither harm individual MGS nor pose a threat to their local or regional populations. No impact would occur.

Crotch's Bumblebee

Additionally, the Project site and study area lack the essential habitat elements required for the survival and reproduction of the Crotch's Bumblebee. The determination was based on the following: lack of suitable foraging habitat; disturbed and degraded habitat; fragmented and limited native vegetation; and proximity to higher-quality habitat. Given these conditions, the lack of diverse and durable native nectar species, combined with the Project site's isolation from more suitable habitats, the Project site is inadequate for supporting the Crotch's Bumblebee and the Project would not pose a threat to the population. No impact would occur.



Threshold b: *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?*

Two vegetation communities and land cover types were observed within the study area: approximately 449.06 acres of Creosote Bush Scrub and approximately 137.85 acres of Developed/Disturbed lands. Additionally, there is no physical evidence of a relatively permanent surface water connection from the Project site to a Traditional Navigable Water [TNW], to any Relatively Permanent Waters (RPW), or to the Mojave River. The Project site is isolated from any TNW and RPW. Due to the nature of ephemeral flows in the area and the arid environment, flows from the Project site lack a continuous or relatively permanent surface water connection to the Mojave River. The signatures detected within the Project site are ephemeral features that drain into intermittent channels or alluvial fans, where water quickly disperses, infiltrates or evaporates before making their way to any noteworthy watercourse. The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service. No impacts would occur.

Threshold c: *Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The results of the biological surveys indicate that there are 1.9 acres of WOTS within the Project site that are subject to regulation under Section 1600 (et seq.) of the California Fish and Game Code and Section 13260 of the California Water Code (CWC). The delineation did not identify any WOTUS within the Project site. There are no signatures within the Project site that possess a relatively permanent - or continuous and uninterrupted, surface water connection to any (a)(1) through (a)(5) Waters, as described in Title 33 CFR Part 328(a).

There is no physical evidence of a relatively permanent surface water connection from the Project site to a TNW, to any RPW or to the Mojave River. The Project site is isolated from any TNW and RPW. Due to the nature of ephemeral flows in the area and the arid environment, flows from the Project site lack a continuous or relatively permanent surface water connection to the Mojave River. The signatures detected within the Project site are ephemeral features that drain into intermittent channels or alluvial fans, where water quickly disperses, infiltrates or evaporates before making their way to any noteworthy watercourse.

As illustrated in Figure 3 of the Delineation of Waters of the State (provided in the Project's Biological Resources Assessment, EIR *Appendix C*), there are 1.9 acres of WOTS within the Project site that are subject to regulation under Section 1600 (et seq.) of the California Fish and Game Code and Section 13260 of the CWC. As such, impacts would be potentially significant.



Threshold d: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The study area and all adjacent properties are designated for urban uses. No migratory wildlife corridors have been identified within the study area. Nor does the Project propose facilities or activities that would substantively and adversely affect any off-site designated wildlife habitat linkage or movement corridor.

No nesting birds were observed within the study area. However, raptors and other nesting birds have the potential to occur within the Project site. Thus, the Project has the potential to impact active bird nests if vegetation is removed during the nesting season. Raptors, migratory birds, and other avian species are protected by the federal Migratory Bird Treaty Act (MBTA). Impacts to nesting birds is a potentially significant impact of the Project.

Threshold e: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As previously mentioned, several species of native plants were identified onsite during the Native Plant Inspection (provided in the Project's Biological Resources Assessment, EIR *Appendix C*), including Branched Pencil Cholla, Golden Cholla, and Mojave Yucca. The location of these species is illustrated in Figure 5 of the Native Plant Inspection.

These species are subject to Municipal Code Chapter 9.76, *Plant Protection and Management Policy*, the County of San Bernardino's Desert Native Plant Protection, and the State Desert Native Plants Act (i.e., Food and Agricultural Code 80001 et seq.). In accordance with the Town's Municipal Code Chapter 9.76 (*Plant Protection and Management Policy*), a native plant removal permit must be obtained from the Town prior to the removal of protected plants. The Project would require the removal of the native plants that were identified onsite. As such, impacts are considered potentially significant.

Threshold f: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project site is not located within any adopted Habitat Conservation, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

It is noted that the Project site is located within the proposed Town of Apple Valley Multiple-Species Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which is in the early stages of development. There is no draft document available for review at this time, as the Town is 2-3 years away from completing the NCCP/HCP.



Based on the preceding, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.3.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. The Project has the potential to result in impacts to the Burrowing Owl and Mohave Ground Squirrel, if the Project site were to become occupied prior to the commencement of construction activities. Project impacts in this regard represent potentially significant impacts.

Threshold b: No Impact. No riparian habitat or other sensitive communities are located within the Project site. No impact would occur.

Threshold c: Potentially Significant Impact. The Project site does not contain federally-protected wetlands. There are 1.9 acres of WOTS within the Project site that are subject to regulation under Section 1600 (et seq.) of the California Fish and Game Code and Section 13260 of the CWC. As such, impacts would be potentially significant.

Threshold d: Potentially Significant Impact. The Project has the potential to impact nesting migratory birds protected by the MBTA and California Fish and Game Code, should habitat removal occur during the nesting season and should nesting birds be present. This is evaluated as a potentially significant impact.

Threshold e: Potentially Significant Impact. The Project site contains native desert plants that are protected by local ordinance. As such, a native plant removal permit must be obtained from the Town prior to the removal of protected plants.

Threshold f: No Impact. The Project site is not located within any adopted Habitat Conservation, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Accordingly, no impacts would occur.

4.3.7 MITIGATION

MM 4.3-1 A 30-day pre-construction survey for Burrowing Owl in compliance with CDFW's Staff Report on Burrowing Owl Mitigation, dated March 7, 2012, shall be conducted prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.) to safeguard that no owls have colonized the Project site.

If Burrowing Owls have colonized the Project site prior to the initiation of ground-disturbing activities, the Project Applicant shall immediately inform CDFW in conjunction with the Town of Apple Valley to determine if "take" would occur and coordinate with CDFW to determine minimization and avoidance measures.



If ground-disturbing activities occur, but the Project site is left undisturbed for more than 30 days, another pre-construction survey shall be conducted no less than fourteen (14) days prior to resuming ground-disturbing activities to safeguard that Burrowing Owl has not colonized the Project since it was last disturbed. If Burrowing Owls are found, the same coordination with CDFW in conjunction with the Town of Apple Valley described above shall be required.

- MM 4.3-2 A 30-day pre-construction clearance survey shall be conducted by a qualified Biologist in accordance with USFWS's clearance survey protocol, dated May 2019, for the Desert Tortoise prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.).

If Desert Tortoises have colonized the Project site prior to the initiation of ground-disturbing activities, the Project shall immediately inform CDFW and USFWS in conjunction with the Town of Apple Valley to determine if "take" would occur and coordinate with CDFW and USFWS to determine minimization and avoidance measures.

If ground-disturbing activities occur, but the Project site is left undisturbed for more than 30 days, a pre-action clearance survey shall again be conducted immediately prior to surface disturbance to safeguard that Desert Tortoise have not colonized the Project site since it was last disturbed. If tortoises are found, the same coordination described above would be necessary.

- MM 4.3-3 Prior to construction activities, a qualified Biologist shall develop and implement a worker awareness program to increase the on-site worker's recognition of and commitment to Burrowing Owl and Desert Tortoise protection. The program shall include identification of the species, legal protections, avoidance measures, and procedures in the event of an encounter.

- MM 4.3-4 In order to ensure that construction activities are limited to the Project site boundaries, prior to the issuance of grading permits, a note shall be placed on the grading plan verified by the Town Engineer, which requires delineation of the limits of disturbance. Limits of grading and construction activities shall be clearly delineated with temporary construction staking, flagging, or similar materials.

- MM 4.3-5 Prior to the issuance of grading permits, a note shall be placed on the grading plan verified by the Town Engineer that the limits of disturbance are clear of debris. To avoid attracting predators and nuisance species, the Project site shall be clear of debris, where possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.



- MM 4.3-6 Prior to issuance of grading permits or other permits authorizing ground disturbance (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging), the Project Applicant shall provide evidence to the Town of Apple Valley that impacts to 1.9 acres of non-riparian ephemeral streambeds that are subject to regulation under California Fish and Game Code Section 1600 and California Water Code Section 13260 have been mitigated through purchase of wetland establishment and or rehabilitation credits from the Mohave River Watershed Mitigation Bank at a minimum 2:1 ratio. In addition, and also prior to issuance of grading permits, the Project Applicant shall provide the Town with a copy of the Project's Section 401 Water Quality Certification from the Regional Board, Waste Discharge Order from the Regional Board, and Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement from CDFW, as applicable.
- MM 4.3-7 In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, any necessary vegetation clearing shall take place outside of the typical avian nesting season for protected species (February 1 through September 15).
- If work needs to take place during the nesting season for protected avian species, a pre-activity clearance survey for nesting birds shall be completed by a qualified biologist no less than fourteen (14) days prior to the onset of ground disturbance. An activity exclusion buffer zone around occupied nests shall be maintained during physical ground disturbing undertakings. Once nesting has ended, the buffer may be removed.
- MM 4.3-8 Prior to the issuance of grading permits, the Property Owner/Developer shall obtain a native plant removal permit from the Town of Apple Valley for removal of any native desert plant that is protected by the Town of Apple Valley Plant Protection and Management Policy (Chapter 9.76), the County of San Bernardino's Desert Native Plant Protection, and the State Desert Native Plants Act (i.e., Food and Agricultural Code 80001 et seq.).

4.3.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less than Significant with Mitigation Incorporated. Implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2 would ensure that appropriate pre-construction surveys for the Burrowing Owl and Desert Tortoise are conducted prior to ground-disturbing activities and/or vegetation removal. As discussed above, the Project site does not provide the physical or biological features necessary for long-term owl occupancy. Accordingly, implementation of a standard pre-construction clearance survey is more than adequate to avoid take, as the risk of impacting an occupied or breeding burrow is negligible. The mitigation measures would ensure that any direct destruction of burrows would be avoided and Mitigation Measure MM 4.3-3 would ensure identification of the Burrowing Owl and Desert Tortoise species, legal protections, avoidance measures, and procedures in the event of an encounter. Implementation of the required mitigation would reduce Project impacts to



species identified as a candidate, sensitive, or special status species to less than significant levels. Mitigation Measures MM 4.3-4 and MM 4.3-5 would ensure that the limits of disturbance are clearly marked and that construction activities do not attract predators and nuisance species.

Threshold c: Less than Significant with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.3-6 would ensure that impacts to WOTS are appropriately mitigated through purchase of wetland establishment and or rehabilitation credits from the Mohave River Watershed Mitigation Bank and that pertinent discretionary permits/authorizations are obtained prior to undertaking ground-disturbing activities within or immediately adjacent to WOTS. Implementation of the required mitigation would reduce the Project's potential impacts to the WOTS to less than significant levels.

Threshold d: Less than Significant with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.3-7 would ensure that appropriate pre-construction surveys are conducted during the bird nesting season and further would ensure that any active nests are avoided and protected by an appropriate buffer area. Implementation of the required mitigation would reduce the Project's potential impacts to nesting birds to less than significant levels.

Threshold e: Less than Significant with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.3-8 would ensure that the appropriate native plant removal permit is obtained from the Town prior to the removal of any protected plants. With the implementation of this mitigation measure, the Project's potential to conflict with any local policies or ordinances protecting biological resources would be less than significant.

4.3.9 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the vicinity of the Project site as well as full General Plan buildout in the Town of Apple Valley and surrounding areas.

Mitigation incorporated above reduces potential impacts to biological resources to levels that would be less than significant. Mitigation of Project-specific biological resources impacts would also reduce the Project's potential incremental contributions to cumulative biological resources impacts within the region.

To the extent that each development proposal within the cumulative impact area(s) provides appropriate mitigation, cumulative impacts to biological resources are reduced below significance thresholds. Pursuant to the provisions of CEQA, each development project within the cumulative impact area that requires discretionary action by a public agency will be assessed for its potential impacts on biological resources.

Appropriate biological resources mitigation would also be required of other projects within the cumulative impact area. There are no known or probable related projects that would interact with the less than significant effects of the Project and thereby result in cumulatively significant impacts.



Based on the preceding, the Project's potential contribution to cumulative impacts in regard to biological resources is not considerable, and the cumulative effects of the Project are determined to be less than significant.



4.4 CULTURAL RESOURCES

The analysis presented within this Subsection is based primarily on information obtained from the following technical report:

- *Cultural Resources Assessment for the Lake Creek Logistics Center Project, Town of Apple Valley, San Bernardino County, California*, (Chronicle Heritage) January 30, 2025.

The Cultural Resources Assessment is included as *Technical Appendix D* to this EIR. Confidential information has been redacted from *Technical Appendix D* for the purposes of public review. In addition, much of the written and oral communication between Native American tribes, the Town of Apple Valley, and Chronicle Heritage is considered confidential in respect to places that may have traditional tribal cultural significance (Government Code Section 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (California Code Regulations Section 15120(d)).

All references used in this Section are listed in EIR Section 7.0, *References*.

4.4.1 ENVIRONMENTAL SETTING

A. *Cultural Setting*

The Project area is within Sidewinder Valley in the western Mojave Desert. The Mojave Desert is bounded on the west by the Sierra Nevada Mountains, on the south by the Transverse and Peninsular ranges, on the southeast and east by the Yuma and Colorado deserts, and on the north by the Great Basin. The western Mojave Desert encompasses several valleys, including Apple Valley, Victor Valley, Antelope Valley, Fremont Valley, and Lucerne Valley, along with the Mojave River and the Barstow area. The following provides a brief discussion of the prehistoric, ethnohistoric, and historic context of the Project area for better understanding of the relevance of resources identified within its proximity. Refer to Section 3.0 of the Project's Cultural Resources Assessment for a complete discussion of the prehistoric, ethnohistoric, and historic setting.

1. *Prehistoric Setting*

The cultural history for the area is divided into the Late Pleistocene (10,000–8000 calibrated years B.P. [cal B.P.]), the Early Holocene (8000–6000 cal B.P.), the Middle Holocene (7000–3000 cal B.P.), and the Late Holocene (2000 cal B.P. to European contact).

- Late Pleistocene (ca. 10,000 to 8000 cal B.P.). The earliest cultural complex recognized in the Mojave Desert is Clovis, aptly named for the fluted projectile points often associated with Pleistocene megafaunal remains. Paleoindian culture is poorly understood in the



- region due to a relative dearth of evidence stemming from a handful of isolated fluted projectile point discoveries and one presumed occupation site on the shore of China Lake.
- Early Holocene (ca. 8000 to 6000 cal B.P.). Two archaeological patterns are recognized during the Early Holocene: The Lake Mojave Complex (sometimes referred to as the Western Pluvial Lakes Tradition) and the Pinto Complex. The Lake Mojave Complex is characterized by stemmed projectile points of the Great Basin Series, abundant bifaces, steep-edged unifaces, and crescents. Archaeologists have also identified, in less frequency, cobble-core tools and ground stone implements. The Pinto Complex, on the other hand, is distinguished primarily by the presence of Pinto-style projectile points.
 - Middle Holocene (ca. 7000 to 3000 cal B.P.). The Pinto Complex is the primary cultural complex in the Mojave Desert during the Middle Holocene. Once thought to have neatly succeeded the Lake Mojave Complex, a growing corpus of radiocarbon dates associated with Pinto Complex artifacts suggest that its inception could date to the latter part of the Early Holocene. Extensive use of tool stone other than obsidian and high levels of tool blade reworking were characteristic of this complex and the earlier Lake Mojave Complex. A reduction in tool stone source material variability suggests a contraction of foraging ranges that had expanded during the Early Holocene. Conversely, long distance trade with coastal peoples is evidenced by the presence of Callianax shell beads.
 - Late Holocene (ca. 2000 cal B.P. to European Contact). The Late Holocene in the greater southern California region is characterized by increases in population, higher degrees of sedentism, expanding spheres of influence, and greater degrees of cultural complexity. In the Mojave Desert, the Late Holocene is divided into several cultural complexes: the Gypsum Complex (2000–1750 cal B.P.), the Rose Spring Complex (1750–850 cal B.P.), and the Late Prehistoric Complexes (850 cal B.P.–European contact).

2. *Ethnohistoric Setting*

The Project area encompasses the traditional use area of the Vanyume and the Serrano. The Vanyume, sometimes referred to as the Desert Serrano, are a subdivision of the Serrano who resided along the Mojave River corridor in the Victorville region and to the north and east along the river as far as Soda Lake. At the time of Spanish contact, the Project area was likely occupied by the Vanyume, a Takic-speaking branch of the larger Uto-Aztecan (or Shoshonean) language family. The Vanyume territory is generally accepted as consisting of the area south of the lower Mojave Riverbed and to the southeast into the foothills of the San Bernardino Mountains, and to the north and east along the river as far as Soda Lake.

The Serrano belong to the Takic-speaking branch of the larger Uto-Aztecan language family. Serrano territory included the San Bernardino Mountains, east of Cajon Pass, and the desert area that is immediately south of Victorville, extending east as far as Twentynine Palms and south as far as Yucaipa Valley. The Serrano were primarily hunters and gatherers. Vegetal staples varied with village



locality: acorns and pinyon nuts in the foothills; mesquite, yucca roots, cacti fruits, and piñon nuts in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds. Deer, mountain sheep, antelope, rabbits, and other small rodents were among the principal animals hunted. Various game birds were also hunted, with quail being the most important. The bow and arrow were used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares.

3. *Historical Setting*

European exploration of the Mojave Desert began in the sixteenth century, but sustained Euro American settlement of the region did not occur until the mid-nineteenth century. This extended period of exploration without expansion creates a long proto-historic period in the region, when Europeans and local Native American groups knew of one another but interacted very little.

European settlement in the Mojave Desert began when Spanish missionaries and explorers entered the area in the eighteenth century. Among the first Europeans in the area was Pedro Fages, who led an expedition into the western Mojave in 1772 in pursuit of Spanish soldiers who had deserted. The establishment of trade routes between Santa Fe and Los Angeles and missions in the Mojave Desert were difficult in the eighteenth century because the native Mojave people hindered Spanish expansion beyond the coastal areas of California.

By the 1850s, the Old Spanish Trail was established as a reliable overland route to California, and it became easier for people to move into the area. Once California was ceded to the United States, the land was open for settlement and development. With the discovery of gold in the Sierra Nevada Mountains, California's population boomed. Most early mining in California took place in the north, near Sacramento and San Francisco. Mining led to the creation of roads throughout the State. Later, these mining roads would be used to establish railroads that operated in the region.

In the Mojave, scientific exploration was undertaken in conjunction with investigations into proposed railroads from the east. An expedition led by Lt. Amiel Weeks Whipple in 1854 sought to survey a railroad route leading from Arkansas to Los Angeles along the 35th parallel, passing near Fremont Valley. The proposed railroad was meant to tie into lines that originated in both the north and the south. Construction of the Southern Pacific Railroad (SPRR), linking San Francisco to Los Angeles via the Mojave Desert, was completed in 1876. Large numbers of Chinese workers were employed in the construction of the railroad, and following its completion, many became involved in placer mining in the upper Santa Clarita River area. The SPRR Mojave line also included a 20-day (round trip) rail route that extended over 165 miles of mountains and desert, running from the Harmony Borax Works in Death Valley (Inyo County) to the railroad loading dock in Mojave.

Although historical settlement of the western Mojave was initially based on mining, which continues to the present day, by the late nineteenth century Victor Valley was slowly being settled by ranchers and farmers. In addition to agrarian pursuits, mining continued to be an important economic focus. Additionally, growing commercial activities spurred the growth of Victorville and the neighboring



communities of Apple Valley, Lucerne Valley, Hesperia, Helendale, Adelanto, and Oro Grande. Further development of the region occurred in 1915, when the state legislature and the federal government authorized the Victor Valley Water Project, the largest of its era in the nation. Railroads were expanded to serve the anticipated needs of the growing Victor Valley. In 1916, the Arrowhead Reservoir and Power Company was formed; however, by 1917 and the onslaught of World War I, many residents of the Valley left to serve in the war. It was not until World War II that Victor Valley witnessed another expansion of settlement with the establishment of George Air Force Base in 1941, which brought military personnel, families, and associated military services and industry.

B. Archaeological and Historical Investigation Results

1. Records Search Results

An archaeological records search for the Project site and the surrounding area within a 0.5-mile radius was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSUF) on December 11, 2023 and a supplemental records search at the same location on September 16, 2024. The objective of the SCCIC records search was to identify cultural resources that have been previously recorded within the records search area during prior investigations.

The results of the SCCIC records search indicated that 13 previous investigations were conducted within 0.5 mile of the Project site. None of the prior cultural resource studies included the Project site. Twelve (12) cultural resources were previously documented within 0.5 mile of the Project site. Nine were dated to the historic period and three were dated to the prehistoric period. The historic period resources include seven refuse scatter sites and two structures. The prehistoric resources include two isolated flaked stone debitage and one lithic scatter site. None of the documented resources are within the proposed Project site.

Historical topographic maps and aerial photographs were reviewed as part of the background research. The earliest topographic map of the Project site dates to 1932, and the earliest aerial photograph of the Project site dates to 1952; both show the property as relatively undeveloped, except for a road that travels along the route of Fernandez Road that is evident in 1932 and no longer present by 1953. In 1970, a dirt road reappeared along this same alignment. There were no further developments within the Project site, aside from an additional road named Somis Avenue that first appears on the 2018 topographic map, and the airport to the east of the Project site constructed sometime before 1970.

2. Field Survey Results

Field survey of the Project site was conducted from December 27 through December 29, 2023 and additional survey of the off-site areas was completed on November 18, 2024. The survey methods followed standard archaeological methods, consisting of parallel pedestrian transects spaced at 33 to 50-foot intervals when allowed by terrain and vegetation. The Project site was documented with digital photographs that included general views of the topography, vegetation density, and other images. A photograph log was maintained to include photograph number, date, orientation, photograph description, and comments.



During the surveys, secondary deposits of historic-period resources (some mixed with modern refuse) were observed distributed across much of the Project site. The deposits extend from the northeastern boundary to the southwestern boundary. The secondary deposits generally consist of Church-Key opened beverage cans. Active alluvial and aeolian processes are evident throughout the Project site, which, over time, have caused intact cultural deposits to be redistributed from their primary depositional location. Due to their secondary nature, these resources often retain little more than generalized age information. Among the scattered refuse, nine (9) concentrations of such historic-period refuse, and one (1) isolated prehistoric hammerstone, were identified and documented. Most of the resources encountered are secondary deposits dating to the middle of the twentieth century and reflect domestic activities and discarded beverage cans associated with off-site settlement and motorist road use. The significance of these items is discussed in Section 4.4.6, presented subsequently.

4.4.2 REGULATORY FRAMEWORK

A. *Federal*

1. *National Historic Preservation Act*

The National Historic Preservation Act of 1966 (NHPA) was passed primarily to acknowledge the importance of protecting our nation's heritage. While Congress recognized that national goals for historic preservation could best be achieved by supporting the drive, enthusiasm, and wishes of local citizens and communities, it understood that the federal government must set an example through enlightened policies and practices. In the words of the Act, the federal government's role would be to "provide leadership" for preservation, "contribute to" and "give maximum encouragement" to preservation, and "foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony."

NHPA and related legislation sought a partnership among the federal government and the states that would capitalize on the strengths of each. The federal government, led by the National Park Service (NPS) provides funding assistance; basic technical knowledge and tools; and a broad national perspective on America's heritage. The states, through State Historic Preservation Officers (SHPOs) appointed by the governor of each state, would provide matching funds, a designated state office, and a statewide preservation program tailored to state and local needs and designed to support and promote state and local historic preservation interests and priorities.

Section 106 of NHPA granted legal status to historic preservation in federal planning, decision-making, and project execution. Section 106 requires all federal agencies to take into account the effects of their actions on historic properties and provide ACHP with a reasonable opportunity to comment on those actions and the manner in which federal agencies are taking historic properties into account in their decisions.

A number of additional executive and legislative actions have been directed toward improving the ways in which all federal agencies manage historic properties and consider historic and cultural values in their planning and assistance. Executive Order 11593 (1971) and, later, Section 110 of NHPA (1980,



amended 1992), provided the broadest of these mandates, giving federal agencies clear direction to identify and consider historic properties in federal and federally assisted actions. The National Historic Preservation Amendments of 1992 further clarified Section 110 and directed federal agencies to establish preservation programs commensurate with their missions and the effects of their authorized programs on historic properties.

2. *National Register of Historic Places (NRHP)*

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the NHPA of 1966, the NPS's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources.

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance, as follows:

- **Age and Integrity.** Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?
- **Significance.** Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were important in the past? With significant architectural history, landscape history, or engineering achievements? Does it have the potential to yield information through archaeological investigation about our past?

Nominations can be submitted to a SHPO from property owners, historical societies, preservation organizations, governmental agencies, and other individuals or groups. The SHPO notifies affected property owners and local governments and solicits public comment. If the owner (or a majority of owners for a district nomination) objects, the property cannot be listed but may be forwarded to the NPS for a Determination of Eligibility (DOE). Listing in the NRHP provides formal recognition of a property's historical, architectural, or archaeological significance based on national standards used by every state.

Under Federal Law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually funding or licensing/permitting. National Register listing does not lead to public acquisition or require public access.

3. *National Historic Landmarks Program*

National Historic Landmarks (NHLs) are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, over 2,600 historic places bear this national distinction. Working with citizens throughout the nation, the NHL Program draws upon the expertise of NPS staff who guide the nomination process for new Landmarks and provide assistance to existing Landmarks.



4. *American Indian Religious Freedom Act*

The American Indian Religious Freedom Act (AIRFA) requires each executive branch agency with statutory or administrative responsibility for the management of Federal lands, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies are also required to maintain the confidentiality of sacred sites. Each executive branch agency with statutory or administrative responsibility for the management of Federal lands are required to implement procedures to ensure reasonable notice is provided of proposed actions or land management policies that may restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites.

5. *Native American Graves Protection and Repatriation Act (NAGPRA)*

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation.

One major purpose of this statute is to require that federal agencies and museums receiving Federal funds inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies and museums must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. Once lineal descent or cultural affiliation has been established, and in some cases the right of possession also has been demonstrated, lineal descendants, affiliated Indian Tribes, or affiliated Native Hawaiian organizations normally make the final determination about the disposition of cultural items. Disposition may take many forms from reburial to long term curation, according to the wishes of the lineal descendent(s) or culturally affiliated Tribe(s).

The second major purpose of the statute is to provide greater protection for Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on Federal and tribal lands. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archaeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on Federal or tribal lands. Excavation or removal of any such items also must be done under procedures required by the Archaeological Resources Protection Act. This NAGPRA requirement is likely to encourage the in-situ preservation of archaeological sites, or at least the portions of them that contain burials or other kinds of cultural items.

Other provisions of NAGPRA: (1) stipulate that illegal trafficking in human remains and cultural items may result in criminal penalties; (2) authorizes the Secretary of the Interior to administer a grants



program to assist museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; authorizes the Secretary of the Interior to penalize museums that fail to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with this Review Committee.

6. *Federal Antiquities Act*

The Antiquities Act is the first law to establish that archaeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments.

B. State

1. *California Administrative Code, Title 14, Section 4308*

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.”

2. *California Register of Historic Resources*

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archaeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA.

In order for a resource to be included on the California Register of Historic Resources (CRHR), the resources must meet one of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).



- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4).

For resources included on the Register of Historic Resources, environmental review may be required under CEQA if property is threatened by a project. Additionally, local building inspectors must grant code alternatives provided under the State Historical Building Code. Further, the local assessor may enter into a contract with property owner for property tax reduction pursuant to the Mills Act. A property owner also may place his or her own plaque or marker at the site of the resource.

Consent of owner is not required, but a resource cannot be listed over an owner's objections. The State Historical Resources Commission (SHRC) can, however, formally determine a property eligible for the California Register if the resource owner objects.

3. *Traditional Tribal Cultural Places Act (Senate Bill 18, "SB 18")*

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment.

4. *Assembly Bill 52 (AB 52)*

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have



information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process.

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 21084.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015.

§ 21074 of the Public Resources Code defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe.

5. *State Health and Safety Code*

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease “In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery...” until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from “internment or a place of storage while awaiting internment” with the intent to sell them or to dissect them with “malice or wantonness” is a public offense



punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that “all California Indian human remains and cultural items are to be treated with dignity and respect.” It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims.

6. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows:

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:*
 - *Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;*
 - *Is associated with the lives of persons important in our past;*



- *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
- *Has yielded, or may be likely to yield, information important in prehistory or history.*
- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

C. Local

1. Town of Apple Valley General Plan

The Town provides goals, policies, and programs that focus on archaeological and historic resource preservation in the Open Space and Conservation Element of the General Plan. Project-applicable goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*.

4.4.3 METHODOLOGY

The Cultural Resources Assessment included a field survey which covered all areas of the Project site, a records search conducted at the South Central Coastal Information Center (SCCIC), housed at California State University, Fullerton (CSUF), and a review and integration of previous studies and statutory requirements.

4.4.4 BASIS FOR DETERMINING SIGNIFICANCE

Section V of Appendix G to the CEQA Guidelines addresses typical adverse effects to cultural resources, and includes the following threshold questions to evaluate the Project's impacts on cultural resources:

- a. *Cause a substantial adverse change in the significance of a historical resource in pursuant to § 15064.5;*
- b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;*
- c. *Disturb any human remains, including those interred outside of formal cemeteries.*



4.4.5 IMPACT ANALYSIS

Threshold a: *Would the Project cause a substantial adverse change in the significance of a historical resource in pursuant to § 15064.5?*

Threshold b: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

As previously mentioned, the field surveys conducted as part of the Cultural Resources Assessment identified nine historic-period refuse and one prehistoric artifact. These items are described in Table 4.4-1, *On-Site Cultural Resources*. All resources listed below were determined to be within a secondary context within an active alluvial and aeolian environment, meaning that natural weather patterns (i.e. rain and wind) have moved the resources to their current placements over time.

Table 4.4-1 On-Site Cultural Resources

Item	Description
23-PC-01357-ISO-430 Prehistoric Hammerstone	Isolated prehistoric quartzite hammerstone with possible polishing on one side.
23-PC-01357-001 Historic secondary debris scatter	Crushed sanitary cans (some with church-key openings).
23-PC-01357-002/003 Historic secondary debris scatter	Crushed beverage cans (some with church key openings), shards of turquoise and yellow Fiestaware, colorless windowpane glass, and broken colorless glass bottles.
23-PC-01357-005 Historic secondary debris scatter	Sanitary cans, a corner pipe widget, three segments of wire, and six sherds of ceramic ware.
23-PC-01357-006 Historic secondary debris scatter	Crushed sanitary and beverage cans.
23-PC-01357-007/008 Historic secondary debris scatter	Sanitary and beverage cans (some with church-key openings), ceramic sherds, and glass shards of blue, green, colorless, and frosted glass.
23-PC-01357-009 Historic secondary debris scatter	Sanitary and oil cans, ceramic dinnerware sherds, and brown glass shards.
23-PC-01357-010 Historic secondary debris scatter	Sanitary and utility cans, glass bottle fragments, glass shards, wire, wire fencing, and ceramic tiles.
23-PC-01357-011 Historic secondary debris scatter	Crushed church-key opened cans and shards of broken glass.
23-PC-01357-012 Historic secondary debris scatter	Sanitary and utility cans, glass shards, a colorless glass milk bottle finish, a colorless glass liquor bottle.

Source: (Chronicle Heritage, 2025, Table 6-1)

The following provides a description and significance evaluation of the 10 documented resources:

- **23-PC-01357-ISO-430:** Although ground stone artifacts are broadly associated with Native American use of the Sidewinder Valley area during the prehistoric period, the isolate does not have a clear association or connection with significant events, nor does it contain any attributes that convey specific association with an important person of national, statewide, or local significance. Consequently, the resource does not meet the criteria for inclusion in the CRHR under Criteria 1 or 2. The isolate also does not embody the distinctive



characteristics of a type, period, or method of construction, nor does it represent the work of a master or possess artistic value; therefore, the resource does not hold significance under Criterion 3. Because the isolate is a single hammerstone observed on the surface within an active alluvial and aeolian environment with no associated cultural soils, there is a low probability for subsurface deposits. As a result, the isolate is unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. The data potential of the isolate appears to have been exhausted by recording; therefore, the isolate also appears not eligible for listing in the CRHR under Criterion 4. In summary, Isolate 23-PC-01357-ISO-430 is not eligible for listing in the CRHR under any criteria.

- 23-PC-01357-001: Although historic period domestic refuse is broadly associated with the historic-era occupation of the Sidewinder Valley area, the refuse was observed within a secondary context and is, thus, contextually considered displaced litter. Such unassociated cultural resources retain little more than generalized temporal information and do not offer chronological data, information on types of activities, or social or economic background of the historical occupants at the location of the site. Site 23-PC-01357-001 does not have a clear association with significant events, nor does it contain any attributes that convey specific association with an important person of national, statewide, or local significance. As such, the resource is not eligible for listing in the CRHR under Criteria 1 or 2. The site also does not embody the distinctive characteristics of a type, period, or method of construction, nor does it represent the work of a master, or possess artistic value; therefore, the resources are not eligible for listing in the CRHR under Criterion 3. Furthermore, due to the secondary nature of the resource, the site is unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. The potential of the site has been exhausted by recording; therefore, the site also appears not eligible for listing in the CRHR under Criterion 4. In summary, Site 23-PC-01357-001 is not eligible for listing in the CRHR under any criteria.
- 23-PC-01357-002/003, 23-PC-01357-005, 23-PC-01357-006, 23-PC-01357-007/008, 23-PC-01357-009, 23-PC-01357-010, 23-PC-01357-011 & 23-PC-01357-012: Although historic period domestic refuse is broadly associated with the historic-period occupation of the Sidewinder Valley area, the refuses were observed within a secondary context and are thus considered secondary litter. Such unassociated cultural resources retain little more than generalized temporal information and do not offer chronological data, information on types of activities, or social or economic background of the historical occupants at the location of the sites. These sites thus do not have a clear association with significant events, nor do they contain any attributes that convey specific association with an important person of national, statewide, or local significance. As such, the resources are not eligible for listing in the CRHR under Criteria 1 or 2. The sites also do not embody the distinctive characteristics of a type, period, or method of construction, nor do they represent the work of a master, or possess artistic value; therefore, the resources are not eligible for listing in the CRHR under Criterion 3. Furthermore, due to their secondary nature, these sites are



unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. The potential of the sites have been exhausted by recording; therefore, these sites also appear not eligible for listing in the CRHR under Criterion 4. In summary, Sites 23-PC-01357-002/003, 23-PC-01357-005, 23-PC-01357-006, 23-PC-01357-007/008, 23-PC-01357-009, 23-PC-01357-010, 23-PC-01357-011, and 23-PC-01357-012 are not eligible for listing in the CRHR under any criteria.

As discussed above, none of the resources identified within the Project site are eligible for inclusion in the CRHR. Based on the low occurrence of prehistoric archaeological remains documented in the vicinity, the level of existing disturbance of the Project site, and the results of the field survey, the Project area has a low sensitivity for encountering intact buried prehistoric archaeological resources (Chronicle Heritage, 2025). Regardless, if previously undiscovered cultural materials were encountered during Project-related ground-disturbing activities, impacts would be potentially significant.

Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project site does not contain a cemetery and no known cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the Project site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 “Disturbance of Human Remains.” According to Section 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact the NAHC by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or their authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. With mandatory compliance to California Health and Safety Code Section 7050.5 and Public



Resources Code § 5097.98, any potential impacts to human remains, including human remains of Native American ancestry, that may result from development of the Project would be less than significant.

4.4.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a & b: Potentially Significant Impact. No known historical or archaeological resources, as defined by CEQA Guidelines Section 15064.5, are present on the Project site. However, there is a remote potential for the Project site to contain unidentified surface or subsurface archaeological resources. Therefore, Project impacts to previously-undiscovered resources that may occur onsite would be significant prior to mitigation.

Threshold c: Less than Significant Impact. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 et seq. Compliance with State law (enforced by Mitigation Measure MM 4.4-4) would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.

4.4.7 MITIGATION

MM 4.4-1 Prior to the issuance of a grading permit, the Project Applicant shall retain a Registered Professional Archaeologist, meeting Secretary of Interior standards, (“Project Archaeologist”) subject to the approval of the Town to be on-call during all mass grading and trenching activities. The Project Archaeologist’s responsibilities include, but are not limited to, performing the tasks that require the need for a qualified archaeologist pursuant to Mitigation Measures MM 4.4-1 through MM 4.4-3 below.

In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and the Project Archaeologist shall be contacted to assess the find. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Additionally, any culturally-affiliated tribes shall be contacted as detailed within Mitigation Measure MM 4.14-1, regarding any pre-contact finds and be provided information after the Project Archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

MM 4.4-2 If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, that includes performance standards identified in Mitigation Measure MM 4.4-3. The drafts of which shall be provided to any consulting tribes for review and comment, as detailed within Mitigation Measure MM 4.14-1. The Monitoring and Treatment Plan shall be subject to final approval by the Town of Apple



Valley Planning Department. The Project Archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.

MM 4.4-3 In the event that buried archaeological resources/Tribal Cultural Resources are uncovered during the course of ground disturbing activity associated with the Project, all work must be halted in the vicinity of the discovery and the Project Archaeologist shall visit the site of discovery and assess the significance and origin of the archaeological resource in coordination with consulting tribes. The following procedures will be carried out for treatment and disposition of the discoveries:

- 1) **Temporary Curation and Storage:** During the course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the Project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and
- 2) **Treatment and Final Disposition:** The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the Town of Apple Valley Planning Department with evidence of same:
 - a) Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources. This will require revisions to the grading plan, denoting the location and avoidance of the resource.
 - b) Accommodate the process for onsite reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed; location information regarding the reburial location shall be included into the final report. Copies of the report shall be provided to the Town for their records, any consulting tribes, and the South Central Coastal Information Center.
 - c) Curation. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation.



- MM 4.4-4 If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the San Bernardino County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project.

4.4.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Thresholds a & b: Less than Significant with Mitigation Incorporated. Implementation of the preceding mitigation would ensure that any cultural resources identified on-site during ground disturbing activities are appropriately treated as directed by a qualified archaeologist. Implementation of the required mitigation would reduce the Project's potential impacts to subsurface cultural resources to below a level of significance.

4.4.9 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area for prehistoric, historic, and archaeological resources generally includes the Town and surrounding areas. Impacts to any cultural resources within this area would be site-specific. In the event that potentially significant cultural resources are encountered at any development sites within the cumulative impact area, specific mitigation measures would be applied before construction activities could proceed. Potential impacts to cultural resources are determined to be less than significant with mitigation. In this regard, mitigation proposed for the Project is typical of, and consistent with, mitigation required for construction within urban and suburban areas within the Town and surrounding region. There are no known or probable related projects that would interact with the effects of the Project and thereby result in cumulatively significant impacts. Related projects in the cumulative impact area would be required to minimize cultural resources impacts consistent with State and local policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable. Based on the preceding, cultural resources impacts of the Project are not cumulatively considerable and the Project's cumulative cultural resources impacts would be less than significant.



4.5 ENERGY

The following analysis is based primarily on information obtained from the technical reports:

- *Lake Creek Logistics Center Energy Analysis (herein "EA")* (Urban Crossroads, Inc.), February 26, 2025.

The Energy Analysis (Urban Crossroads, 2025d) is included in its entirety as EIR *Technical Appendix E* to this EIR. All references used in this Section are listed in EIR Section 7.0, *References*.

4.5.1 ENVIRONMENTAL SETTING

A. *Overview*

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2022, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included:

- As of 2022, approximately 6,882 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2022, approximately 628 million barrels of petroleum
- As of 2022, approximately 2,059 billion cubic feet of natural gas
- As of 2022, approximately 1,322 thousand short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. In 2023, about 253,289 million gallons (or about 6.031 million barrels) of finished petroleum products were consumed in the U.S., an average of about 694 million gallons per day (or about 16.5 million barrels per day). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day).

The most recent data provided by the EIA for energy use in California is reported from 2022 which shows approximate energy usage by each of the following sectors:

- 42.6% for transportation uses
- 22.5% for industrial uses
- 17.6% for residential uses
- 17.4% for commercial uses

According to the EIA, California used approximately 251,869 gigawatt hours of electricity in 2022. By sector in 2022, residential uses utilized 35.6% of the state's electricity, followed by 45.3% for commercial uses, 18.9% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building.



According to the EIA, California used approximately 200,871 million therms of natural gas in 2022. In 2023 (the most recent year for which data is available), by sector, industrial uses utilized 31% of the state's natural gas, followed by 32% used as fuel in the electric power sector, 23% from residential, 13% from commercial, 1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself. While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas.

In 2023, total system electric generation for California was 281,140 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 215,623 GWh which accounted for approximately 76% of the electricity it uses; the rest was imported from the Pacific Northwest (6%) and the U.S. Southwest (18%). Natural gas is the main source for electricity generation at 43.68% of the total in-state electric generation system power as shown in Table 4.5-1, *Total Electricity System Power – California (2023)*.

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- In 2023, California was the seventh-largest producer of crude oil among the 50 states, and the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- California is the second-largest total energy consumer among the states, after Texas, but its per capita energy consumption is the fourth-lowest in the nation.
- In 2023, renewable resources, including hydroelectric power and small-scale solar power, supplied 54% of California's in-state electricity generation. Natural gas fueled another 39% and nuclear power provided almost all the rest.
- In 2023, California was the fourth-largest electricity producer in the nation. It is also the nation's third-largest electricity consumer and imports more electricity than any other state.

As indicated below, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. (Urban Crossroads, 2025d)



Table 4.5-1 Total Electricity System Power – California (2023)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	257	0.12%	163	4,561	4,724	4,981	1.77%
Natural Gas	94,192	43.68%	52	8,530	8,582	102,774	36.56%
Oil	36	0.02%	0	0	0	36	0.01%
Other (Waste Heat/ Petroleum Coke)	206	0.10%	0	0	0	206	0.07%
Unspecified	0	0.00%	100	10,273	10,373	10,373	3.69%
Total Thermal and Unspecified	94,690	43.91%	316	23,363	23,679	118,370	42.10%
Nuclear	17,714	8.22%	196	8,361	8,558	26,272	9.34%
Large Hydro	27,066	12.55%	4,712	1,109	5,821	32,886	11.70%
Biomass	5,037	2.34%	753	-	753	5,790	2.06%
Geothermal	10,999	5.10%	221	2,347	2,569	13,567	4.83%
Small Hydro	4,853	2.25%	133	2	135	4,988	1.77%
Solar	41,344	19.17%	417	6,108	6,525	47,869	17.03%
Wind	13,920	6.46%	9,177	8,302	17,479	31,399	11.17%
Total Non-GHG and Renewable Resources	120,932	56.09%	15,609	26,229	41,838	162,771	57.90%
SYSTEM TOTALS	215,623	100.00%	15,925	49,593	65,518	281,140	100.00%

Source: (Urban Crossroads, 2025d)

B. Electricity

The Southern California region’s electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). Although the once-through cooling phase-out has been ongoing since May 2010 pursuant to the adoption of the State Water Resources Control Board’s once-through cooling policy, the retirement of San Onofre has complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the Mojave Desert Air Basin (MDAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts. Similarly, the subsequent 2023 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.



California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and directing uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities.

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided within the Town by Southern California Edison (SCE) and Apple Valley Choice Energy (AVCE). Since CalEEMod identifies SCE as the provider for the Project site, this analysis will use SCE to estimate the Project's energy usage. SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2022 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

The 2022 SCE Power Mix shows renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0%. (Urban Crossroads, 2025d)

C. Natural Gas

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the CPUC.

"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage



operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e. they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja – Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.



The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California’s “backbone” pipeline system). Natural gas on the utilities’ backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities’ distribution pipeline systems. The state’s natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities – Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage – help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California’s natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called “core transport agents” (CTA). Contact information for core transport agents can be found on the utilities’ web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities’ storage service responsibility for noncore customers, along with the cost of this service from noncore customers’ transportation



rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order to properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when



too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties – the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California”

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the State in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State. (Urban Crossroads, 2025d)

As discussed within Section 3.0, *Project Description*, the site is not anticipated to use natural gas for the building envelope, and as such, natural gas consumption is not included in this analysis.

Transportation Energy/Fuel Consumption

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California, and those vehicles consume an estimated 17.2 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 83% of the petroleum consumed in California is used in the transportation sector.

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2023, about 32% of the natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2023. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 23% of natural gas deliveries. The commercial sector

received 13% of the deliveries to end users and the transportation sector consumed the remaining 1%. (Urban Crossroads, 2025d)

4.5.2 REGULATORY FRAMEWORK

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the California Energy Commission (CEC) are two agencies with authority over different aspects of energy. Relevant federal and State energy-related laws and plans are summarized below.

A. Federal

1. Intermodal Surface Transportation Efficiency Act (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. (FHWA, 2020)

2. The Transportation Equity Act for the 21st Century (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. The TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. The TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. The TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems (ITS), to help improve operations and management of transportation systems and vehicle safety. (FHWA, 2022)

B. State

1. Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR).



The 2019 IEPR focuses on changes in its energy system to address climate change and improve air quality in order to ensure that all Californians share in the benefit of the state’s clean energy future. The report provides an analysis of electricity sector trends, building decarbonization and energy efficiency, zero-emission vehicles, energy equity, climate change adaptation, electricity reliability in Southern California, natural gas technologies, and electricity, natural gas, and transportation energy demand forecasts. In response to SB 100, which calls for California’s electricity system to become 100 percent zero-carbon by 2045, the CEC, California Public Utilities Commission (CPUC) and the California Air Resources Board (CARB) are leading the way to identify pathways to remove carbon from the state’s electricity system. The goal is to utilize the clean electricity system to eliminate the carbon from other portions of California’s energy system. (CEC, n.d.)

2. *State of California Energy Plan*

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access. (CEC, n.d.)

3. *California Code Title 24, Part 6, Energy Efficiency Standards*

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. The CEC anticipates that the 2022 energy code will provide \$1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons. (CEC, n.d.)

4. *California Renewable Portfolio Standards (RPS)*

The CEC implements and administers portions of California’s Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California’s RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those



products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and California Air Resources Board (CARB) to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. (CEC, n.d.)

5. *Pavley Fuel Efficiency Standards (AB 1493)*

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption. (CARB, n.d.)

6. *Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015*

In October 2015, the legislature approved, and the Governor signed, SB 350, which reaffirms California’s commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions: (CA Legislative Info, n.d.)

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

7. *Executive Order N-79-20 and Advanced Clean Cars II*

On August 25, 2022, CARB approved the Advanced Clean Cars II rule, which codifies the goals set out in Executive Order N-79-20 and establishes a year-by-year roadmap such that by 2035, 100% of new cars and light trucks sold in California will be zero-emission vehicles. Under this regulation, automakers are required to accelerate deliveries of zero-emission light-duty vehicles, beginning with



model year 2026. CARB estimates that between 2026 and 2040, the regulation would reduce GHG emissions by a cumulative 395 million metric tons, equivalent to reducing petroleum use by 915 million barrels. (CARB, 2024a)

8. *Advanced Clean Trucks Program*

In June 2020, CARB adopted a new Rule requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California will be required to be zero-emission. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. CARB reports that as of 2020, most commercially-available models of zero-emission vans, trucks and buses operate less than 100 miles per day. Commercial availability of electric-powered long-haul trucks is very limited. However, as technology advances over the next 20 years, zero-emission trucks will become suitable for more applications, and several truck manufacturers have announced plans to introduce market ready zero-emission trucks in the future. When commercial availability of electric-powered long-haul trucks is more readily available, implementation of the Advanced Clean Trucks Regulation is anticipated to significantly reduce GHG emissions and energy usage statewide. (CARB, 2024b)

C. *Local*

1. *Town of Apple Valley General Plan*

The General Plan policies that are related to energy resources and apply to the Project are listed in a General Plan Consistency Analysis table in Subsection 4.10, *Land Use and Planning*, of this EIR.

4.5.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section VI of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to energy if the Project or any Project-related component would:

- *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or*
- *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

4.5.4 METHODOLOGY

Information from the CalEEMod Version 2022.1 outputs for the *Lake Creek Logistics Center Air Quality Impact Analysis* was utilized in the energy analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.



1. *CalEEMod*

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including MDAQMD, released CalEEMod 2022 in May 2022. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine air quality emissions. (Urban Crossroads, 2025d)

2. *Emission Factors Model*

On May 2, 2022, the EPA approved the 2021 version of the Emissions FACTor model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2025 through 2029 analysis year was utilized to determine the average vehicle fuel economy used throughout the duration of the Project. (Urban Crossroads, 2025d)

4.5.5 IMPACT ANALYSIS

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

A. *Energy Use During Project Construction*

1. *Overview of Construction-Related Energy Consumption*

Project Construction Power Cost

The total Project construction power cost is the summation of the products of the area in square feet by the construction duration and the typical power cost. As previously discussed in EIR subsection 3.4.1, construction is expected to commence in March 2025 and would last through December 2029. The 2024 National Construction Estimator identifies a typical power cost per 1,000 square feet. of construction per month of \$2.66, which was used to calculate the Project’s total construction power cost. As shown in Table 4.5-2 the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately \$527,749.19.



Table 4.5-2 Construction Power Cost

Land Use	Power Cost (per 1,000 SF of construction per month)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
General Light Industrial	\$2.66	348.074	57	\$52,774.98
High-Cube Cold Storage	\$2.66	348.074	57	\$52,774.98
High-Cube Fulfillment	\$2.66	2,784,588	57	\$422,199.23
Construction Power Cost				\$527,749.19

Source: (Urban Crossroads, 2025d)

Construction Electricity Usage

The total Project construction electricity usage is the summation of the products of the power cost (shown in Table 4.5-2) by the utility provider cost per kilowatt hour (kWh) of electricity. The SCE’s general service rate schedule was used to determine the Project’s electrical usage. As of October 1, 2024, SCE’s general service rate is \$0.16 per kilowatt hours (kWh) of electricity for industrial services. As shown in Table 4.5-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 3,298,432 kWh.

Table 4.5-3 Construction Electricity Usage

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
General Light Industrial	\$0.16	329,844
High-Cube Cold Storage	\$0.16	329,844
High-Cube Fulfillment	\$0.16	2,638,745
Construction Electricity Usage		3,298,432

Source: (Urban Crossroads, 2025d)

Project Construction Equipment Fuel Consumption

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4.5-4 The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the Project area and region.



Table 4.5-4 Construction Equipment Fuel Consumption Estimates

Construction Activity	Durations (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Site Preparation	50	Rubber Tired Dozers	367	5	8	0.4	5,872	15,870
		Crawler Tractors	87	6	8	0.43	1,796	4,863
Grading	120	Graders	148	2	8	0.41	971	6,298
		Excavators	36	3	8	0.38	328	2,130
		Scrapers	423	3	8	0.48	4,873	31,608
		Rubber Tired Dozers	367	2	8	0.4	2,349	15,235
		Crawler Tractors	87	3	8	0.43	898	5,824
		Forklifts	82	5	8	0.2	656	38,296
Building Construction	1,080	Generator Sets	14	2	8	0.74	166	9,677
		Cranes	367	2	8	0.29	1,703	99,411
		Welders	46	2	8	0.45	331	19,335
		Tractors/Loaders/Backhoes	84	5	8	0.37	1,243	72,576
		Pavers	81	2	8	0.42	544	9,709
Paving	330	Paving Equipment	89	2	8	0.36	513	9,144
		Rollers	36	2	8	0.38	219	3,904
		Air Compressors	37	1	8	0.48	142	5,069
Architectural Coating	660	Air Compressors	37	1	8	0.48	142	5,069
Construction Fuel Demand (Gallons)								348,941

Source: (Urban Crossroads, 2025d)

As shown above, Project construction activities would consume an estimated 348,941 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 32,997,340 VMT during the 57 months of construction. VMT is calculated by multiplying the number of construction days by the estimated number of worker trips per day and the trip length. Worker trip assumptions are based on CalEEMod methodology, which assumes 50% of all worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1¹), and 25% are from light-duty-trucks (LDT2²). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the Project’s Air Quality Impact Analysis (*Technical Appendix B1* of this EIR). The estimated fuel consumption by construction worker trips during construction of the Project is presented in Table 4.5-5.

¹Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

²Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.



Table 4.5-5 Construction Worker Fuel Consumption Estimates

Year	Construction Activity	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2025	LDA						
	Site Preparation	50	14	18.5	12,950	32.23	402
	Grading	120	17	18.5	37,740	32.23	1,171
	Building Construction	47	731	18.5	635,605	32.23	19,719
	LDT1						
	Site Preparation	50	7	18.5	6,475	24.70	262
	Grading	120	9	18.5	19,980	24.70	809
	Building Construction	47	366	18.5	318,237	24.70	12,885
	LDT2						
	Site Preparation	50	7	18.5	6,475	24.81	261
	Grading	120	9	18.5	19,980	24.81	805
	Building Construction	47	366	18.5	318,237	24.81	12,827
2026	LDA						
	Building Construction	261	731	18.5	3,529,634	33.14	106,511
	LDT1						
	Building Construction	261	366	18.5	1,767,231	25.20	70,141
	LDT2						
Building Construction	261	366	18.5	1,767,231	25.48	69,356	
2027	LDA						
	Building Construction	261	731	18.5	3,529,634	33.96	103,948
	Architectural Coating	149	146	18.5	402,449	33.96	11,852
	LDT1						
	Building Construction	261	366	18.5	1,767,231	25.66	68,877
	Architectural Coating	149	73	18.5	201,225	25.66	7,843
	LDT2						
	Building Construction	261	366	18.5	1,767,231	26.06	67,805
Architectural Coating	149	73	18.5	201,225	26.06	7,721	
2028	LDA						
	Building Construction	260	731	18.5	3,516,110	34.83	100,960
	Paving	79	8	18.5	11,692	34.83	336
	Architectural Coating	260	146	18.5	702,260	34.83	20,164
	LDT1						
	Building Construction	260	366	18.5	1,760,460	26.19	67,211
	Paving	79	4	18.5	5,846	26.19	223
	Architectural Coating	260	73	18.5	351,130	26.19	13,405
	LDT2						
	Building Construction	260	366	18.5	1,760,460	26.67	65,997
Paving	79	4	18.5	5,846	26.67	219	
Architectural Coating	260	73	18.5	351,130	26.67	13,163	
2029	LDA						



Year	Construction Activity	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)	
	Building Construction	251	731	18.5	3,394,399	35.66	95,185	
	Paving	251	8	18.5	37,148	35.66	1,042	
	Architectural Coating	251	146	18.5	677,951	35.66	19,011	
	LDT1							
	Building Construction	251	366	18.5	1,699,521	26.74	63,566	
	Paving	251	4	18.5	18,574	26.74	695	
	Architectural Coating	251	73	18.5	338,976	26.74	12,678	
	LDT2							
	Building Construction	251	366	18.5	1,699,521	27.25	62,374	
	Paving	251	4	18.5	18,574	27.25	682	
	Architectural Coating	251	73	18.5	338,976	27.25	12,441	
	Total Construction Worker Fuel Consumption							1,112,545

Source: (Urban Crossroads, 2025d)

As shown above, it is estimated that 1,112,545 gallons of fuel would be consumed related to construction worker trips during full construction of the Project. It should be noted that construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

Construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 5,500,656 VMT along area roadways for the Project over the duration of construction activities. VMT from vendor trips is calculated by multiplying the number of construction days by the estimated number of vendor trips per day and the trip length. It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT), 50% are from heavy-heavy duty trucks (HHDT), and 100% of all hauling trips are from HHDTs. These assumptions are consistent with the CalEEMod defaults used in the Project’s Air Quality Impact Analysis (*Technical Appendix B1* of the EIR). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2021. The estimated fuel consumption by construction vendor trips during construction of the Project is presented in Table 4.5-6.



Table 4.5-6 Construction Vendor Fuel Consumption Estimates

Year	Construction Activity	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2025	MHDT						
	Site Preparation	50	12	10.2	6,120	7.61	804
	Grading	120	28	10.2	34,272	7.61	4,505
	Building Construction	47	246	10.2	117,932	7.61	15,501
	HHDT						
	Site Preparation	50	12	10.2	6,120	6.32	968
	Grading	120	28	10.2	34,272	6.32	5,421
2026	MHDT						
	Building Construction	261	246	10.2	654,901	7.75	84,543
	HHDT						
2027	MHDT						
	Building Construction	261	246	10.2	654,901	7.91	82,796
	HHDT						
2028	MHDT						
	Building Construction	260	246	10.2	652,392	8.12	80,302
	HHDT						
2029	MHDT						
	Building Construction	251	246	10.2	629,809	8.39	75,078
	HHDT						
Total Construction Vendor Fuel Consumption							755,309

Source: (Urban Crossroads, 2025d)

As shown above, it is estimated that 755,309 gallons of fuel will be consumed related to construction vendor trips during full construction of the Project. It should be noted that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (Urban Crossroads, 2025d)

2. Construction Energy Efficiency/Conservation Measures

Starting in 2014, CARB adopted the nation’s first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive



than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed during construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by Town building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared. In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. (Urban Crossroads, 2025d)

B. Energy Use During Project Operation

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

1. Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by applying the vehicle fleet mix percentage for each vehicle type to the total VMT, as



identified in the CalEEMod outputs. Fuel consumption associated with the Project is estimated by dividing the total VMT for each vehicle type by the corresponding average vehicle fuel economy for that vehicle class. As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021.

In order to account for the possibility of refrigerated uses (cold storage), it is assumed that all 10% of trucks accessing this land use (i.e., all truck trips associated with the cold storage uses) are presumed to also have transport refrigeration units (TRUs). Therefore, for modeling purposes 132 trucks are assumed to be trucks with TRUs. TRUs are also accounted for during on-site and off-site travel.

The Project would result in 42,785,395 annual VMT and an estimated annual fuel consumption of 2,836,022 gallons of fuel. (Urban Crossroads, 2025d)

2. *TRU Energy Demands*

Energy would be consumed by truck and trailer mounted TRUs that visit the Project site. For modeling purposes, it was estimated that 264 two-way truck trips (132 trucks) have the potential to include TRUs. TRU fuel consumption was estimated using information generated from EMFAC2017 for the San Bernardino (MD) sub-area. Total fuel consumption associated with TRUs is calculated by multiplying the number of trucks/trailers by the operational days, and then by the average daily operating hours. The result is the multiplied by the fuel usage rate, which is derived by dividing the annual fuel consumption (gallons per year) by the total annual hours of operation, as reported in the EMFAC Off-Road Emissions Inventory. It is estimated that the Project will result in an estimated annual fuel consumption of 122,206 gallons due to the use of TRUs. (Urban Crossroads, 2025d)

3. *Stationary Source Energy Demands*

As previously stated, the aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of this analysis, the calculations are based on three 300 hp diesel-fueled emergency fire pumps. Diesel fuel would be supplied by existing industrial fuel providers serving the Town and region. Total fuel consumption from the fire pumps is calculated by first determining the fuel consumption rate (gallons per hour) based on the horsepower, engine efficiency, and fuel energy content, adjusted by the load factor. This rate is then multiplied by the total number of hours the pump is expected to operate, resulting in the total fuel consumption. Project stationary sources would consume an estimated 1,695 gallons of diesel fuel per year. (Urban Crossroads, 2025d)

4. *On-Site Cargo Handling Equipment Fuel Demands*

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this Project, on-site modeled operational equipment includes up to 13 compressed natural gas-powered cargo handling equipment operating 4 hours a day for 365 days of the year. Project operational activity estimates and associated fuel consumption estimates are based



on the annual EMFAC2021 offroad emissions for the 2029 operational year and were used to derive the total annual fuel consumption associated with on-site equipment. Fuel consumption for cargo handling equipment is calculated by multiplying the equipment quantity of the duration of use and average daily operating hours, then applying a fuel usage rate derived from the EMFAC data, which is calculated by dividing the annual fuel consumption by the total annual activity hours. Project on-site equipment would consume an estimated 60,344 gallons of equipment fuel. (Urban Crossroads, 2025d)

5. Facility Energy Demands

Project operational activities would result in the consumption of electricity. The analysis herein assumes compliance with the 2022 Title 24 and CALGreen standards. Based on information provided by the Project Applicant, the site is not expected to utilize natural gas for the building envelope. The Project’s energy demand estimates were calculated using CalEEMod; Annual electricity usage of the Project is summarized in Table 4.5-7, *Project Annual Energy Demand Summary*.

Table 4.5-7 Project Annual Energy Demand Summary (Without Mitigation)

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBtu/year)
General Light Industrial	3,319,833	0
High-Cube Cold Storage	7,621,233	0
High-Cube Fulfillment	12,861,185	0
On-Site Equipment	0	60,344
Parking Lot	1,208,863	0
PROJECT ENERGY DEMAND	25,011,114	60,344

Source: (Urban Crossroads, 2025d)

It is noted that Mitigation Measures MM 4.2-1 through MM 4.2-20, presented within Section 4.2, *Air Quality*, would also further reduce the Project’s energy demands. For example, mitigation measures require the installation of energy and water efficient interior fixtures and irrigation techniques. Additionally, all indoor and outdoor equipment would be electric-powered. Further, the Project would be required to provide enough solar power generate sufficient power to meet at least 10% of the Project’s total operational base energy requirements. Table 4.5-3 presents the energy demands of the Project with the implementation of these measures.



Table 4.5-8 Project Annual Energy Demand Summary (With Mitigation)

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBtu/year)
General Light Industrial	2,890,865	0
High-Cube Cold Storage	3,453,489	0
High-Cube Fulfillment	11,575,067	0
On-Site Equipment	842,110	0
Parking Lot	1,208,863	0
PROJECT ENERGY DEMAND	19,970,394	0

Source: (Urban Crossroads, 2025d)

6. Operational Energy Efficiency/Conservation Measures

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code). Project annual fuel consumption estimates represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. Enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. (Urban Crossroads, 2025d)

C. Conclusion

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the Project would not result in wasteful, inefficient, and unnecessary consumption of energy.

The Project would be designed and constructed in accordance with the Town’s latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. The Project site is surrounded by existing transportation facilities and infrastructure which would provide future visitors and employees associated with the Project access to a mix of land uses near the Project, thus further reducing fuel consumption demand. Additionally, the Project would also provide electronic vehicle (EV) parking and associated infrastructure that would further promote fuel-efficient vehicles.



No aspects of the Project's construction process or operations are considered unusual or energy intensive. Project construction and operational energy consumption would not be atypical for the type of land use proposed. Additionally, the Project would be subject to applicable regulations acting to reduce potential impacts in this regard. As such, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy; impacts would be less than significant. (Urban Crossroads, 2025d)

Threshold b: *Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

A. Construction

As previously discussed, the Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The Project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, the construction phase of the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, impacts related construction-related energy efficiency and renewable energy would be less than significant. (Urban Crossroads, 2025d)

B. Operation

California's Renewable Portfolio Standard (RPS) establishes a goal of renewable energy for local providers to be 44 percent by 2040. Similarly, the State is promoting renewable energy targets to meet the 2022 Scoping Plan greenhouse gas emissions reductions. The Project would be designed and constructed in accordance with the Town's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant. (Urban Crossroads, 2025d)

4.5.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant. No aspects of the Project's construction process or operations are considered unusual or energy intensive. Project construction and operational energy consumption would not be atypical for the type land use proposed. Additionally, the Project would be subject to



applicable regulations acting to reduce potential impacts in this regard. Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy.

Threshold b: Less than Significant. The Project would be constructed and operated consistent with all applicable energy efficiency and renewable energy standards. The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

4.5.7 MITIGATION

The Project would result in less than significant impacts related to energy and no mitigation is required.

4.5.8 CUMULATIVE IMPACT ANALYSIS

The geographic scope of cumulative energy impacts is generally limited to the energy provider service area(s). The preceding analysis substantiates that the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. These plans and policies address development-level and cumulative impacts to energy resources. Project consistency with State and local plans for renewable energy and energy efficiency demonstrates that the Project cumulative energy impacts would not be cumulatively considerable and the Project cumulative energy impacts would be less than significant.

There are no known or related projects that would interact with less than significant effects of the Project and thereby result in cumulatively significant impacts. As with the Project, other developments within the energy provider service areas would be required to demonstrate compliance with State and local plans for renewable energy and energy efficiency.

Based on the preceding, energy impacts of the Project are not cumulatively considerable, and the Project cumulative energy impacts would be less than significant.



4.6 GEOLOGY AND SOILS

The following analysis is based primarily on information obtained from the technical reports:

- *Geotechnical Investigation, Proposed Industrial Development, NWC Central Road and Corwin Road, Apple Valley, California* (Southern California Geotechnical, Inc.) July 11, 2022.
- *Paleontological Resource Technical Memorandum* for the Lake Creek Logistics Center Project, Town of Apple Valley, San Bernardino County, California (Chronicle Heritage) January 16, 2024.

These reports are presented as *Technical Appendices F1 and F2* to this EIR. All references used in this Section are listed in EIR Section 7.0, *References*.

4.6.1 ENVIRONMENTAL SETTING

The overall site slopes downward toward the southwest at a gradient of about two percent. The site topography is slightly rolling, with several northeast to southwest trending drainage courses. The depths of these drainage courses with respect to the adjacent grade were estimated to be as much as two to three feet. There is approximately 105 feet of elevation differential across the site.

A. Regional Geologic Setting

The site is located within the Mojave Desert Geomorphic Province. The Mojave Desert is bounded on the southwest by the San Andreas fault and the Transverse Ranges and on the northeast by the Garlock fault. The Mojave Desert is an ancient feature formed in response to the inception of movement on the San Andreas and Garlock faults. The region is characterized by broad alluviated basins that are burying the previously mountainous topography.

B. Local Geologic Setting

The subsurface exploration conducted as part of the Geotechnical Investigation consisted of 47 borings advanced to depths of approximately 10 to 30 feet below the existing site grades. Native alluvium was encountered at the ground surface at all the boring locations. The soils encountered within the upper approximately 2.5 to 6.5 feet at some of the boring logs were classified as younger alluvium. These younger alluvial soils generally consist of loose to dense sands, silty sands, and sandy silts. Older native alluvial soils were encountered at all of the boring locations, either at the ground surface or beneath the younger alluvial soils, where present. The older alluvial soils generally consist of medium dense to very dense silty sands, sands, sandy silts, clayey sands, and occasional layers of stiff to hard sandy clays. In general, the older alluvial soils were observed to be weakly cemented.

C. Earthquake Faults

The Project site is in an area of southern California that is subject to strong ground motions due to seismic events (i.e., earthquakes). The geologic structure of southern California is dominated mainly by northwest-trending faults associated with the San Andreas system. The Project site is not located



within an Alquist-Priolo Earthquake Fault Zone. Furthermore, no evidence of faulting was identified during the Geotechnical Investigation.

The nearest active fault zone to the Project site is the Helendale Fault Zone, located approximately 3.6 miles to the northeast. An active fault is defined by the California Geological Survey as a fault that has experienced surface displacement within the Holocene Epoch (roughly the last 11,000 years). (DOC, 2022)

D. Groundwater

Water was not encountered during the drilling of any of the borings. Based on the lack of any water within the borings, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 30 feet at the time of the subsurface exploration. Historic and recent water level data in the Project vicinity indicates a high groundwater level of approximately 240 feet below ground surface in March 2017.

E. Secondary Seismic Hazards

Secondary seismic hazards generally associated with severe ground-shaking during an earthquake include liquefaction, seiches and tsunamis, and landslides, each of which is discussed below.

1. Liquefaction

Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and grain size characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. San Bernardino County has designated certain areas as potential liquefaction hazard zones. These are areas considered at risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table.

Based on review of the County of San Bernardino General Plan, Geologic Hazard Overlay and the subsurface conditions encountered at the boring locations including the lack of a static ground water table within the upper 40 feet, the Project site is not located within an area of liquefaction susceptibility.

2. Seiches and Tsunamis

The Project site is located approximately 78 miles northeast of the Pacific Ocean and is located approximately seven miles northeast of Spring Valley Lake. The Project site is not located in a coastal area and reservoirs are not located up gradient from or in close proximity to the site. The Project site is not located in the vicinity of any other large water bodies. There is no potential for the Project site to be affected by a seiche or tsunami (earthquake-generated wave) due to the absence of any large bodies of water near the site.



3. *Earthquake Induced Flooding*

There are no large water storage facilities (i.e. dams) located on or near the Project site which could possibly rupture during an earthquake and affect the site by flooding. Moreover, the Project site is not located within a designated dam inundation zone. (DWR, 2021)

4. *Seismically-Induced Landslides*

Ground accelerations generated from a seismic event can produce settlements in sands or in granular earth materials both above and below the groundwater table. This phenomenon is often referred to as seismic settlement and is most common in relatively clean sands, although it can also occur in other soil materials. Laboratory testing indicates that some samples of soils taken from the upper zone of native alluvial soils possess a potential for collapse when exposed to moisture infiltration. These soils also possess a potential for moderate consolidation when exposed to load increases in the range of those that will be exerted by the foundations of the new structures. The potentially compressible and collapsible soils generally extend to depths of approximately five to six feet.

The Project site and immediately surrounding properties are generally flat and gently sloping and contain no steep natural or manufactured slopes (Google Earth, 2025); thus, there is no potential for landslides to occur on or immediately adjacent to the site.

F. *Paleontological Resources*

The Project site is entirely underlain by old alluvial deposits (Qoa) composed of moderately consolidated, brown, fine to medium-grained sand and fine to medium gravel composed of metamorphic, volcanic, and plutonic clasts deposited approximately 129,000 to 11,700 years ago during the late Pleistocene. Elsewhere in San Bernardino County, Pleistocene deposits have produced remains of a diverse terrestrial fauna including ground sloth, deer, mammoth, camel, horse, bison, badger, mole, rabbit, gray fox, coyote, snake, and rodent and have a high potential for paleontological resources. (Chronicle Heritage, 2024)

4.6.2 REGULATORY FRAMEWORK

The following is a brief description of the federal, State, and local environmental laws and related regulations governing issues related to geology, soils, and paleontological resources.

A. *Federal*

1. *Clean Water Act*

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the Waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to



discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

2. *Paleontological Resources Preservation Act*

The Paleontological Resources Preservation Act (PRPA) was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11). PRPA directs the Department of Agriculture (U.S. Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to implement comprehensive paleontological resource management programs. Section 6310 of PRPA specifically states, "As soon as practical after the date of enactment of this Act, the Secretary shall issue such regulations as are appropriate to carry out this subtitle, providing opportunities for public notice and comment." (NPS, 2023)

B. State

1. *Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)*

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than State law requires.

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet).

2. *Seismic Hazards Mapping Act*

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map



areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards.

Staff geologists in the Seismic Hazards Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake-induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes.

The SHMA requires site-specific geotechnical investigations be conducted within the ZORI to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CDC, n.d.)

3. *Natural Hazards Disclosure Act*

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone.

The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and State agencies for their use in planning and controlling construction and development. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the State requirements. However, local agencies can be more restrictive than State law requires.

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by State-licensed engineering geologists and/or civil engineers. (CA Legislative Info, n.d.)

4. *California Building Standards Code*

California Code of Regulations (CCR) Title 24 is reserved for State regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC).

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the State of California. Cities and counties are required by State law to enforce CCR Title 24 (reference



Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a Finding of Need Statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (CBSC, 2022, p. 1)

C. Regional

1. *Mojave Desert Air Quality Management District Rule 403*

The Mojave Desert Air Quality Management District (MDAQMD) is responsible for enforcing air pollution control measures in the Mojave Desert Air Basin, within which the Project site is located. Rule 403 (Fugitive Dust) addresses blowing dust from construction sites and is applicable to the Project due to the potential for wind erosion during Project grading and construction activities.

D. Local

1. *Town of Apple Valley General Plan*

The Town of Apple Valley General Plan Geotechnical Element provides goals, policies, and programs that focus on reducing potential impacts, such as loss of life and property damage, associated with seismic and geologic hazards. The Town's General Plan Archaeological and Historic Resources Element discusses goals, policies, and programs that focus on paleontological resources. Project-applicable goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Section 4.10, *Land Use and Planning*.

2. *Town of Apple Valley Municipal Code*

Town Municipal Code Title 8, Buildings and Construction, provides minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within the Town; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated herein; and the moving of buildings within, into, from and through the Town.

Town Municipal Code Title 9, Development Code, is designed to address unified text regulations more typically contained in separate zoning and subdivision ordinances and related chapters of the Municipal Code. The purpose of the Development Code is to protect and promote the public health, safety and welfare of the citizens of Apple Valley. The standards and guidelines in this Code are intended to preserve and enhance the property values of the Town. The Development Code is also intended to:

- A. Implement the goals and objectives of the General Plan in guiding the future growth of the Town by regulating the location and use of structures and land between industry, business, residents, open space, including agriculture, recreation, enjoyment of scenic beauty and uses of natural resources, and other purposes.



- B. Protect the physical, social, and economic stability for residential, commercial, industrial, and other land uses to assure orderly and beneficial development.
- C. Reduce hazards to the public resulting from the inappropriate location or use of improvements.
- D. Maintain Apple Valley's distinctive character.

4.6.3 METHODOLOGY

A. Geology and Soils

The scope of the Geological Investigation included visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for preparing the design of the building foundations, building floor slabs, and parking lot pavements along with site preparation recommendations and construction considerations for the proposed development. This information was used to determine the potential impacts of the Project.

B. Paleontological Resources

The evaluation of impacts to paleontological resources was based on a search of pertinent local and regional museum repositories for paleontological localities in and within three miles of the Project site. Additionally, a formal museum records search was conducted at the National History Museum of Los Angeles County (NHMLAC). The NHMLAC records search did not produce any fossil localities from within the Project area but did produce six localities in similar geologic deposits in the vicinity. Informal records searches were also conducted of the online University of California Museum of Paleontology Collections and San Diego Natural History Museum Collections as well as the online Paleobiology Database, FAUNMAP, Integrated Digitized Biocollections, and other published and unpublished geological and paleontological literature of the area. Searches of online databases and other literature did not produce any fossil localities within 3 miles.

4.6.4 BASIS FOR DETERMINING SIGNIFICANCE

Section VII of Appendix G to the CEQA Guidelines addresses typical adverse effects due to geological conditions, and includes the following threshold questions to evaluate the Project's impacts resulting from geologic or soil conditions:

- a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;*
 - ii. *Strong seismic ground shaking;*



- iii. *Seismic-related ground failure, including liquefaction; and*
- iv. *Landslides.*
- b. *Result in substantial soil erosion or the loss of topsoil;*
- c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;*
- d. *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;*
- e. *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;*
- f. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

4.6.5 IMPACT ANALYSIS

Threshold a: *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) strong seismic ground shaking; iii) seismic-related ground failure, including liquefaction; iv) landslides?*

A. Rupture of a Known Earthquake Fault

There are no active faults known within the Project site. The Project site is outside any Fault Rapture Hazard Zone (formerly Alquist-Priolo Zone). The site-specific Geotechnical Investigation (*Technical Appendix F1*) determined that the risk of surface fault rupture is considered low. The Project does not propose actions or facilities that would otherwise exacerbate known or probable adverse earthquake fault conditions. Based on the preceding, there is no potential for the Project to directly or indirectly cause potential substantial adverse effect due to rupture of a known earthquake fault, and no impact would occur.

B. Strong Seismic Ground Shaking

The Project site is in a region known to be seismically active, and strong seismic ground-shaking could be anticipated during an earthquake event of sufficient magnitude. The CBC requires construction methods that minimize the effects of earthquakes on structures. As part of the Town's standard review and approval of development projects, a geotechnical study is required to be reviewed and approved by the Town Engineer and comply with the recommendations of the approved geotechnical report and applicable CBC provisions. Pursuant to Town Municipal Code Section 8.12.010, recommendations in



the geotechnical report and the engineering geology report shall be incorporated into the grading plans. The Project-specific Geotechnical Investigation (*Technical Appendix F1*) includes seismic design parameters and provides design/construction recommendations for geotechnical design, grading, construction, foundations, floor slabs, exterior flatwork, retaining walls, and pavement. Compliance with these requirements reduces potential seismic ground-shaking impacts to levels that are less than significant.

C. Seismic-Related Ground Failure, Including Liquefaction

Liquefaction and seismically-induced settlement or ground failure are generally associated with strong seismic shaking in areas where ground water tables are at relatively shallow depths (within 50 feet of the ground surface) and/or when the area is underlain by loose, cohesionless deposits. During a strong ground shaking event, saturated, cohesionless soils may acquire a degree of mobility to the extent that the overlying ground surface distorts. In extreme cases, saturated soils become suspended in groundwater and become fluid-like.

The Geotechnical Investigation (*Technical Appendix F1*) determined that the site is not located within an area considered to be susceptible to liquefaction. Additionally, groundwater was not encountered within the upper 40 feet of the site. As such, the possibility of liquefaction at the site is considered low. The potential for the Project to result in exposure of people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction is considered less than significant.

D. Landslides

Slope failures in the form of landslides are common during strong seismic shaking in areas of steep hills. The Project site and surrounding area are generally flat with no significant slopes. The Project site is not located within a landslide zone. Accordingly, no impact related to landslide hazards would occur.

Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?

The Project site is vacant and undeveloped. Ground-disturbing activities associated with Project construction may result in removal of topsoil or soil erosion, which would temporarily expose underlying soils resulting in potential erosion. The potential for Project construction activities involving soil disturbance, such as excavation and grading to result in increased erosion and sediment transport by storm water to surface waters would be minimized because the Project would be required to comply with a Construction General Permit, which is issued by the State Water Resources Control Board (SWRCB) (SWRCB Order No. 2009-0009-DWQ) and contains water quality standards and stormwater discharge requirements applying to construction projects of one acre or more. The General Construction Permit was issued pursuant to the National Pollutant Discharge Elimination System (NPDES) regulations for implementing part of the federal Clean Water Act.

The General Construction Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) that identifies the sources of pollution that may affect the quality of stormwater discharges



and describes and ensures the implementation of best management practices (BMPs) to reduce the pollutants, including silt and soil, in construction stormwater discharges. The Project site would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction. Additionally, the Project would be required to implement erosion and dust control measures pursuant Mojave Desert Air Quality Management District Rule 403 to minimize water- and windborne erosion. Adherence to the BMPs in the SWPPP and Mojave Desert Air Quality Management District Rule 403 would reduce, prevent, or minimize soil erosion from Project-related grading and construction activities. Potential erosion impacts incurred during construction activities would be less than significant with mandated compliance with a Town-approved Storm Water Pollution Prevention Plan (SWPPP), as well as compliance with MDAQMD Rules that prohibit grading activities and site disturbance during high wind events. At Project completion, potential soil erosion impacts would not occur, as pavement, roads, buildings, and landscaping would cover previously exposed soils.

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

As discussed under Threshold a, no impact related to landslide hazards would occur. The Geotechnical Investigation (*Technical Appendix F1*) determined that the potential for geologic hazards such as seismically induced settlement, lateral spreading, subsidence, liquefaction is considered low. However, soils within depths of 5 to 6± feet below ground surface possess significant collapse potential. As a result, the Geotechnical Investigation provided remedial grading recommendations. Existing soils within the proposed building areas should be over-excavated to a depth of 5 feet below existing grades and to a depth of 5 feet below proposed pad grades. The proposed foundation influence zones should be over-excavated to a depth of at least 3 feet below proposed foundation bearing grade and extend to a sufficient depth to remove any artificial fill soils (*Technical Appendix F1*). As part of the Town's standard review and approval of development projects, the Project is required to comply with the recommendations of the approved geotechnical report and applicable CBC provisions. To ensure compliance, pursuant to Town Municipal Code Section 8.12.010, recommendations in the geotechnical report and the engineering geology report shall be incorporated into the grading plans. The Project-specific Geotechnical Investigation (*Technical Appendix F1*) includes site preparation/remedial grading recommendations to ensure that the development is not located on unstable soil. Compliance with State and Town requirements ensures that the Project would not be located on a geologic unit or soil that is unstable, or that would become unstable. As a result, the Project is considered less than significant.

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

Development on expansive soils may adversely affect concrete slabs-on-grade, building foundations, and roadway subgrades. In the event of a severe earthquake in the vicinity, structural foundations and floors may be damaged if constructed in, or over, expansive or unstable soils. The Geotechnical



Investigation (*Technical Appendix F1*) classified the on-site soils as very low to non-expansive and determined that further design recommendations were not warranted. As such, Project impacts related to expansive soils are considered less than significant.

Threshold e: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Project would be served by municipal sewer services. No septic tanks or other alternative wastewater disposal systems are proposed by the Project. On this basis, there is considered to be no potential for the Project to affect or be affected by soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems, and no impact would occur.

Threshold f: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As discussed previously, the Project site is entirely underlain by old alluvial deposits (Qoa) deposited approximately 129,000 to 11,700 years ago during the late Pleistocene. Elsewhere in San Bernardino County, Pleistocene deposits have produced remains of a diverse terrestrial fauna and have a high potential for paleontological resources. As such, Project-related ground disturbance has the potential to affect paleontological resources; this is a potentially significant impact.

4.6.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. Compliance with CBC and Town Municipal Code Section 8.12.010 would ensure that the Project would not result in significant impacts associated with strong seismic ground shaking.

Threshold b: Less than Significant Impact. The Project's compliance with the NPDES permit, requiring adherence to the SWPPP, and MDAQMD Rules, precluding significant soil erosion from Project-related grading and construction activities would ensure that impacts related to substantial soil erosion or the loss of topsoil would be less than significant.

Threshold c: Less than Significant Impact. The Project site and surrounding properties do not exhibit substantial gradient or elevation differences, or other factors that may cause unstable soils, landslides, or collapse. As previously discussed, the potential for liquefaction or ground subsidence at the site is low. Impacts would be less than significant.

Threshold d: Less than Significant Impact. The Geotechnical Investigation classified the on-site soils as very low to non-expansive; therefore, impacts are less than significant.

Threshold e: No Impact. No septic tanks or other alternative wastewater disposal systems are proposed by the Project.



Threshold f: Potentially Significant Impact. The old alluvial deposits (Qoa) underlying the Project site have a high potential for paleontological resources. As such, Project-related ground disturbance has the potential to affect paleontological resources; this is a potentially significant impact.

4.6.7 MITIGATION

MM 4.6-1 Prior to the start of the proposed Project activities, all field personnel shall receive a worker's environmental awareness training on paleontological resources. The training shall provide a description of the laws and ordinances protecting fossil resources, the types of fossil resources that may be encountered in the Project area, the role of the paleontological monitor, an outline of steps to follow if a fossil discovery is made, and the contact information for the Project paleontologist. The training shall be developed by the Project paleontologist.

MM 4.6-2 Prior to the commencement of any ground-disturbing activities, the Project Applicant shall retain both a qualified paleontologist and paleontological monitor to prepare and implement a Paleontological Resource Impact Mitigation Project (PRIMP), which describes monitoring and fossil collection procedures. If a paleontological resource is discovered, the paleontologist or paleontological monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and, if appropriate, collected. If the resource is determined to be of scientific significance, the Project paleontologist shall complete the following:

- 1) **Salvage of Fossils.** If fossils are discovered, all work in the immediate vicinity shall be halted to allow the paleontological monitor and project paleontologist to evaluate the discovery and determine if the fossil may be considered significant. If the fossils are determined to be potentially significant, the Project paleontologist (or paleontological monitor) shall recover them following standard field procedures for collecting paleontological resources as outlined in the paleontological mitigation plan for the Project. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils, such as complete skeletons or large mammal fossils, require more extensive excavation and longer salvage periods. In the case of discovery of larger fossils, the paleontologist or paleontological monitor shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossils can be removed in a safe and timely manner.
- 2) **Fossil Preparation and Curation.** The paleontological mitigation plan for the project shall identify the museum that has agreed to accept fossils that may be discovered during Project-related excavations. Upon completion of fieldwork, all significant fossils collected shall be prepared in a properly equipped laboratory to a point ready for curation. Preparation may include the removal of excess matrix from fossil materials and stabilizing or repairing specimens. During preparation



and inventory, the fossils specimens shall be identified to the lowest taxonomic level practical prior to curation at an accredited museum. The fossil specimens must be delivered to the accredited museum or repository no later than 30 days after all laboratory work is completed. The cost of curation shall be assessed by the repository and will be the responsibility of the Project Applicant.

- 3) **Final Paleontological Mitigation Report.** Upon completion of ground-disturbing activity, and curation of fossils if necessary, the Project paleontologist shall prepare a final paleontological mitigation report outlining the results of the mitigation and monitoring program. The report shall include a discussion of the location, duration, and methods of monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils and where fossils were curated.

4.6.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold f: Less Than Significant Impact with Mitigation Incorporated. Mitigation Measures MM 4.6-1 and MM 4.6-2 would ensure the identification and subsequent treatment of any significant paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the Project. With implementation of the required mitigation, the Project's potential impacts to paleontological resources would be reduced to less than significant.

4.6.9 CUMULATIVE IMPACT ANALYSIS

As discussed in the preceding analysis, compliance with existing Town/CBC regulations and the recommendations of the Geotechnical Investigation would ensure Project-related geology and soils impacts would be less than significant. The effects of geology and soils are primarily restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. For example, development of the Project would not have the potential to alter geologic events or soil features/characteristics at an offsite property.

As with the Project, other development projects would be required to conduct site-specific geotechnical investigations to identify onsite characteristics and provide recommendations regarding engineering, design, and construction. Compliance of individual projects with the recommendations of the applicable geotechnical investigation, and adherence to Town/CBC regulations would prevent hazards associated with geologic issues. Therefore, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to geology and soils.

With respect to erosion, other development in the vicinity would be required to comply with the same regulatory requirements as the Project to preclude substantial adverse erosion impacts. Because the Project and other cumulative projects would be subject to similar mandatory regulatory requirements to control erosion during construction and long-term operation, the Project would not result in a cumulatively considerable contribution related to erosion.



Excavation of the Project site has the potential to yield significant paleontological resources. This cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development in the vicinity of the Project site that have a potential for uncovering paleontological resources. Generally, impacts relating to paleontological resources are site-specific and addressed on a site-by-site basis. Therefore, while there is a potential for an impact on a specific site, the impact would not ordinarily extend beyond the site or immediately surrounding area. Additionally, implementation of Mitigation Measures MM 4.6-1 and MM 4.6-2 would ensure the proper identification and subsequent treatment of any paleontological resources that may be encountered during ground-disturbing activities, ensuring Project-specific paleontological impacts are reduced to less than significant. There could be circumstances in which a paleontological resource extends over more than one property, however, there are no adjacent related projects that could potentially result in effects to unknown paleontological resources that may lie in the subsurface of the project site; therefore, there would be no cumulative impacts would occur.



4.7 GREENHOUSE GAS EMISSIONS

The following analysis is based primarily on information obtained from the following technical reports:

- *Lake Creek Logistics Center, Greenhouse Gas Analysis, Town of Apple Valley (Urban Crossroads, Inc.) February 26, 2025*

The Greenhouse Gas Analysis (Urban Crossroads, 2025c) is included in its entirety as EIR *Technical Appendix G*. Refer also to EIR Section 7.0, *References*, for a complete list of reference sources.

4.7.1 EXISTING SETTING

A. Introduction to Global Climate Change

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs created by human activity and industrialization over the past 200 years.

An individual project cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. This section will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to GCC.

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO₂, N₂O, CH₄, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 °F cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

B. Greenhouse Gases

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. For the purposes of this analysis, emissions of CO₂, CH₄, and N₂O were evaluated because these gases are the primary contributors to GCC from development projects¹.

GHGs have varying Global Warming Potential (GWP) values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO₂ is utilized as the reference gas for GWP, and thus has a GWP of 1. CO₂ equivalent (CO₂e) is a term used for describing the different GHGs in a common unit. CO₂e signifies the amount of CO₂ which would have the equivalent GWP.

The atmospheric lifetime and GWP of selected GHGs are summarized at Table 4.7-1, *GWP and Atmospheric Lifetime of Select GHGs*. As shown in the table below, GWP for the 2nd Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)’s scientific and socio-economic assessment on climate change, range from 1 for CO₂ to 23,900 for SF₆ and GWP for the IPCC’s 6th Assessment Report range from 1 for CO₂ to 25,200 for SF₆.

Table 4.7-1 GWP and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2 nd Assessment Report	6 th Assessment Report
CO ₂	Multiple	1	1
CH ₄	11.8	21	28
N ₂ O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF ₆	3,200	23,900	25,200

Source: (Urban Crossroads, 2025c)

Provided below is a description of the common gases that contribute to GCC. For more information about these gases and their associated human health effects, refer to Section 2.3 of *Technical Appendix G* to this EIR and the reference sources cited therein.

- CO₂ is an odorless and colorless GHG that is emitted from natural and artificial sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria,

¹ Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.



plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. As an example, prior to the industrial revolution, CO₂ concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Exposure to CO₂ in high concentrations can cause human health effects, but outdoor levels are not high enough to adversely affect human health.

- CH₄ is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO₂ and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. CH₄ in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. CH₄ is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH₄ can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
- N₂O concentrations began to rise in the atmosphere at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N₂O is used as an aerosol spray propellant, (e.g., in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and in race cars. N₂O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. N₂O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause brain damage.
- Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH₄ or ethane (C₂H₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source. They are found in aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants.
- Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23, HFC-134a, and HFC-152a. Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. No human health effects are known to result from exposure to HFCs, which are used for applications such as automobile air conditioners and refrigerants.



- Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF₄) and hexafluoroethane (C₂F₆). The EPA estimates that concentrations of CF₄ in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. No human health effects are known to result from exposure to PFCs.
- SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The EPA indicates that concentrations in the 1990s were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
- Nitrogen Trifluoride (NF₃) is a colorless gas with a distinctly moldy odor. The World Resources Institute indicates that NF₃ has a 100-year GWP of 17,200. NF₃ is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display panels, types of solar panels, and chemical lasers. Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis.

C. Greenhouse Gas Emissions Inventories

1. Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately 28,272,940 gigagram (Gg) CO₂e as summarized in Table 4.7-2, *Top GHG Producing Countries and the European Union*.

Table 4.7-2 Top GHG Producing Countries and the European Union

Emitting Countries	GHG Emissions (Gg CO ₂ e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	28,272,940

Source: (Urban Crossroads, 2025c)



2. State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the U.S. emissions inventory total. The CARB compiles GHG inventories for the State of California. Based upon the 2023 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2021 GHG emissions period, California emitted an average 381.3 million metric tons of CO₂e per year (MMT_{CO₂e} /yr) or 381,300 Gg CO₂e (6.01% of the total United States GHG emissions). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average

D. Effects of Climate Change in California

Climate change will likely cause shifts in weather patterns, potentially resulting in changes in rainfall levels and volumes, resulting in flooding or droughts, increased wildfire risk, impaired habitats for threatened and endangered species, and food shortages in some areas, among other climate change results. The potential health effects related directly to the emissions of CO₂, CH₄, and N₂O as they relate to development projects such as the Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Higher ambient temperatures could affect disease survival rates and result in more widespread disease. Exhibit 4.7-1, *Summary of Projected Global Warming Impact, 2070-2099 (As Compared With 1961-1990)*, presents the potential impacts of global warming.

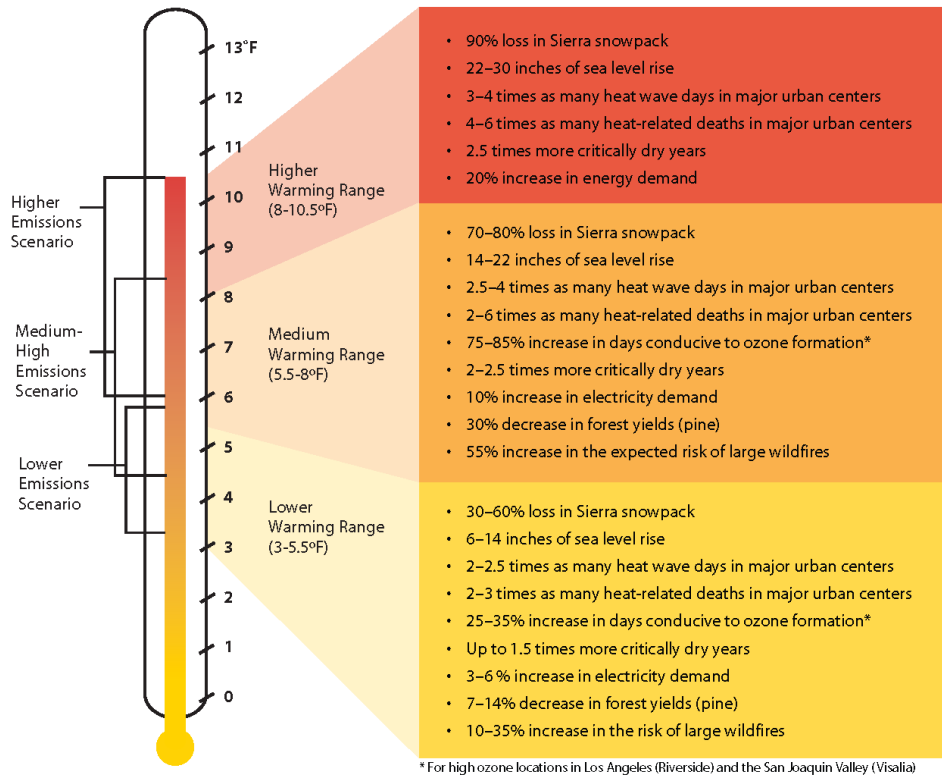
1. Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center*, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.



Exhibit 4.7-1: Summary of Projected Global Warming Impact, 2070-2099 (As Compared With 1961-1990)



Source: (Urban Crossroads, 2025c)

2. Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.



The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

3. *Agriculture*

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

4. *Forests and Landscapes*

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.



5. *Rising Sea Levels*

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

4.7.2 REGULATORY FRAMEWORK

A. *International*

1. *Intergovernmental Panel on Climate Change*

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

2. *United Nation's Framework Convention on Climate Change (UNFCCC)*

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

3. *International Climate Change Treaties*

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011;



Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make “nationally determined contributions” (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would “represent a progression” beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly would not “involve or provide a basis for any liability or compensation;”
- Require parties engaging in international emissions trading to avoid “double counting;” and



- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC.

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

B. Federal

1. Federal Regulation and the Clean Air Act

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO₂, are air pollutants subject to regulation under Section 202(a)(1) of the CAA. The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ —in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the Section 2.7.2 "Clean Vehicles" in *Technical Appendix G* of this EIR.

2. Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil



fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

3. *Executive Order 13990*

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

4. *Clean Vehicles*

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S. The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO₂ level solely through fuel economy improvements. Together, these standards would cut CO₂ emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, the EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025. The new standards apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO₂ emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17%, respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.



On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised. This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend exiting Corporate Average Fuel Economy (CAFE) and tailpipe CO₂ standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO₂ emissions standards by 1.5% each year through model year 2026.

5. New Source Review

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule “tailors” the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

“This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016.”

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation’s largest GHG emitters—power plants, refineries, and cement production facilities.

6. Standards of Performance for GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO₂ for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO₂ per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the Supreme Court issued a



stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO₂ standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

7. *Cap-And-Trade*

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N₂O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO₂ emissions from power plants, auctions CO₂ emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and has retained all participating states as of 2020.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

8. *SmartWay Program*

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components:

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.



3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs would have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel-saving benefits of various devices through grants, cooperative agreements, emissions, and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel would eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

9. *Executive Order 13990*

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who



disproportionately harm communities of color and low-income communities; reduce greenhouse gas emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

C. State

1. Title 24 Building Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The latest revisions (2019 Building Energy Efficiency Standards) became effective on January 1, 2020. The 2019 Building Energy Efficiency Standards are 7 percent more efficient than the previous (2016) Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous Standards for non-residential construction. (The 2016 Building Energy Efficiency Standards already were 28 percent more efficient for residential construction and 5 percent more efficient for nonresidential construction than the 2013 Building Energy Efficiency Standards they replaced.) (CEC, 2018)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code. (CEC, 2018)

2. Senate Bill 375 (SB 375)

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32.” SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing,



environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

3. *California Assembly Bill No. 1493 (AB 1493)*

Enacted on July 22, 2002, California AB 1493, also known as the Pavley Fuel Efficiency Standards, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phase in during the 2009 through 2016 MY. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which



other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

4. *Clean Energy and Pollution Reduction Act of 2015 (SB 350)*

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

5. *Senate Bill 32 (SB 32)*

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature.

6. *2022 CARB Scoping Plan*

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to “deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor.” The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates



for compliance with a local GHG reduction strategy (CAP) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments.

7. *Cap-and-Trade Program*

The 2017 Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 MTCO₂e/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 MTCO₂e/yr "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each MTCO₂e of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year.

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the First Update to the Climate Change Scoping Plan:

"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities.



Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.”

The Cap-and-Trade Program covers approximately 80% of California’s GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program’s first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

8. Executive Order S-3-05

Executive Order (EO) S-3-05 documents GHG emission reduction goals, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts with meeting the GHG reduction targets with the heads of other state agencies. The EO requires the Secretary to report back to the Governor and Legislature biannually to report: progress toward meeting the GHG goals; GHG impacts to California; and applicable Mitigation and Adaptation Plans. EO S-3-05 goals for GHG emissions reductions include: reducing GHG emissions to 2000 levels by the year 2010; reducing GHG emissions to 1990 levels by the year 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050.

9. Executive Order S-01-08 (LCFS)

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California’s transportation fuels by at least 10% by 2020. CARB adopted the LCFS on April 23, 2009.

The LCFS was challenged in the U.S. District Court in Fresno in 2011. The court’s ruling issued on December 29, 2011, included a preliminary injunction against CARB’s implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on appeal, allowing CARB to continue to implement and enforce the regulation. The Ninth Circuit Court’s decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that LCFS adopted by CARB were not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled CARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for LCFS. In a partially published opinion, the Court



of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of CARB approving LCFS regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while CARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify, and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

10. *Executive Order S-13-08*

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy (CNRA 2009)* was adopted, which is the "...first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

11. *Executive Order B-30-15*

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the 2017 Scoping Plan to express the 2030 target in terms of MMTCO₂e. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.



12. *Executive Order B-55-18 and SB 100*

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

13. *Executive Order N-79-20 and Advanced Clean Cars II*

On August 25, 2022 CARB approved the Advanced Clean Cars II rule, which codifies the goals set out in Executive Order N-79-20 and establishes a year-by-year roadmap such that by 2035, 100% of new cars and light trucks sold in California will be zero-emission vehicles. Under this regulation, automakers are required to accelerate deliveries of zero-emission light-duty vehicles, beginning with model year 2026. CARB estimates that the regulation would reduce GHG emissions from light-duty vehicles by 50% by 2040, and that from 2026 to 2040, GHG emissions would be reduced by a cumulative 395 million metric tons.

14. *Title 20 CCR Sections 1602 et seq. – Appliance Energy Regulations*

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment.

15. *Title 24 Energy Efficiency Standards and California Green Building Standards*

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and



school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide \$1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

D. Regional

1. Mojave Desert Air Quality Management District

The MDAQMD is responsible for monitoring criteria air pollutant concentrations and establishing management policies for the MDAB. All development within the MDAB, including the proposed Project, is subject to all applicable air quality management plans that establish control strategies and guidance on regional emission reductions for air pollutants. The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert set forth a comprehensive set of programs that will lead the MDAB into compliance with federal and state air quality standards. The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments.

E. Local

1. Town of Apple Valley Climate Action Plan (CAP)

On May 2021, the Town of Apple Valley adopted the 2019 CAP Update, which was originally adopted in 2010. The CAP provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate. The CAP recommends GHG emissions targets that are consistent with the reduction targets of the State of California and presents a number of strategies that will make it possible for the Town to meet the recommended targets. Projects that demonstrate consistency with the strategies, actions, and emission reduction targets contained in the CAP would have a less than significant impact on climate change.

The 2010 CAP concluded that the Town of Apple Valley would need to reduce greenhouse gas emissions by a minimum of 112,337 MTCO₂e/yr by 2020 to meet a reduction target of 15% below 2005 levels. The 2019 CAP Update provides a revised 2030 target of 299,565 MTCO₂e/yr for greenhouse gas emissions or 40% below baseline emission levels. Greenhouse gas inventories emissions provided in the 2019 CAP Update show that emissions were approximately 597,681 MTCO₂e per year, a 38,894 MTCO₂e/yr exceedance as compared to the 2020 target of 636,575 MTCO₂e. To achieve the 2030 target of 40% below baseline emissions, the Town of Apple Valley would need to reduce greenhouse gas emissions by 148,334 MTCO₂e/yr.



4.7.3 METHODOLOGY

In July 2024, the California Air Pollution Control Officers Association (CAPCOA), in conjunction with other California air districts including SJVAPCD, released the latest version of CalEEMod Version 2022.1.1.26. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendices 3.1 and 3.2 of *Technical Appendix G*. CalEEMod includes GHG emissions from the following source categories: area, energy, mobile, waste, and water

4.7.4 BASIS FOR DETERMINING SIGNIFICANCE

In order to assess the significance of a proposed Project's environmental impacts it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. As discussed above, while estimated Project-related GHG emissions can be quantified, the direct impacts of such emissions on GCC and global warming cannot be determined on the basis of available science. There is no evidence at this time that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.

AB 32 states, in part, that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would have no potential to result in a direct impact to global warming; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively considerable way.

Section VIII of Appendix G to the CEQA Guidelines indicate that a project would result in a significant impact on climate change if a project were to:

- a. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The Town of Apple Valley is located within the jurisdiction of MDAQMD, which is the local agency responsible for air quality and GHG regulation in the region. Under *CEQA Guidelines* Section 15064.4(c), lead agencies may rely on thresholds of significance adopted by air districts with regulatory authority over the project area. MDAQMD has adopted the significance emissions threshold of 100,000 tons CO₂e (90,718.5 MTCO₂e) for stationary-source projects, as outlined in its CEQA and Federal Conformity Guidelines. The California Governor's Office of Land Use and Climate Innovation



also encourages the use of locally applicable thresholds developed by regional air districts in its *Discussion Draft CEQA and Climate Change Advisory*. (Urban Crossroads, 2025c)

If Project-related GHG emissions do not exceed the 90,718.5 MTCO₂e/yr threshold, then Project-related GHG emissions would clearly have a less than significant impact pursuant to Threshold a below. On the other hand, if Project-related GHG emissions exceed 90,718.5 MTCO₂e/yr, the Project would be considered a substantial source of GHG emissions.

4.7.5 IMPACT ANALYSIS

Threshold a: *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

A. Construction

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. MDAQMD follows the SCAQMD recommendation in calculating the total GHG emissions for construction activities, by dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.7-3, *Amortized Annual Construction Emissions*.

Table 4.7-3 Amortized Annual Construction Emissions

Year	Emissions (MT/yr)				
	CO ₂	CH ₄	N ₂ O	Refrigerant s	Total CO ₂ e ²
2025	1,790.00	0.06	0.08	1.29	1,818.00
2026	4,641.00	0.07	0.34	5.59	4,749.00
2027	4,826.00	0.07	0.34	5.41	4,933.00
2028	5,005.00	0.07	0.34	5.12	5,113.00
2029	4,842.00	0.07	0.31	4.38	4,942.00
Total GHG Emissions	21,104.00	0.34	1.41	21.79	21,555.00
Amortized Construction Emissions	703.47	1.13E-02	4.70E-02	0.73	718.50

Source: (Urban Crossroads, 2025c)

B. Operation

Project operations would generate CO₂, CH₄, N₂O, and Refrigerant emissions. Primary emissions sources would include:

² CalEEMod reports the most common GHGs emitted which include CO₂, CH₄, and N₂O. These GHGs are then converted into the CO₂e by multiplying the individual GHG by the GWP.



- Mobile Source Emissions
- Area Source Emissions
- Energy Source Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste
- Refrigerants
- Stationary Source Emissions
- TRU Source Emissions
- On-site Cargo Equipment

The estimated Project-related GHG emissions are summarized in Table 4.7-4, *Project GHG Emissions Summary (Without Mitigation)*.

Table 4.7-4 Project GHG Emissions Summary (Without Mitigation)

Emission Source	Emissions (MT/yr)				
	CO ₂	CH ₄	N ₂ O	Refrigerants	Total CO ₂ e
Annual construction-related emissions amortized over 30 years	703.47	1.13E-02	4.70E-02	0.73	718.50
Mobile Source	25,485.00	0.34	2.67	27.20	26,316.00
Area Source	50.80	0.00	0.00	0.00	51.00
Energy Source	3,928.00	0.37	0.05	0.00	3,950.00
Water Source	984.00	26.30	0.63	0.00	1,828.00
Waste Source	301.00	30.10	0.00	0.00	1,054.00
Refrigeration Source	0.00	0.00	0.00	1,551.00	1,551.00
Emergency Fire Pump Source	17.10	0.00	0.00	0.00	17.20
TRU Source					1,244.06
On-Site Cargo Handling Equipment Source					615.88
Total Project CO₂e (All Sources)	37,345.63				

Source: (Urban Crossroads, 2025c)

As shown above, construction and operation of the Project would generate approximately 37,345.63 MTCO₂e/yr. The Project would not exceed the emission threshold of 100,000 Tons CO₂e (90,718.5 MTCO₂e); Impacts would be less than significant.

It should be noted that Mitigation Measures MM 4.2-2 through 4.2-4, presented within Section 4.2, *Air Quality*, would also further reduce the Project’s GHG emissions. The proposed mitigation measures presented within Section 4.2, *Air Quality*, would reduce GHG emissions by improving energy and water efficiency, electrifying on-site cargo handling equipment, and integrating solar power. Efficient



appliances, WaterSense fixtures, and drought-tolerant landscaping lower electricity and water use, and reduce indirect emissions. Replacing diesel-powered equipment with electric alternatives eliminates direct fuel combustion emissions. Installing solar panels offsets a portion of the facility’s electricity needs with renewable energy. Together, these measures reduce emissions from building operations, on-site equipment, and energy use. Table 4.7-5 presents the GHG emissions of the Project with the implementation of these measures.

Table 4.7-5 Project GHG Emissions Summary (With Mitigation)

Emission Source	Emissions (MT/yr)				
	CO ₂	CH ₄	N ₂ O	Refrigerants	Total CO ₂ e
Annual construction-related emissions amortized over 30 years	703.47	1.13E-02	4.70E-02	0.73	718.50
Mobile Source	25,485.00	0.34	2.67	27.20	26,316.00
Area Source	50.80	0.00	0.00	0.00	51.00
Energy Source	3,136.00	0.30	0.04	0.00	3,154.00
Water Source	886.00	23.70	0.57	0.00	1,648.00
Waste Source	301.00	30.10	0.00	0.00	1,054.00
Refrigeration Source	0.00	0.00	0.00	1,551.00	1,551.00
Emergency Fire Pump Source	17.10	0.00	0.00	0.00	17.20
TRU Source					1,244.06
On-Site Cargo Handling Equipment Source					0.00
Total Project CO₂e (All Sources)	35,753.76				

Source: (Urban Crossroads, 2025c)

As shown above, the implementation of Mitigation Measures MM 4.2-2 through MM 4.2-4 would further reduce the Project’s already less than significant GHG emissions to approximately 35,753.76 MTCO₂e/yr, well under the screening threshold of 90,718.5 MTCO₂e/yr.

Threshold b: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Pursuant to 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project’s consistency with the 2022 Scoping Plan, is discussed below. It should be noted that the Project’s consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary, since both of these plans have been superseded by the 2022 Scoping Plan.



C. 2022 CARB Scoping Plan Consistency

The Project would not impede the State’s progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the Low Carbon Fuel Standard. The Project includes a comprehensive set of GHG reduction measures (Mitigation Measures MM 4.2-2 through MM 4.2-20) that are consistent with the regulatory requirements outlined in the 2022 Scoping Plan. Key measures include the use of on-site solar power generation, electrification of all cargo handling equipment, installation of EV infrastructure, enhanced building energy efficiency through LEED Silver design and improved insulation, and reduced carbon intensity of construction materials. Additional transportation-related measures such as truck idling restrictions, clean truck requirements, and TDMs further align with the 2022 Scoping Plan’s goal on reducing emissions. As such, the Project would be consistent with the 2022 Scoping Plan.

D. Town of Apple Valley CAP Consistency

The Town of Apple Valley CAP includes several strategies aimed at helping the Town reduce GHG emissions consistent with State targets. As shown on Table 4.7-6, *Project CAP Consistency Reduction Measures*, the proposed Project would be consistent with the applicable CAP measures with the incorporation of Project design features and mitigation measures.

Table 4.7-6 Project CAP Consistency Reduction Measures

CAP Reduction Measure	Consistency
<p>ND-6: For projects within the North Apple Valley Industrial Specific Plan, develop employee housing within one mile of the industrial project.</p>	<p>No Conflict. This is not a project specific measure. While the Project itself does not include a residential component, the adjacent area to the Project, on the southeastern side of Central Road, is designated for Low Density Housing. If this area is developed in accordance with its existing land use designation, it would provide housing opportunities within one mile of the Project site. This proximity has the potential to support the CAP’s goal by reducing commute distances, promoting local employment, and lowering associated transportation emissions.</p>
<p>ND-12: Building and site plan designs shall ensure that the project energy efficiencies meet applicable California Title 24 Energy Efficiency Standards.</p>	<p>No Conflict. The Project is consistent with Title 24 energy efficiency standards through multiple design and operational features. These include the use of Energy Star appliances, enhanced insulation (R-19), solar-ready construction with on-site generation, and energy-efficient lighting controls. The Project also includes infrastructure</p>



CAP Reduction Measure	Consistency
	and charging for EVs in accordance with CALGreen requirements.
ND-20: Install common area electric vehicle charging station(s) and secure bicycle racks.	No Conflict. The Project would install EV charging station(s) and a secure bicycle rack.
CO-2: Establish and enforce idling time limits for delivery vehicles. Idling shall not be permitted for more than 5 minutes.	No Conflict. The Project includes a series of anti-idling measures which aims to reduce emissions from vehicles. Specifically, Mitigation Measure MM 4.2-1 require strict enforcement of a three-minute idling limit for all on-site trucks, along with tenant lease provisions, signage at key access points, and training for site personnel.
CO-17: Increase recycling by 20%. Currently, recycling is mandatory for businesses that generate four cubic yards or more of commercial solid waste per week and for multifamily residential dwellings of five units or more (Senate Bill 1018).	No Conflict. Mitigation Measure MM 4.2-9 requires the provision of dedicated storage areas for recyclable and green waste, and food waste where a pick-up service is available. These facilities will ensure compliance with mandatory commercial recycling requirements. By incorporating infrastructure to support recycling and organic waste diversion, the Project contributes to reducing landfill-bound waste and supports the CAP's objective to increase recycling rates within the Town of Apple Valley.

4.7.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The Project would not exceed the significant emissions threshold of 100,000 Tons CO₂e (90,718.5 MTCO₂e) per year. Additionally, the implementation of Mitigation Measures MM 4.2-2 through MM 4.2-4 would further reduce the Project's already less than significant GHG emissions to approximately 35,753.76 MTCO₂e/yr, well under the screening threshold of 90,718.5 MTCO₂e/yr.

Threshold b: Less than Significant Impact. The Project would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHG emissions. Therefore, impacts are less than significant.

4.7.7 MITIGATION

The Project would result in less than significant impacts related to GHG emissions and no mitigation is required.

4.7.8 CUMULATIVE IMPACT ANALYSIS

Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis consistent with the requirements outlined in CEQA Guidelines 15064(h)(3). As discussed, implementation of the Project would comply with the 2022 Scoping Plan and Town's CAP. The Project would not exceed the significant emission threshold of 100,000 Tons CO₂e (90,718.5 MTCO₂e) per year. Therefore, Project-related GHG emissions and their contribution to global climate change would be not cumulatively considerable, and GHG emissions impacts would be less than significant.



4.8 HAZARDS AND HAZARDOUS MATERIALS

The following analysis is primarily based on information obtained from:

- *Phase I Environmental Site Assessment* (Partner Engineering and Science) March 18, 2022.
- *Airport Land Use Compatibility Analysis – SPR2022-0003 Lake Creek Logistics Center, Apple Valley Airport, Apple Valley, CA (Johnson Aviation Consulting) February 19, 2024.*

The above-listed documents are included as *Appendix H1 and H2* to this EIR. All references used in this Section are listed in EIR Section 7.0, *References*.

4.8.1 ENVIRONMENTAL SETTING

For the purposes of this EIR, the term “toxic substance” is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances.

The term “hazardous material” is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness. Hazardous waste is defined in the California Code of Regulations, Title 22, § 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency (EPA) as capable of inducing systemic damage to humans or animals). Certain wastes are called “Listed Wastes” and are found in the California Code of Regulations, Title 22, §§ 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

A. Historical and Regulatory Review

Based on the review of historical documentation, the Project site has been undeveloped since at least 1952. No potential environmental concerns were identified in association with the current or former use of the site. The Project site was not identified in any regulatory database.

Apple Valley Airport, located immediately west of the Project site is identified as an underground storage tank (UST) site, Statewide Environmental Evaluation and Planning System (SWEEPS) UST, Historical Hazardous Substance Storage Container Information (HIST) TANK, Leaking Underground Storage Tank (LUST), Resource Conservation and Recovery Act (RCRA)-Non Generator (NonGen), San Bernardino County Certified Unified Program Agencies (SANBERN CUPA), California Environmental Reporting System (CERS), Historical Hazardous Substance Storage Information



(HHSS), and Toxic Pollutant Emission Facilities (EMISSIONS) site in the regulatory database report. Based on the continued regulatory permitted oversight, regulatory status, depth to groundwater, and inferred direction of groundwater flow, this site is not expected to represent a significant environmental concern.

B. Site Reconnaissance

No potential environmental concerns were identified at the Project site during the onsite reconnaissance conducted as part of the Phase I Environmental Site Assessment (ESA). Adjacent properties were also observed (from the Project site) and exhibited no obvious environmental concerns.

C. Airport Hazards

The Project site is located adjacent to the Apple Valley Airport and is within the Airport Influence Area. According to the Apple Valley Comprehensive Airport Land Use Compatibility Plan (ALUCP), the majority of the site is within Airport Overlay Zone A-2, however, a small portion of the site located in the southeasterly corner, adjacent to Central and Corwin Roads, is located within Airport Overlay Zone A-1. (Apple Valley, 1995) Industrial uses, such as those proposed by the Project, are permitted in both Airport Overlay Districts.

D. Wildland Fire Hazards

According to the California Department of Forestry and Fire Protection, the Project site is located within the limits of the Town of Apple Valley, outside of the State Responsibility Area (SRA). The site is not located within a Very High Fire Hazard Severity Zone (VHFHSZ). (CalFire, 2025)

4.8.2 REGULATORY FRAMEWORK

The following is a brief description of the federal, State, and local environmental laws and regulations related to hazards and hazardous materials.

A. Federal

1. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed.



EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA).

2. *Resource Conservation and Recovery Act (RCRA)*

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

3. *Hazardous Materials Transportation Act (HMTA)*

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property."

Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 CFR Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177

The HMTA is enforced by use of compliance orders [49 U.S.C. 1808(a)], civil penalties [49 U.S.C. 1809(b)], and injunctive relief (49 U.S.C. 1810). The HMTA (Section 112, 40 U.S.C. 1811) preempts state and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. (OSHA, n.d.)



4. *Hazardous Materials Transportation Uniform Safety Act of 1990*

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property.

The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials. (OSHA, n.d.)

5. *Occupational Safety and Health Act (OSHA)*

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions.

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states.

6. *Toxic Substances Control Act*

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

Various sections of TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture.
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found.
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.



- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.
- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform EPA, except where EPA has been adequately informed of such information. EPA screens all TSCA b§8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law, but are submitted by industry and public interest groups for a variety of reasons.

B. State

1. Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace.

Pursuant to 29 CFR 1952.172, the California State Plan applies to all public and private sector places of employment in the State, with the exception of federal employees, the United States Postal Service, private sector employers on Native American lands, maritime activities on the navigable waterways of the United States, private contractors working on land designated as exclusively under federal jurisdiction and employers that require federal security clearances. Cal/OSHA is the only agency in the State authorized to adopt, amend, or repeal occupational safety and health standards or orders. In addition, the Standards Board maintains standards for certain things not covered by federal standards or enforcement, including: elevators, aerial passenger tramways, amusement rides, pressure vessels and mine safety training. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries or illnesses. (OSHA, n.d.)

2. California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL



implements RCRA as a “cradle-to-grave” waste management system in the State. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law (RCRA). (CA Legislative Info, n.d.)

3. *California Code of Regulations (CCR), Titles 22 and 26*

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized State according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of State and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as “Title 22.” (DTSC, n.d.)

C. *Local*

1. *Town of Apple Valley General Plan*

The Town of Apple Valley General Plan Hazardous and Toxic Materials Element identifies factors that need to be considered in order to provide protection to residents and visitors from potentially harmful hazardous and toxic materials within the Town. Such hazards may pose a threat to life and property, or may call for costly public improvements. The Hazardous and Toxic Materials Element characterizes hazards and presents methods to reduce or eliminate them by establishing policies and programs to ensure the utilization of appropriate management practices, as well as the effective and secure use, storage, and transport of hazardous and toxic substances in the community. Project-applicable goals and policies of the Hazardous and Toxic Materials Element and a discussion of the Project’s consistency are presented in Table 4.10-1, *General Plan Consistency Analysis*, in EIR Section 4.10, *Land Use and Planning*.

2. *Town of Apple Valley Emergency Operations Plan*

The Town of Apple Valley has developed an Emergency Operations Plan (EOP) to incorporate and coordinate all the facilities and personnel of the Town into an efficient organization capable of responding to any emergency, including hazardous material incidents. The EOP is compliant with the California Standardized Emergency Management System (SEMS), which enables a multiple agency response to an incident, and the National Incident Response Management System (NIMS), which is



intended to standardize agency response across federal, state, and local jurisdictions (Town of Apple Valley 2014).

3. *Apple Valley Local Hazard Mitigation Plan*

The Town updated its Local Hazard Mitigation Plan (LHMP) in 2017 in an effort to identify hazards, determine their likely impacts, and set mitigation goals and strategies, to expedite the recovery from a disaster to normalcy and increase the Town's resiliency to disasters. The LHMP focused on six hazards that were determined to be most significant to the Town: wildfire, flood, earthquake, erosion, flooding, and climate change. The LHMP included a vulnerability assessment and identified mitigation goals and actions for each of the six hazards and those that apply to all hazards such as improving emergency services management capability through implementation of a public notification system and ensuring continual power supply at the Emergency Operations Center (Apple Valley, 2017).

4. *Apple Valley Comprehensive Land Use Plan*

Due to its location adjacent to the Apple Valley Airport, the Project is subject to the Apple Valley Comprehensive Land Use Plan (ALUCP), which provides specific airport land use guidance and is used to evaluate land use compatibility and development proposals in the vicinity of the Airport. The primary compatibility concerns are aircraft noise, the safety of people and property on the ground and in aircraft, the protection of airspace, and concerns related to overflights. The ALUCP has established an Airport Master Plan Area and Airport Overlay Districts to promote the development of compatible land uses near the Airport.

4.8.3 METHODOLOGY

The Project site and surrounding areas were assessed to determine the potential presence of hazardous materials. The Phase I ESA was prepared in accordance with ASTM Practice E1527-13 and E1527-21 which included a review of environmental records, a review of historical records, a site reconnaissance, and interviews with representatives of the Project site and adjoining properties. Additional relevant information was also obtained from the Town of Apple Valley General Plan.

4.8.4 BASIS FOR DETERMINING SIGNIFICANCE

Section IX of Appendix G to the CEQA Guidelines addresses typical adverse effects due to hazards and hazardous materials, and includes the following threshold questions to evaluate the Project's impacts from hazards and hazardous materials:

- a. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
- b. *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;*



- c. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*
- d. *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;*
- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;*
- f. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;*
- g. *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

4.8.5 IMPACT ANALYSIS

Threshold a: *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Threshold b: *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

A. *On-Site Conditions*

Based on a review of regulatory databases and a site reconnaissance, the Project site does not contain any hazards, nor is the Project site affected by any off-site hazards. No unusual or noxious odors, pools of liquid or potentially hazardous substances, hazardous materials storage structures, stained soil, aboveground storage tanks, pits, or ponds were observed. The Phase I ESA did not identify any environmental issues pertaining to past uses of the Project site during the course of the assessment. (Partner, 2022)Therefore, past and existing uses do not represent a significant environmental concern for the Project site. As a result, implementation of the Project would result in less than significant impacts related to on-site conditions.

B. *Temporary Construction-Related Activities*

During construction activities, the Project will require limited transport of potentially hazardous materials (e.g., paints, solvents, fertilizer, etc.) to and from the Project site. Handling of these materials is extensively regulated at the local, State and federal levels. The Project would be required to comply with all applicable regulations, including but not limited to the federal Hazardous Materials Transportation Act and California Hazardous Waste Control law. It is not anticipated that the development of the Project would result in conditions that are not currently addressed by existing regulations. On this basis, potential impacts due to routine transport, use, or disposal of hazardous materials during construction are considered less than significant.



C. Long-Term Operation

The Project could involve the use, temporary storage and handling of potentially hazardous materials such as pesticides, fertilizers, or paint products that are pre-packaged for distribution and use. This type of storage, transfer, use and disposal of potentially hazardous materials is extensively regulated at the local, State and federal levels.

The precise materials that would be located onsite are not known, as the tenants of the Project are not yet defined. In the event that hazardous materials, other than those common materials described above, are associated with future warehouse operations, the business would be required to prepare and submit a Hazards Materials Business Emergency Plan (HMBEP) in order to register the business as a hazardous materials handler. Such businesses are also required to comply with California’s Hazardous Materials Release Response Plans and Inventory Law, which require immediate reporting to SBCFD and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business.

Project operations would be required to comply with all applicable federal, State, and local regulations to ensure the proper transport, use, and disposal of hazardous substances including potential transport of refrigerants. With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project are not expected to pose a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, nor would the Project increase the potential for accident operations which could result in the release of hazardous materials into the environment. Impacts would be less than significant.

Threshold c: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No existing or proposed schools are located within one-quarter mile of the Project site. The nearest existing school is Sycamore Rocks Elementary School, located approximately 1.70 miles southeast of the Project site. Accordingly, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. As such, no impact would occur.

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

Government Code Section 65962.5 requires DTSC, the State Department of Health Services, State Water Resources Control Board, and the State Department of Resources Recycling and Recovery to maintain a list of hazardous materials sites that fall within specific, defined categories. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC, n.d.). As such, no impact would occur.



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

Due to its location adjacent to the Apple Valley Airport, the Project is subject to the ALUCP, which provides specific airport land use guidance and is used to evaluate land use compatibility and development proposals in the vicinity of the Airport. As previously identified, the majority of the Project site is located within Airport Overlay Zone A-2, however, a small portion of the southeasterly corner of the site is located within Airport Overlay Zone A-1. Industrial uses such as the Project are permitted within both Overlay Zones (although no portion of the proposed structures would be located within Overlay Zone A-1).

Project plans were submitted to the Federal Aviation Administration (FAA) for airspace review. The FAA conducted an aeronautical study for the Project and concluded that the Project would not be a hazard to air navigation. As such, the FAA issued a Determination of No Hazard for the Project on October 3, 2023.

As discussed in EIR Section 4.1, *Aesthetics*, the Project would comply with the lighting standards within the Airport Overlay Districts as required by the Town's Municipal Code Chapter 9.65 – Airport Overlay Districts and consistent with the ALUCP which requires all exterior lighting to have sharp cut-off reflectors in which virtually no light leaves the fixture above an angle of about 70 degrees, as measured straight down.

Additionally, as discussed in EIR Section 4.11, *Noise*, the 60 dBA noise contour boundary for the airport has been identified as occurring within the Airport's property, and noise levels on surrounding lands are not significantly affected. While aircraft overflights may be heard, aircraft noise would not create significant impacts outside the noise contour.

Based on the preceding, the potential for the Project to result in a safety hazard or excessive noise for people residing or working in the Project area is considered less than significant.

Threshold f: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project would include improvements to adjacent roadways for access onto the Project site. All proposed roadway improvements would be constructed in accordance with the Town's General Plan and Town's development standards. The Town's Local Hazard Mitigation Plan 2017 Update identifies Interstates as major emergency response and evacuation routes (Apple Valley, 2017). The Project does not propose or require permanent alteration of vehicle circulation routes. Nor does the Project propose or require facilities or operations that would interfere with the identified emergency response or emergency evacuation plan. In accordance with Town policies, coordination with the local fire and police departments during construction would ensure that potential interference with emergency response and evacuation efforts are avoided. Under operational conditions, the Project would maintain



adequate emergency access for emergency vehicles on-site. The Project is not anticipated to interfere or impede with an adopted emergency response plan or emergency evacuation route during construction or operations. As such, impacts would be less than significant.

Threshold g: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

According to the California Department of Forestry and Fire Protection, the Project site is located within the limits of the Town of Apple Valley, outside of the SRA. The site is not located within a VHFHSZ. (CalFire, 2025)

Pre-construction coordination with the Fire Protection District and adherence to local fire regulations during construction and operation of the Project would be required. The Town and Fire Protection District would require that fire prevention/fire suppression measures are incorporated in the Project designs and that water delivery systems serving the Project site provide adequate fire flow. Creation and maintenance of firebreaks and fire-defensible spaces adjacent to buildings and roadways as required by the Town and Fire Protection District would further reduce the potential for exposure to wildland fires and the spread of wildland fires. The Town would also enforce weed abatement measures, minimizing potential fire fuel loads. Based on the preceding, the potential for the Project to result in significant risk of loss, injury or death involving wildland fires is considered less than significant.

4.8.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a & b: Less than Significant Impact. No significant hazards due to existing conditions, Project construction, or Project operations have been identified.

Threshold c: No Impact. The Project site is not located within one-quarter mile of any existing or proposed school. No impact would occur in this regard.

Threshold d: No Impact. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Threshold e: Less than Significant Impact. The Project is a permitted use within the applicable Airport Overlay Zone(s). The FAA has issued a Determination of No Hazard for the Project. The potential for the Project to result in significant airport-related hazards is considered less than significant.

Threshold f: Less than Significant Impact. The Project does not propose or require permanent alteration of vehicle circulation routes. Nor does the Project propose or require facilities or operations that would interfere with any identified emergency response or emergency evacuation plan.

Threshold g: Less than Significant Impact. The Project site is not located within a VHFHSZ area. Additionally, pre-construction coordination with the Town and Fire Protection District would ensure appropriate fire prevention/fire suppression measures are incorporated into the Project. The potential



for the Project to result in significant risk of loss, injury or death involving wildland fires is considered less than significant.

4.8.7 MITIGATION

The Project would result in less than significant impacts related to hazards and hazardous materials; no mitigation is required.

4.8.8 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area when considering potential hazards and hazardous materials issues includes the area to be developed within the Project site, as well as off-site locations that might be affected by or contribute to hazards or hazardous conditions resulting from the Project and its operations. The cumulative hazards and hazardous materials impact analysis evaluates the effects of Project construction and operations and reflects long-term buildout conditions within the cumulative impact area.

As discussed previously, the Project does not propose uses or activities that would require substantial handling or use of hazardous materials, hazardous substances, or hazardous waste that could result in potential adverse effects. To the extent that such materials or substances may be present during Project construction or operations they will be transported, stored, used and disposed of consistent with multiple and broad regulatory requirements. No other hazards, such as aircraft hazards, emergency services issues, or wildfire hazards have been identified. Project impacts related to hazards and hazardous materials would be less than significant.

As with the Project, other related projects within the cumulative impact area would be required to comply with hazards/hazardous material regulatory requirements. Mitigation would be incorporated if necessary. There are no known or probable related projects that would interact with the less than significant effects of the Project and thereby result in cumulatively impacts.

Based on compliance with established policies and regulations, the Project's potential contribution to hazards/hazardous materials cumulative impacts is not considerable, and the cumulative effects of the Project are less than significant.



4.9 HYDROLOGY AND WATER QUALITY

The analysis is based on information obtained from the following technical reports:

- *Preliminary Hydrology Calculations for the Apple Valley Assemblage, Southwest Corner of Gustine Street and Central Road, Apple Valley, California* (Thienes Engineering, Inc.) September 5, 2024.
- *Priority Project Water Quality Management Plan for: Apple Valley Assemblage APN: 0463-373-01, 03, 04, 05 and 06* (Thienes Engineering, Inc.) September 5, 2024.
- *Water Supply Assessment, Apple Valley Logistics Center Project, San Bernardino County, California* (Dudek) September 2023.

These documents are provided as EIR *Technical Appendices II, I2, and I3*, respectively. All documents relied upon to prepare this Subsection are listed in EIR Section 7.0, *References*.

4.9.1 ENVIRONMENTAL SETTING

A. Regional Hydrology

The Project site is located in the Mojave River Watershed, which is a hydrologically diverse area covering over 5,400 square miles in the California High Desert, in San Bernardino County. Over 90 percent of the basin groundwater recharge originates in the San Gabriel and San Bernardino Mountains. Groundwater is discharged from the basin primarily by well pumping, evaporation through soil, transpiration by plants, seepage into dry lakes where accumulated water evaporates, and seepage into the Mojave River. (K/J, 2017)

B. Site Hydrology

Under existing conditions, the Project site receives offsite flows from the adjacent properties in the northeast. The flows enter the site via surface flow. The site generally surface drains to the southwest and discharges into an earthen channel on the south side of the Project site. The southern channel runs west and into a larger earthen channel adjacent to the airport. (Thienes, 2024a)

C. Flooding and Dam Inundation

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C5835H, the Project site is located within “Zone D” which are areas of undetermined flood hazard. (FEMA, n.d.)

D. Water Quality

The Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act, CWA) requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards



due to excessive concentrations of pollutants are placed on a list of impaired waters pursuant to Section 303(d) of the CWA. The Project site's receiving waters include the Mojave River (Upper Narrows to Lower Narrows), Mojave River (below Lower Narrows), and East Cronise Lake. The Mojave River (Upper Narrows to Lower Narrows) is included on the CWA's Section 303(d) list of impaired waters because of excessive concentrations of three pollutants ("Pollutants of Concern"), including fluoride, sulfates, and total dissolved solids.

E. Groundwater

The Project site is located within the Upper Mojave River Valley Groundwater Basin (DWR Basin No. 6-042) as mapped by the California Department of Water Resources as well as the Mojave Basin (Alto Subarea) as designated by the Mojave Basin Area Watermaster. The Basin is an adjudicated groundwater basin and is exempt from the requirements of developing a Groundwater Sustainability Plan (GSP) as it is designated as a very-low priority basin. Because the Project site is within an adjudicated area, it is not subject to the requirements of California's Sustainable Groundwater Management Act (SGMA), but instead is subject to groundwater pumping allocations under the court adjudication set up to mitigate long-term overdraft, to keep subareas in balance, and to meet biological resource mitigation obligations. (CDWR, 2024)

F. Seiches and Tsunami Hazards

Seiches are standing waves oscillating in a body of water that are caused when strong winds and rapid changes in atmospheric pressure push water from one end of a water body to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors. Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the sea. In the depths of the ocean, tsunami waves do not dramatically increase in height, but as the waves travel inland, they build up to higher and higher heights as the depth of the ocean decreases (NOAA, 2024).

In the vicinity of the Project site, there are no open reservoirs, lakes, or other large bodies of water. The Project site is located approximately seven miles northeast of Spring Valley Lake, and approximately 80 miles northeast of the Pacific Ocean. The Project site is not susceptible to a seiche or tsunami conditions.

4.9.2 REGULATORY FRAMEWORK

The following is a brief description of the federal, State, and local environmental laws and related regulations related to hydrology and water quality.

A. Federal

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the



CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit is obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

2. *Federal Flood Insurance Program*

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration (FIMA) within the Federal Emergency Management Agency (FEMA) is responsible for administering the NFIP and administering programs that provide assistance with mitigating future damages from natural hazards. (FEMA, n.d.)

B. State

1. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.



The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of the nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions.

The Porter-Cologne Act implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and are updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2018) The Project site is located in the Mojave River Watershed, which is within the purview of the Lahontan Regional Water Quality Control Board (RWQCB). The Mojave River Integrated Regional Water Quality Management Plan is the governing water quality plan for the region. (SWRCB, 2024)

2. *California Water Code*

The California Water Code is the principal State law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to



issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW.

Surface water quality is the responsibility of the RWQCB, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water. (CA Legislative Info, n.d.)

3. *California Toxics Rule (CTR)*

The California Toxics Rule (CTR) fills gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR criteria are similar to those published in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016, pp. 14-15)

4. *CDFG Code Section 1600 et seq. (Lake- or Streambed Alteration Agreement Program)*

Fish and Game Code § 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream, or lake.

It should be noted that "any river, stream or lake" includes those that are episodic (dry for periods of time) as well as those that are perennial (flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.



CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, n.d.)

5. *Watershed Management Initiative (WMI)*

The State and Regional Water Boards are currently focused on looking at entire watersheds when addressing water pollution. The Water Boards adopted the Watershed Management Initiative (WMI) to further their goals. The WMI establishes a broad framework overlying the numerous federal and State mandated priorities. As such, the WMI helps the Water Boards achieve water resource protection, enhancement and restoration while balancing economic and environmental impacts. The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds. Involve stakeholders to develop solutions.
- Better coordinate point source and nonpoint source regulatory efforts. Establish working relationships between staff from different programs.
- Better coordinate local, state, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups. (SWRCB, 2017)

6. *Sustainable Groundwater Management Act (SGMA)*

The 2014 SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. The DWR categorizes the priority of groundwater basins. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement GSPs or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. (DWR, n.d.) As stated above, because the Project site is within an adjudicated area, it is not subject to the requirements of California's Sustainable Groundwater Management Act.

C. *Regional*

1. *Mojave River Watershed Water Quality Management Plan*

The 2013 Phase II Small MS4 Permit, adopted by the SWRCB, and issued Statewide, requires all new development projects covered by this Order to incorporate low-impact development (LID) Best Management Practices (BMPs) to the maximum extent practicable. In San Bernardino County, the Phase II MS4 Permit is applicable within the Mojave River Watershed. In addition, the Order also



requires the development of a standard design and post-development BMP guidance for incorporation of site design/LID, source control, treatment control BMP (where feasible and applicable), and hydromodification mitigation measures to the maximum extent practicable to reduce the discharge of pollutants to receiving waters. The purpose of this technical guidance document for the Water Quality Management Plan (WQMP) is to provide direction to project proponents on the regulatory requirements applicable to a private or public development activity, from project conception to completion. This technical guidance document is intended to serve as a living document, which will be updated as needed to remain applicable beyond the current Phase II MS4 Permit term. Any non-substantive updates to the technical guiding document and WQMP template are provided in an annual report. Future substantive updates shall be submitted to the Lahontan RWQCB for review and approval, prior to implementation.

The Lahontan RWQCB is responsible for the protection of the beneficial uses of waters within the Project area in San Bernardino County. The Lahontan RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Lahontan Basin Plan to implement plans, policies, and provisions for water quality management.

In accordance with State policy for water quality control, the RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Lahontan Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. Beneficial uses of waters within the Mojave River Watershed are addressed in the Mojave River Basin Plan Amendment of the Lahontan Basin Plan. (Lahontan, 2021)

2. *Mojave Storm Water Management Program*

The NPDES General Permit NO. CAS000004, Waste Discharge Requirements for stormwater discharges from Small MS4s, requires that Permittees develop a Storm Water Management Program (SWMP). The purpose of this SWMP is to keep the Mojave River clean to the maximum extent practicable using BMPs. These practices would reduce stormwater runoff and non-storm water runoff flowing to the river. BMPS would also serve to keep contaminations, including sediment, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, pesticides, herbicides, and trash from entering the storm drain system. (Mojave, 2003)

D. Local

1. *Town of Apple Valley General Plan*

The Town of Apple Valley General Plan Water Resources Element addresses water sources, availability, current and future demand, conservation, water quality, and the future of the water resources serving the community. A discussion of local water purveyors and the importance of coordination between the purveyors and the Town is also included below. The topics covered by this element include regional and local water supplies, consumptive demand within the Town and Sphere-of-Influence, and groundwater conservation and protection. Project-applicable goals and policies of the



Water Resources Element and a discussion of the Project's consistency are discussed in Table 4.10-1, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*. (Apple Valley, 2009)

4.9.3 METHODOLOGY

Information from the Project's Preliminary Hydrology Calculations, Water Quality Management Plan (WQMP), Water Supply Assessment (WSA), the Town of Apple Valley General Plan, and FEMA Flood Insurance Rate Maps (FIRMs) were utilized in the analyses of the Project's potential impacts to hydrology and water quality. Hydrologic and hydraulic calculations were performed per the San Bernardino County Rational Method program (AES Software). The Project's preliminary WQMP was prepared in accordance with the requirements of State of California Water Resources Control Board Order No. 2013-0001-DWQ.

4.9.4 BASIS FOR DETERMINING SIGNIFICANCE

Section X of Appendix G to the CEQA Guidelines addresses typical adverse effects to hydrology and water quality, and includes the following threshold questions to evaluate the Project's impacts on hydrology and water quality:

- a. *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;*
- b. *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;*
- c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
 - i. *Result in substantial erosion or siltation on- or off-site;*
 - ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
 - iii. *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv. *Impede or redirect flood flows.*
- d. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.*
- e. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*



4.9.5 IMPACT ANALYSIS

Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

A. Construction-Related Water Quality Impacts

Construction of the Project would be subject to NPDES permit requirements. The Town of Apple Valley is a co-permittee under the San Bernardino County Municipal NPDES MS4 Phase II Stormwater permit. The NPDES MS4 Permit requires the Town to implement a Construction Site Stormwater Runoff Control Program in accordance with the regional Storm Water Management Program (SWMP) for the Mojave River Watershed.

To comply with the regulatory requirements of the SWMP, the Town requires the implementation of an Erosion and Sediment Control Plan (ESCP), which would ensure that appropriate BMPs are implemented to prevent, to the maximum extent practicable, pollutants from leaving the site during all phases of construction. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydroseeding.

In addition to an ESCP, implementation of a required WQMP in accordance with the Mojave River Watershed Technical Guidance Document for Water Quality Management Plans, would ensure that stormwater treatment and conveyance would be sufficient prior to Project build-out. Submittal, review, and approval of both the WQMP and ESCP by the Town are required prior to the issuance of grading permits for Project development. The Project's Preliminary WQMP is presented as *Technical Appendix I2* to this EIR.

Mandatory compliance with the SWMP, ESCP, and WQMP would ensure that implementation of the Project would not result in a violation of any water quality standards or waste discharge requirements during construction activities. Therefore, short-term water quality impacts associated with temporary construction activities would be less than significant.

B. Post-Development Water Quality Impacts

The NPDES MS4 Phase II Stormwater Permit requires the Town to implement a Post-Construction Storm Water Management Program in accordance with the regional SWMP. This Program sets limits of pollutants being discharged into waterways and requires all new development to incorporate structural and non-structural BMPs to improve water quality. To meet the requirements of the SWMP, the Town requires the incorporation of LID features into new development and redevelopment projects, as specified in the Mojave River Watershed Technical Guidance Document for Water Quality Management Plans. In accordance with the NPDES permit, the Town is responsible for monitoring WQMPs, which address stormwater pollution from new private development. Site-specific WQMPs for individual projects must incorporate the SWRCB required minimum Runoff Capture BMPs. In addition, the WQMP specifies the minimum required LID features, as well as the BMPs that must be used for a designated project.



The Project Applicant would be required to implement the WQMP to demonstrate compliance with the City’s NPDES municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. As identified within the Project-specific WQMP, the proposed Project has been designed to include onsite structural-source control BMPs, as well as operational-source controls. The Project’s drainage system has been designed to capture and convey offsite flows that run onto the Project site, as well as runoff generated onsite. In summary, drainage from all three buildings would be collected in catch basins located throughout the site. Each building will have multiple storm drain systems (Lines A-H, Line J, and Line P, discussed subsequently) which will discharge to one of four proposed detention basins. From the detention basins, flows will discharge by gravity via separate storm drain system to an onsite channel where it will eventually spillover to the westerly adjacent earthen channel.

In addition to the WQMP, the NPDES program also requires certain land uses, including those proposed by the Project, to prepare an SWPPP for operational activities. Because the Project’s future building occupants and their operations are not currently known, details of the SWPPP (including specific BMPs) cannot be determined at this time. Regardless, the Project SWPPP would ensure that operation of the Project would not violate any water quality standards or waste discharge requirements. Based on the preceding discussion, operational water quality impacts would be less than significant.

Threshold b: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Direct additions or withdrawals of groundwater are not proposed by the Project. Further, construction proposed by the Project will not involve substructures or other intrusions at depths that would significantly impair or alter the direction or rate of flow of groundwater.

Water is provided to the Project area by Liberty Utilities, which relies solely on groundwater obtained from 20 active wells in the Mojave Basin Area. Liberty Utilities only pumps the amount of water necessary to serve the demand. According to the Project’s Water Supply Assessment (WSA), the projected operational water demand for the Project is 44 AF. According to the Liberty Utilities Urban Water Management Plan and the 2021-2022 Watermaster Report and WSA, Liberty Utilities can meet its water demands (including the Project) during normal years, single dry years, and a five consecutive year drought period over the next 20 years.

Groundwater which may be consumed by the Project, and the service area as a whole, would be recharged pursuant to Liberty Utilities’ policies and programs. The Project site is not a designated groundwater recharge area. The Project does not propose or require facilities or operations that would otherwise adversely affect designated recharge areas. Based on the preceding, the potential for the Project to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin is considered less than significant.



Threshold c: *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impeded or redirect flood flows?*

The Project incorporates necessary drainage and stormwater management systems, and would comply with stormwater system design, construction, and operational requirements mandated under the Town Municipal Code, and with regulations established by other agencies, including the Lahontan RWQCB and California Department of Water Resources.

The Project would implement a storm drain system that will collect and detain stormwater runoff. The Projects detention basins have been designed to mitigate the impacts of additional runoff that would be generated by the Project. Final design, configuration, and locations of proposed drainage system improvements will be reviewed and approved by the Town prior to, or concurrent with, application for grading permits. A complete description of the proposed drainage system for the site is presented in previous EIR Section 3.0, *Project Description*, (Section 3.3.1, H. *Stormwater Drainage Infrastructure Improvements*).

A. Construction

During site preparation activities, any existing groundcover would be removed from the site, exposing the Project area to increased wind and water erosion potentials. Further, construction site runoff may carry increased loads of sediment, heavy metals and petroleum hydrocarbons (from machinery) which could degrade water quality. As previously mentioned, in accordance with NPDES requirements, the Project Applicant would be required to prepare and implement an ESCP to alleviate potential erosion, sedimentation and stormwater discharge contamination impacts of the Project.

The Project Applicant would also be responsible for compliance with the General Construction Permit by filing a Notice of Intent to Commence Construction Activities. Under the General Construction Permit, discharge of materials other than stormwater is prohibited. The General Construction Permit stipulates further that the Applicant shall prepare, retain at the construction site, and implement a SWPPP which identifies the sources of sediments and other pollutants that affect the quality of stormwater discharge, and implement practices to reduce sediment and other pollutants to stormwater discharge. SWPPP requirements include identification of construction and post-construction BMPs that would act to reduce sediments and other pollutants.

Implementation of the Project SWPPP and compliance with applicable NPDES and Lahontan RWQCB requirements would ensure that potential construction-source water quality impacts of the Project are reduced to levels that would be less than significant.



B. Operation

Runoff from the developed site would be collected via four proposed onsite detention basins. From the detention basins, the flows will discharge by gravity to an onsite channel where it will eventually spillover to an existing adjacent earthen channel to the west.

Under existing conditions, peak flows for the Project site are 284.9 cubic feet per second (cfs). Post development, on-site flows without detention would be 482.6 cfs. With the four detention basins, peak flows for the site would be 123.3 cfs, which is less than existing conditions. (Thienes, 2024a) Therefore, the Project would not result in flooding on- or offsite or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems.

Over the life of the Project, contaminants such as oil, fuel and grease that are spilled or left behind by vehicular traffic, collect and concentrate on paved surfaces. During storm events, these contaminants are washed into the storm drain system and may potentially degrade receiving water quality. Stormwater runoff from paved surfaces within the developed Project area could carry a variety of urban wastes, including greases and oils and small amounts of metals which are common by-products of vehicular travel. In addition, storm runoff will likely contain residual amounts of fertilizers and plant additives washed off from landscaped areas.

Recognizing the potential hazards of such urban runoff, the EPA has issued regulations which require municipalities to participate in the NPDES program. Project compliance with applicable NPDES requirements and performance standards would be achieved through implementation of the Project-specific WQMP. To ensure adequate and appropriate treatment of stormwater discharges, the Project stormwater management concept and associated WQMP would implement water quality BMPs that would treat stormwaters onsite prior to release to the regional stormwater system or infiltration to groundwater.

In combination, implementation of the Project SWPPP, on-site stormwater management system and associated WQMP, and compliance with NPDES Permit requirements, act to protect local and regional water quality by preventing or minimizing potential stormwater pollutant discharges to the watershed. On this basis, Project impacts in this regard would be less than significant.

Threshold d: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Project site is not located within an identified flood hazard, tsunami, or seiche zone. The site is located approximately 80 miles inland; as such, tsunamis are not a concern at the site. The nearest large body of surface water (Spring Valley Lake) is approximately seven miles southwest of the Project site. At this distance, seiches are not a concern. As shown on Exhibit III-12 of the General Plan, the site is not located within an identified 100- or 500-year flood zone. The site is located within Zone D, “areas with possible but undetermined flood hazards.” As illustrated in General Plan Exhibit III-13, the Project site is not located in or near any identified dam inundation area. As such, the potential for the Project to risk release of pollutants due to Project inundation is considered less than significant.



Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project site is located within the Mojave River Basin; Project-related construction and operational activities would be required to comply with the Mojave Integrated Regional Water Management Plan. Consistent with MS4 Permit requirements, the Applicant would be required to develop and implement a construction SWPPP acting to reduce and control potential erosion, siltation, and discharge of pollutants during Project construction. Project operations would comply with the Project's mandated Town-approved WQMP to minimize storm water pollutants of concern and document implementation of required BMPs.

Implementation of the SWPPP and WQMP would ensure the Project would not conflict with a water quality control plan or sustainable groundwater management plan. Impacts in this regard would be less than significant.

4.9.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. Compliance with Town requirements to include required implementation of the Project SWPPP and WQMP would ensure that construction and operation of the Project would not violate any water quality standards or waste discharge requirements, or conflict with implementation of a water quality control plan.

Threshold b: Less than Significant Impact. Direct additions or withdrawals of groundwater are not proposed by the Project. Further, construction proposed by the Project would not involve substructures or other intrusions at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Project site is not a designated groundwater recharge area, nor does the Project propose or require facilities or operations that would otherwise adversely affect designated recharge areas.

Threshold c: Less than Significant Impact. Implementation of the Project SWPPP, on-site stormwater management system and associated WQMP, and compliance with NPDES Permit requirements, act to protect local and regional water quality by preventing or minimizing potential stormwater pollutant discharges to the watershed. Additionally, the Project drainage concept would implement drainage systems and detention areas to accept developed stormwater discharges and reduce peak flow runoff below existing levels.

Threshold d: Less than Significant Impact. The Project site would not be subject to inundation from tsunamis, seiches, or other hazards.

Threshold e: Less than Significant Impact. Implementation of the SWPPP and WQMP would ensure the Project would not conflict with a water quality control plan or sustainable groundwater management plan. Impacts in this regard would be less than significant.



4.9.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

4.9.8 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area for hydrology/water quality impact considerations is generally defined as the area encompassed by the jurisdictional Regional Water Quality Control Board (RWQCB).

Development of the Project site would incrementally increase impervious surfaces within the cumulative impact area, with related potential increases in the rate and quantity of local stormwater discharges. As presented within the preceding discussions, no significant impacts have been identified. In this regard, the Project would implement stormwater management components, and structural and non-structural BMPs, which collectively act to ensure that post-development stormwater discharge rates are adequately conveyed within available system capacities.

The Project drainage concept would implement drainage systems and detention areas to accept developed stormwater discharges. The Project drainage and stormwater management systems would be required to comply with all stormwater system design, construction, and operational requirements mandated under the Town Municipal Code. The Project drainage and stormwater management systems would also be required to comply with regulations established by other jurisdictional agencies including Lahontan RWQCB, San Bernardino County, and California Department of Water Resources. Additionally, consistent with established building code regulations, approved site-specific drainage studies reflecting precise pad locations, proposed drainage structures, detention facilities, etc., would be required prior to the issuance of building permits within the Project site.

Stormwater management systems implemented by the Project, mandated compliance with Town, Lahontan RWQCB, County, and State stormwater management requirements and policies, collectively ensure that adequate stormwater conveyance and treatment facilities would be provided to support development and operations of the Project.

Based on the preceding, contribution to cumulative hydrology/water quality impacts is not considerable, and the cumulative effects of the Project are determined to be less than significant.



4.10 LAND USE AND PLANNING

This Subsection evaluates potential land use impacts within the Town of Apple Valley from implementation of the Project based primarily on a review of the Town of Apple Valley General Plan and the North Apple Valley Industrial Specific Plan (NAVISP).

4.10.1 EXISTING SETTING

A. Project Site

Under existing conditions, the Project site is vacant and undeveloped. Two unpaved access roads bisect the subject property and two unpaved access roads border the north and west of the subject property. The Project site is comprised of five parcels that total approximately 226.75 gross acres in size (Assessor's Parcel Numbers (APN): 0463-373-01, -03, -04, -05, -06).

B. Surrounding Land Uses

Property to the north of the Project site is vacant and undeveloped. To the east of the site are residential uses and vacant land zoned "Apple Valley/Rural Living" by the County of San Bernardino. Residences in the vicinity are located approximately 492' to 1,456' from the property line of the Project site. An Apple Valley Airport runway is located approximately 500' from the southern property line, as well as undeveloped land. Undeveloped land is located westerly adjacent to the site, beyond which is another Apple Valley Airport runway (approximately 700 feet away from the western property line). Existing land uses in the immediate vicinity of the Project site are illustrated on Figure 2-1.

C. General Plan Land Use Designations

The prevailing planning document for the Project site and its surrounding area is the Town of Apple Valley General Plan. As depicted on Figure 2-2, *Existing General Plan Land Use Map*, the Town General Plan Land Use Map (as amended in 2022) designates the Project site and lands to the north, south and west as "Specific Plan." This designation is applied to lands on which a specific plan has been approved by the Town Council. The Specific Plan must conform to State law and include maps and text that establish the land use designations; standards and guidelines for development; infrastructure requirements; and phasing for the specific plan area. Lands to the east are in unincorporated San Bernardino County and are designated "RL: Rural Living" on the Countywide Plan Land Use Map.

D. Zoning Designations

As shown on Figure 2-3, *Existing Zoning*, the Project site is zoned (SP) Specific Plan on the Town's Official Zoning Map. Lands to the north, south and west are also zoned (SP) Specific Plan. Lands east of the site are within unincorporated San Bernardino County, and are zoned "Apple Valley/Rural Living" on the County's Official Zoning Map.

The purpose of specific plans is to provide detailed implementation guidelines for a specific geographic area, aligning with the broad goals of municipality's General Plan. Specific Plans offer more explicit



and detailed development and design standards, land use regulations and infrastructure requirements than the General Plan and serve as the guiding document for future development within a defined area. Specific plans are intended to provide for development which is superior to that which could be achieved through strict application of conventional land use and development criteria by allowing greater design flexibility and planning.

E. North Apple Valley Industrial Specific Plan

The Project site is located within the NAVISP area. Four of its five parcels are designated (I-SP) Specific Plan Industrial, while the southeasterly parcel (APN 0463-373-06) is designated (C-G) General Commercial. Lands west and south of the Project site are in the (I-A) Airport Industrial designation, lands to the north are in the (I-SP) Specific Plan Industrial designation, and lands to the east are in unincorporated San Bernardino County and are outside of the NAVISP.

The NAVISP I-SP designation allows for a broad range of clean manufacturing and warehousing uses, ranging from furniture manufacture to warehouse distribution facilities. Appropriate land uses in this designation include manufacturing facilities with showrooms and offices, regional warehousing facilities, and support services for manufacturing and warehousing.

The NAVISP C-G designation provides for a wide range of commercial uses intended to support the industrial development in the Specific Plan area. Appropriate land uses in this designation include hotels and motels, professional services, retail commercial land uses, in the form of both free-standing businesses and retail centers. Heavier commercial land uses, including vehicle repair, and vehicle storage may also be appropriate, particularly if related to adjacent industrial development.

4.10.2 REGULATORY FRAMEWORK

The following is a brief description of the federal, state, and local environmental laws and related regulations related to land use and planning.

A. Federal

1. Federal Aviation Regulations Part 77

Federal Regulation Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects.



Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
 - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.
 - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.
 - within 5,000 feet of a public use heliport which exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2023)

B. State

1. California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§ 65000 - 66499.58. Under State of California planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures. (OPR, n.d.)



2. *Subdivision Map Act*

The Subdivision Map Act (“Map Act”) vests cities and counties the power to regulate and control the design and improvement of subdivisions within its boundaries. Each city must adopt an ordinance regulating and controlling subdivisions for which the Map Act requires a tentative and final or parcel map. The authority for a city or county to regulate land use, including subdivisions, flows from the general police power. However, the Map Act sets forth certain mandates that must be followed for subdivision processing. A city can impose conditions on the subdivision process when the Map Act is silent, but it cannot regulate contrary to specific provisions contained in the Map Act. The Map Act's primary goals are:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of the subdivision, with a proper consideration of its relation to adjoining areas;
- To ensure that the areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community; and
- To protect the public and individual transferees from fraud and exploitation.

The Map Act is applied in conjunction with other State land use laws such as the general plan, specific plans, zoning, CEQA, and the Permit Streamlining Act. The Map Act provides for regulation of land divisions by a city or county and is interpreted and enforced by the city or county. (Curtin, Jr. & Merritt, 2002)

3. *Governor's Office of Land Use and Climate Innovation General Plan Guidelines*

Each city and county in California must prepare a comprehensive, long-term general plan to guide its future. To assist local governments in meeting this responsibility, the Governor’s Office of Land Use and Climate Innovation (formerly, Office of Planning and Research) is required to adopt and periodically revise guidelines for the preparation and content of local general plans pursuant to Government Code § 65040.2. The General Plan Guidelines are advisory, not mandatory. Nevertheless, it is the State’s only official document explaining California’s legal requirements for general plans. Planners, decision-making bodies, and the public depend upon the General Plan Guidelines for help when preparing local general plans. The courts have periodically referred to the General Plan Guidelines for assistance in determining compliance with planning law. For this reason, the General Plan Guidelines closely adhere to statute and case law. It also relies upon commonly accepted principles of contemporary planning practice. (OPR, 2023)

4. *State Aeronautics Act*

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics (“Division”) and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division’s first priorities are those mandated by the Aeronautics Act, then



Caltrans guidance, then Division guidance as expressed through its Policy Element. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that “protect the public interest in aeronautics and aeronautical progress.”

The Aeronautics Act itself is divided into seven chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature’s intent for a State aviation program. Chapter two explains Caltrans’ role in administering the Division and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from Federal Aviation Administration (FAA) regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of Airport Land Use Commissions (ALUC). Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Chapter six introduces airport planning and specifically introduces the intent of the CASP and how it can be used to support California aviation. Finally, Chapter 7 covers skydiving or sport parachuting operations to ensure they are in compliance with federal safety laws. (CA Legislative Info, n.d.)

C. *Regional*

1. *Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local government and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties: Riverside, Los Angeles, Orange, San Bernardino, Ventura, and Imperial; and 191 cities in an area covering more than 38,000 square miles. SCAG develops long-range regional transportation plans including sustainable communities’ strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region.

As an MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. In April 2024, SCAG adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as “Connect SoCal.” The RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. These goals are meant to provide guidance for considering a proposed project within the context of regional goals and policies. (SCAG, 2024)



D. *Local*

1. *Town of Apple Valley General Plan*

State law requires that general plans address seven topics (referred to as “Elements”) of land use, circulation (mobility), housing, open space, safety, and noise (California Government Code Section 65302). A General Plan may also include other topics of local interest, as chosen by the local jurisdiction (California government Code Section 65303). On August 11, 2009, the Town Council adopted the 2009 General Plan and certified the Environmental Impact Report. The Town of Apple Valley General Plan is organized into five chapters and 19 elements that include the following:

- Introduction
- Community Development
 - Land Use Element
 - Circulation Element
 - Parks and Recreation Element
 - Housing Element
- Environmental Resources
 - Water Resources Element
 - Open Space and Conservation Element
 - Biological Resources Element
 - Archaeological and Historic Resources Element
 - Air Quality Element
 - Energy and Mineral Resources Element
- Environmental Hazards
 - Geotechnical Element
 - Flooding and Hydrology Element
 - Noise Element
 - Hazardous and Toxic Materials Element
- Public Services and Facilities
 - Water, Wastewater and Utilities Element
 - Public Building and Facilities Element
 - Schools and Libraries Element
 - Police and Fire Protection Element
 - Emergency Preparedness Element

Information presented in the Town of Apple Valley General Plan chapters relevant to the Project are discussed in Table 4.10-2, presented subsequently.

2. *Town of Apple Valley Development Code*

The Apple Valley Development Code implements the goals and objectives of the General Plan by regulating the location and use of structures and land through various zoning designations. It is intended to assure orderly and beneficial development, reduce hazards resulting from the inappropriate



location or use of improvements, and maintain the Town's distinctive character. The Zoning Map assigns zoning designations to all parcels in the Town. It is consistent with the General Plan and directly corresponds to General Plan land use designations. Additionally, Development Code Chapter 9.65, Airport Overlay Districts, provides goals and regulations relevant to development within the Overlay Districts as presented in Table 4.10-3, presented subsequently.

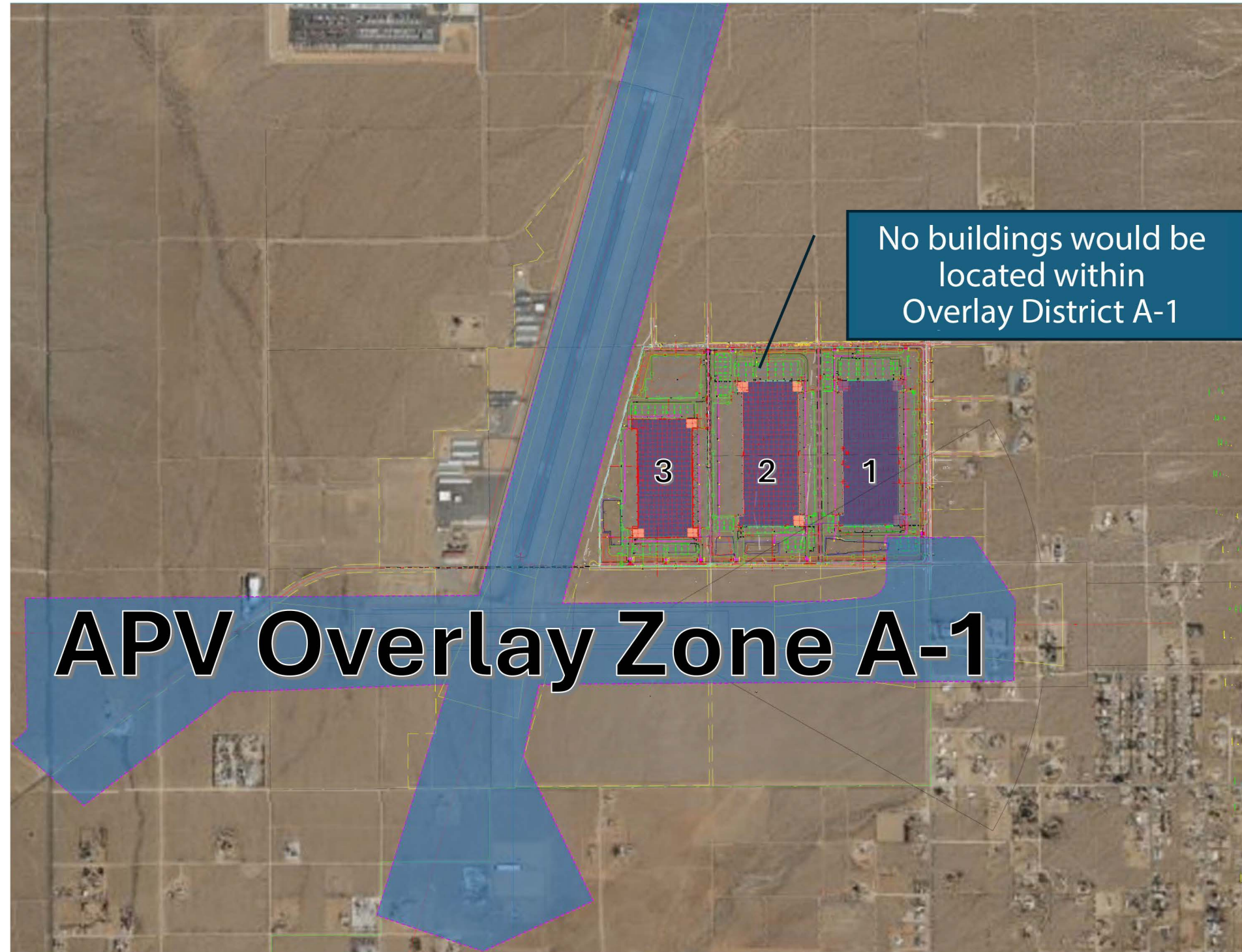
3. *North Apple Valley Industrial Specific Plan*

The NAVISP was prepared to establish long-term development goals, standards and guidelines for 6,220 acres including and surrounding the airport. The primary land uses envisioned in the area are industrial and commercial land uses, which will provide the Town with long-term economic growth and vitality, job growth, and revenue. The NAVISP establishes development standards and guidelines and provides land use designations within the area. Where a development standard is different in the Development Code than in the NAVISP, the provisions in the NAVISP shall apply. Where a standard is not provided in the Specific Plan, the standards of the Development Code shall apply.

4. *Apple Valley Comprehensive Airport Land Use Compatibility Plan*

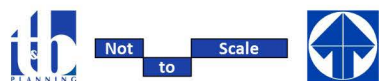
The Town of Apple Valley Comprehensive Airport Land Use Compatibility Plan (ALUCP), adopted in 1995, provides guidelines to reduce potential land use conflicts in areas surrounding the Airport, and protect public health, safety, and welfare by minimizing aircraft-related hazards.

The ALUCP identifies Airport Overlay Districts A-1 and A-2, with compatibility guidelines outlined for land uses within each Overlay District. Guidelines include height restrictions, recommended population densities, and prohibited land use types. A small portion of the southeast corner of the Project site lies within the Overlay District A-1. This portion of the Project site would only contain parking areas; No buildings would be located within Overlay District A-1. None of the guidelines for Overlay District A-1 would pertain to parking areas. The entire building area of the site is located within Overlay District A-2, as illustrated in Figure 4.10-1. Requirements presented in the Compatibility Plan relevant to the Project are discussed in Table 4.10-4, presented subsequently. (Apple Valley, 1995)



Source(s): Johnson Aviation Consulting (02-22-2024)

Figure 4.10-1



APV Overlay District A-1



4.10.3 METHODOLOGY

This analysis discusses potential land use impacts of the Project by focusing on consistency with SCAG’s 2024-2050 RTP/SCS (Connect SoCal), the Town of Apple Valley General Plan, and NAVISP.

4.10.4 BASIS FOR DETERMINING SIGNIFICANCE

Section XI of Appendix G to the CEQA Guidelines addresses typical adverse effects to land use and planning resources, and includes the following threshold questions to evaluate the Project’s impacts on land use and planning resources:

- a. *Physically divide an established community;*
- b. *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

4.10.5 IMPACT ANALYSIS

Threshold a: Would the Project physically divide an established community?

Under existing conditions, the Project site is vacant and undeveloped. Surrounding properties to the north, west and south are also located within the NAVISP and zoned Airport Industrial (I-A) and Industrial – Specific Plan (I-SP). The properties to the east are within San Bernardino County, and zoned Apple Valley/Rural Living. Surrounding uses include undeveloped land to the north, undeveloped land and single-family residences to the east, undeveloped land and an Apple Valley Airport runway to the south, and the Apple Valley Airport to the west. No housing exists within the Project site. No residents would be displaced by the Project, nor would the physical arrangement of any neighboring residential communities be modified or divided by the Project. Therefore, implementation of the Project would not physically divide an established community and there would be no impact.

Threshold b: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project’s consistency with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect is discussed below. This section includes an analysis of consistency with SCAG’s Connect SoCal, the Town of Apple Valley General Plan, the NAVISP, the Town Development Code, and the Apple Valley Comprehensive Airport Land Use Compatibility Plan.

1. Connect SoCal

SCAG’s Connect SoCal goals are meant to provide guidance for municipalities throughout the SCAG jurisdictional area within the context of regional goals and policies. On April 4, 2024, SCAG’s



Regional Council adopted the 2024-2050 Connect SoCal. Table 4.10-1 provides an analysis of Project consistency with applicable policies with the 2024-2050 Connect SoCal. As shown, the Project would not conflict with any applicable 2024-2050 Connect SoCal policies. Project consistency with Connect SoCal illustrates consistency with goals set forth for the Project region.

Table 4.10-1 SCAG 2024-2050 Connect SoCal Consistency Analysis

2024-2050 RTP/SCA Regional Planning Policies	Project Consistency
Mobility	
<i>Complete Streets</i>	
03. Pursue the development of Complete Streets that comprise a safe, multimodal network with flexible use of public rights-of-way for people of all ages and abilities using a variety of modes (e.g., people walking, biking, rolling, driving, taking transit).	No Conflict. In addition to the site-adjacent roadway improvements proposed by the Project, the Project would be responsible for fair share costs towards the transportation improvements detailed in Section 6.0 of the Traffic Analysis. The Project is also subject to the Town’s Development Impact Fee (DIF) and Transportation Uniform Mitigation Fee (TUMF) programs, thus contributing to a safe, multimodal network.
05. Facilitate the implementation of Complete Streets and curb space management strategies that accommodate and optimize new technologies, micromobility devices and first/last mile connections to transit and last-mile delivery.	No Conflict. The Project Applicant would be required to pay TUMF, DIF, and fair share fees; and the Project would include roadways improvements consistent with Town Requirements to accommodate site access and maintain acceptable peak hour operations.
Communities	
<i>Priority Development Areas</i>	
34. Seek to realize scale economies or a critical mass of jobs and destinations in areas across the region that can support non-SOV options and shorter trip distances, combined trips and reduced vehicle miles traveled.	No Conflict. The Project would increase employment opportunities in the local area, reducing the need for members of the local workforce to commute outside the area for employment. Additionally, the Project would establish development intensities that could support future transit in the local area.
Environment	
<i>Sustainable Development</i>	
48. Promote sustainable development and best practices that enhance resource conservation, reduce resource consumption and promote resilience.	No Conflict. Compliance with applicable federal and State regulations and requirements, including the provisions of the Title 24 Building Energy Standards, would reduce the Projects resource consumption and help promote sustainable development.
<i>Air Quality</i>	
51. Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts.	No Conflict. An Air Quality Impact Analysis, Health Risk Assessment, and GHG Analysis have been conducted to assess the Project’s impacts related to air quality and greenhouse gas emissions. Mitigation has been proposed to reduce hazardous air pollutants and greenhouse gas emissions to the extent feasible.

Source: (SCAG, 2024)



2. Town of Apple Valley General Plan

Table 4.10-2, *General Plan Consistency Analysis*, provides an analysis of the Project’s consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown, the Project would not conflict with any applicable General Plan goals or policies. Accordingly, the Project would have a less than significant impact.

Table 4.10-2 General Plan Consistency Analysis

General Plan Policy	Consistency
Land Use Element	
<i>Goal 1: The Town shall respect its desert environment</i>	
Policy 1.A: The Town will require low water use through drought tolerant and native desert plants for landscaping.	No Conflict. The Project landscape plan incorporates drought tolerant species, as well as California native species of trees and plants, including the Desert Willow, Blue Palo Verde, Deer Grass, and Dwarf Coyote Bush. Please refer to Figure 3-8.
Policy 1.B: New development shall be designed to minimize grading, and avoid mass grading to the greatest extent possible.	No Conflict. Project development would adhere to the Town’s grading standards. The Project’s grading plan is subject to review and approval by the Town prior to the issuance of a grading permit.
<i>Goal 2: A well planned, orderly development pattern that enhances community values, and assures development of adequate infrastructure.</i>	
Policy 2.B: All new development and redevelopment proposals shall be required to install all required infrastructure, including roadways and utilities, and shall have complied with requirements for public services prior to occupancy of the project.	No Conflict. As discussed in Section 3.0, <i>Project Description</i> , the Project includes the installation of all infrastructure necessary to support the proposed land uses. Installation of all infrastructure would occur consistent with Town/affected purveyor requirements.
Policy 2.C The Town shall require quality design in all development and redevelopment proposals and shall encourage the enhancement of existing development.	No Conflict. The Project has been designed consistent with approved NAVISP Design Standards and Guidelines pertaining to architecture, landscaping, lighting, walls and fences, and signage (see Table 4.1-1).
<i>Goal 3 Minimal impact to existing neighborhoods.</i>	
Policy 3.A The Town will support measures that buffer both new and established residences from commercial, industrial and agricultural uses.	No Conflict. The Project site is located in an area anticipated for urban uses. The Project would include fencing and landscaping along the perimeter of the site, acting as a buffer between onsite uses and existing rural residential uses to the east, across Central Road.
<i>Goal 7 Industrial development which supports a broad-based economy, and encourages the jobs-housing balance.</i>	
Policy 7.A Industrial development shall be permitted only in areas with provisions for adequate circulation, utilities, infrastructure and public services.	No Conflict. The Project site is located in an area planned for industrial development. As discussed in Section 3.0, <i>Project Description</i> , the Project would include connections to existing utility infrastructure. As discussed in Section 4.12, <i>Public Services</i> , there is adequate capacity from fire protection and police protection services to serve the Project. Additionally, the Project would construct roadway improvements



General Plan Policy	Consistency
	necessary to serve the proposed uses and would improve emergency access to the Project site and surrounding areas (EIR <i>Technical Appendix K2</i>).
Policy 7.C The long-term economic growth of the Apple Valley Airport shall be protected.	No Conflict. The NAVISP was prepared “to establish long-term development goals, standards and guidelines for 6,220-acres including and surrounding the airport. The primary land uses envisioned in this area are industrial and commercial land uses, which will provide the Town with long-term economic growth and vitality, job growth, and revenue.” Development of the Project would implement the goals of the NAVISP, thus helping to ensure the long-term economic growth of the Apple Valley Airport.
Circulation Element	
<i>Goal The Town shall continue to maintain and expand a safe and efficient circulation and transportation system.</i>	
Policy 1.H New development proposals shall pay their fair share for the improvement of street within and surrounding their projects on which they have an impact, including roadways, bridges, and traffic signals.	No Conflict. The Project Applicant would pay requisite fair share contributions and fee payments consistent with Town requirements, as detailed in EIR <i>Technical Appendix K2</i> , Traffic Analysis Table 6-1, <i>Project Fair Share Calculations</i> .
Policy 1.I Pedestrian access shall be preserved and enhanced.	No Conflict. As presented in Section 3.0, the Project would construct curb, gutter, and sidewalk improvements along the Project site frontages.
Water Resources Element	
<i>Goal A dependable supply of safe, high-quality domestic water to meet the needs of all segments of the community.</i>	
Policy 1.A The Town shall coordinate land development and assure a balance of development and water supply that ensures the long-term maintenance of an adequate supply of water, and its continued high quality.	No Conflict. As discussed in Section 4.15, <i>Utilities and Service Systems</i> , the Project’s Water Supply Assessment (WSA) concluded that water supply exists to adequately serve the Project.
Policy 1.B To ensure that overall and per capita water demand from new development is reduced, the Town shall continue to require the use of drought-tolerant, low water consuming landscaping, intelligent irrigation controllers, and other water-conserving strategies and technologies in irrigated areas.	No Conflict. The Project would comply with Chapter 9.75 Water Conservation/Landscaping Regulations of the Town’s Municipal Code which provides water conservation and landscape development standards to ensure water efficiency.
Policy 1.D To the greatest extent practicable, the Town shall direct new development to provide irrigation systems that are able to utilize reclaimed water, when available, for use in common area and streetscape landscaping.	
Policy 1.E To the greatest extent practicable, the Town shall continue to require new development to connect to the community sewer system. Where sewer service is not available and lots are created of less than one (1) acre in size, the Town shall require the installation of	No Conflict. The Project proposes sewer infrastructure to connect to the Town’s existing sewer system.



General Plan Policy	Consistency
“dry sewers” and the payment of connection fees for future sewer main extensions.	
Policy 1.F Consistent with community design standards and local and regional drainage plans, the Town shall provide development standards and guidelines for the construction of on-site storm water retention facilities.	No Conflict. The Project’s proposed drainage system would be reviewed by Town staff to ensure compliance with the Town’s development standards for construction of onsite storm water retention facilities.
Policy 1.H The Town shall confer with appropriate water agencies and purveyors, as necessary, to assure adequate review and mitigation of potential impacts of proposed development on local water resources.	No Conflict. As discussed in Section 4.15, <i>Utilities and Service Systems</i> , the Project’s WSA examined the availability of water supply under normal-year, single-dry-year, and multiple-dry-year conditions over a 20-year projection. The WSA concluded that water supply exists to adequately serve the Project. Liberty Utilities has provided a Conditional Will Serve Letter in this regard.
Open Space & Conservation Element	
<i>Goal 2 The Town shall encourage the preservation of significant native trees, native vegetation, landforms and wildlife habitat.</i>	
Policy 2.A The Town shall seek to reduce soil erosion caused by wind and water.	No Conflict. Pursuant to Town requirements, the Project would prepare and implement an Erosion and Sediment Control Plan (ESCP), which would ensure that appropriate BMPs are implemented to reduce soil erosion. Additionally, the Project would be required to comply with Mojave Desert Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts.
Policy 2.B The Town will only allow types and patterns of development that will minimize destruction of, or damage to, significant biotic resources, such as wildlife corridors along the Mojave River.	No Conflict. The Project site is not located within an area identified as a special survey area in Exhibit III-6 of the General Plan. Additionally, as discussed in Section 4.3, <i>Biological Resources</i> , the Project would incorporate mitigation measures to minimize potential impacts to significant biotic resources.
Policy 2.C The Town will encourage the planting and preservation of native species of trees and plants to enhance the environment.	No Conflict. The Project landscape plan incorporates California native species of trees and plants, including the Desert Willow, Blue Palo Verde, Deer Grass, and Dwarf Coyote Bush. Please refer to Figure 3-8.
<i>Goal 3 The Town will encourage and support the preservation of historic and cultural resources.</i>	
Policy 3.B The Town will require that archaeological, cultural, and historical resources are preserved or salvaged if threatened by new development.	No Conflict. As discussed in Section 4.4, <i>Cultural Resources</i> and Section 4.14 <i>Tribal Cultural Resources</i> , the Project would incorporate mitigation measures to preserve and properly treat archaeological, cultural and/or historical resources.
Biological Resources Element	
<i>Goal 1 Establish a pattern of community development that supports a functional, productive, and balanced relationship between the manmade environment and the natural environment.</i>	
Policy 1.B The Town shall promote the use of native vegetation for landscaping to enhance and create viable habitat for local species.	No Conflict. The Project landscape plan incorporates drought tolerant species, as well as California native species of trees and plants, including the Desert Willow,



General Plan Policy	Consistency
	Blue Palo Verde, Deer Grass, and Dwarf Coyote Bush. Please refer to Figure 3-8.
<i>Goal 2 The Town shall work with local, state, and regional agencies to protect, preserve, and manage biological resources, especially threatened, endangered, and sensitive plants and wildlife species and their habitats.</i>	
Policy 2.A The Town shall coordinate with CDFG and USFWS when working on projects that are proposed to be located within or adjacent to linkage areas or special survey areas.	No Conflict. The Project site is not located within an area identified as a special survey area in Exhibit III-6 of the General Plan. Additionally, the Project would not impact a migratory wildlife linkage or corridor.
Policy 2.B The Town shall support and cooperate with other agencies in establishing multiple use corridors that link open space areas through drainage channels and utility easements, thereby encouraging the connectivity of natural communities.	
Policy 2.D The Town shall work with CDFG and USFWS to ensure that state and federal protections required by the Migratory Bird Treaty Act addressed during the planning process.	No Conflict. The Project includes Mitigation Measure 4.3-7 which requires, consistent with the Migratory Bird Treaty Act, that any necessary vegetation clearing should take place outside of the typical avian nesting season for protected species (February 1 through September 15). If work needs to take place during the nesting season for protected avian species, a pre-activity clearance survey for nesting birds should be completed prior to the onset of ground disturbance. An activity exclusion buffer zone around occupied nests should be maintained during physical ground disturbing undertakings.
Policy 2.E The Town shall work with CDFG, RWQCB and ACOE to ensure that state and federal jurisdictional areas are properly identified.	No Conflict. As discussed in Section 4.3, <i>Biological Resources</i> , there are no State and/or federal jurisdictional areas located within the Project site.
Archaeological and Historic Resources Element	
<i>Goal That all elements of the Town's cultural heritage, including archaeological and historic sites, artifacts, traditions and other elements, shall be professionally documented, maintained, preserved, conserved and enhanced.</i>	
Policy 1.A Early in the planning process, the Town shall implement its obligation to identify, document and assess archaeological, historical and cultural resources that proposed development projects and other activities may affect.	No Conflict. A cultural resources assessment has been prepared for the Project to identify, document, and assess archaeological and historical resources. Refer to Section 4.4, <i>Cultural Resources</i> and Section 4.14, <i>Tribal Cultural Resources</i> .
Air Quality Element	
<i>Goal To preserve and enhance local and regional air quality</i>	
Policy 1.D All proposals for development activities within the Town shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.	No Conflict. An Air Quality Impact Analysis, Health Risk Assessment, and GHG Analysis (EIR <i>Technical Appendices B1, B2, G</i>) have been conducted to assess the Project's potential to adversely impact local and regional air quality. Mitigation has been proposed to reduce impacts to the extent feasible.



General Plan Policy	Consistency
Policy 1.G Future residential, commercial, and industrial development and remodeling projects, shall strive to exceed Title 24 standards by 15% and/or achieve LEED certification or similar performance standards for buildings.	No Conflict. The Project would be constructed to meet all Title 24 standards, and would strive to exceed these standards as feasible.
Policy 1.H Residential, commercial, and industrial projects that reduce vehicle miles traveled (VMTs) by providing alternative transportation options, home office and live/work spaces, and/or promote employees living close to work are preferred.	No Conflict. The Project would increase employment opportunities in the area that will reduce the need for members of the local workforce to commute outside the area for employment. Mitigation Measure MM 4.13-1 has been incorporated to reduce VMT.
Energy and Mineral Resources Element	
<i>Goal Assure the long-term availability and affordability of energy and mineral resources through conservative consumption, efficient use and environmentally sensitive management practices.</i>	
Policy 1.A The community and all economic sectors shall be urged to conserve energy, with particular focus on the inclusion of energy saving measures in transport systems, and in the planning and construction of urban uses.	No Conflict. The Project would be constructed to meet all Title 24 and CALGreen standards.
Policy 1.B Promote building design and construction that integrates alternative energy systems, including but not limited to solar, thermal, photovoltaics and other clean energy systems.	No Conflict. The Project would integrate alternative energy systems by utilizing solar energy to meet a portion of the Project energy demands.
Geotechnical Element	
<i>Goal The protection and safety of human life, land, and property from the effects of seismic and geotechnical hazards shall be increased.</i>	
Policy 1.B In areas identified as being susceptible to slope instability, development shall be avoided unless adequately engineered to eliminate geotechnical hazards.	No Conflict. As shown in Exhibit III-8, Slope Distribution, of the General Plan EIR, the Project site is not located in an area identified as being susceptible to slope instability. The Project site and surrounding area are generally flat with no significant slopes.
Policy 1.C The Town shall require that future development avoid disturbing unique rock outcroppings within the Town boundary and Sphere of Influence.	No Conflict. There are no rock outcroppings located within or adjacent to the Project site. The Project would not disturb unique rock outcroppings.
Policy 1.E In areas identified as being susceptible to rockfall, landslide, liquefaction and/or other associated hazards as depicted in the General Plan EIR, development shall be required to prepare detailed technical analysis, which shall include mitigation measures intended to reduce potential hazards below levels of significance.	No Conflict. As shown in Exhibit III-11, Seismic Related Hazards, of the General Plan EIR, the Project site is not located in an area identified as being susceptible to rockfall, landslide, or liquefaction. According to the site-specific Geotechnical Investigation, the site is not subject to significant geological hazards. Additionally, the Project would be developed consistent with all CBC and Geotechnical Investigation standards and recommendations, precluding significant impacts.
Policy 1.F Development in areas susceptible to collapsible or expansive soils as shown in soils mapping in the General Plan EIR shall be required to conduct soil sampling and laboratory testing and to implement	No Conflict. According to the site-specific Geotechnical Investigation, on-site soils have been classified as very low to non-expansive. Therefore, the Investigation determined that no design considerations



General Plan Policy	Consistency
mitigation measures that reduce potential hazards below levels of significance.	related to expansive soils are considered warranted for the Project site. Additionally, the Project would be developed consistent with all CBC and Geotechnical Investigation standards and recommendations, precluding significant impacts.
Flooding and Hydrology Element	
<i>Goal Protect lives and property from flooding hazards through a comprehensive system of flood control facilities throughout the Town.</i>	
Policy 1.D All new development within the Town shall be required to incorporate adequate flood mitigation measures, including the adequate siting of structures located within flood plains, grading that prevents adverse drainage impacts to adjacent properties, and on-site retention of runoff.	No Conflict. The Project site is not located within a flood plain as shown on the Town’s General Plan, Exhibit IV-4. As discussed in Section 4.9, <i>Hydrology and Water Quality</i> , the Project’s storm drain system would be sized and designed in accordance with the area’s master drainage plan to ensure that offsite flows that are conveyed through the Project site and flows originating offsite are discharged from the site at a volume and rate that can be accommodated by existing and planned downstream storm drain facilities. The Project would be designed to ensure that peak flood volumes and flows would not exceed that of the designed capacity of the existing storm drain system.
Noise Element	
<i>Goal Noise levels that are consistent with the Town’s rural character and high quality of life.</i>	
Policy 1.B New development projects shall assure that exterior noise levels in back yards and/or useable open space do not exceed 65 dBA CNEL, and that interior noise levels are consistent with the requirements of the Building Code.	No Conflict. Table 4.11-13, <i>Opening Year (2029) Traffic Noise Level Increases</i> , shows that the noise levels along certain roadway segments in the study area would exceed 65 dBA at adjacent receiving land uses. However, noise levels above 65 dBA would exist with or without the Project at all but one of the roadway segments.
Policy 1.D The development review and environmental review process shall require all development proposals within the noise impact area of U.S. I-15, State Route 18, the High Desert Corridor or the railroads to mitigate both noise and vibration to acceptable levels through the preparation of focused studies.	No Conflict. The Project site is not located within the noise impact area of U.S. I-15, State Route 18, the High Desert Corridor, or the railroads.
Hazardous & Toxic Materials Element	
<i>Goal Ensure that the environment and all residents, workers, and visitors are protected from exposure to hazardous materials and wastes.</i>	
Policy 1.A The Town shall cooperate with regulators and encourage the enforcement of laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify such materials, and notify the appropriate county, state and/or federal agencies as required by law.	No Conflict. As discussed in Section 4.8, <i>Hazards and Hazardous Materials</i> , the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.



General Plan Policy	Consistency
Policy 1.D The Town shall require all business that use, store, or produce hazardous material to comply with the County’s Business Plan.	Neither the Project site, nor adjacent properties contain potentially hazardous or toxic materials.
Policy 1.F The Town shall thoroughly evaluate development proposals for lands directly adjacent to sites known to be contaminated with hazardous or toxic materials, or sites that use or contain potentially hazardous or toxic materials.	Any business that operates at the Project site and that handles and/or stores substantial quantities of hazardous materials (as defined by California Health and Safety Code, Division 20, Chapter 6.95) would be required to prepare and submit an HMBEP to the SBCFD in order to register the business as a hazardous materials handler.
Policy 1.J Land use designations that may involve the production, storage, transportation, handling, or disposal of hazardous materials will be located at a safe distance from land uses that may be adversely impacted by such activities.	
Water, Wastewater and Utilities Element	
<i>Goal The provision of a range of water, wastewater and other utility services and facilities that is comprehensive and adequate to meets the Town’s near and long-term needs in a cost-effective manner.</i>	
Policy 1.B The Town shall continue to require sewer connection where feasible at the time that a lot is developed, or when service becomes available.	No Conflict. As discussed in Section 3.0, <i>Project Description</i> , the Project would include sewer infrastructure connections to the Town’s existing municipal system.
Policy 1.G To the greatest extent feasible, the Town shall encourage commercial and industrial establishments to minimize the amount of packaging and potential waste associated with product manufacturing and sales.	No Conflict. The Project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Act of 1991) and other applicable local, State, and federal solid waste disposal standards.
Police and Fire Protection Element	
<i>Goal The highest possible level of services and quality for fire and police protection to ensure the preservation and protection of the health, welfare and property for all types of development and socio-economic segments of the community.</i>	
Policy 1.A The Town shall review all new development proposals, as well as significant remodeling projects to determine potential impacts to public safety and the provision of police and fire protection services.	No Conflict. The Project would be subject to review by the Town, Apple Valley Fire Protection District, and the Apple Valley Police Department to ensure appropriate safety requirements are met. Additionally, the Project is subject to payment of Development Impact Fees to ensure adequate provision of services and maintenance of facilities.
Policy 1.B All proposed development shall be designed to provide unencumbered access for police, fire, and paramedic vehicles, to the satisfaction of the Sheriff’s Department and the Fire Marshal.	No Conflict. The Project would be subject to review by the Town, Apple Valley Fire Protection District, and the Apple Valley Police Department to ensure appropriate provisions for emergency access are maintained.
Policy 1.E The Town shall utilize the process of reviewing development and building plans, and of conducting building inspections, to strictly enforce fire standards and regulations.	No Conflict. The Project would be subject to review by the Town and the Apple Valley Fire Protection District to ensure appropriate fire standards and regulations are met.
Policy 1.F The use and storage of potentially hazardous materials shall be regulated by the Town, County	No Conflict. As discussed in Section 4.8, <i>Hazards and Hazardous Materials</i> , the Project would not create a significant hazard to the public or the environment



General Plan Policy	Consistency
Department of Environmental Health, Apple Valley Fire Protection District and other appropriate agencies.	through the routine transport, use, or disposal of hazardous materials. Any business that operates at the Project site and that handles and/or stores substantial quantities of hazardous materials (as defined by California Health and Safety Code, Division 20, Chapter 6.95) would be required to prepare and submit an HMBEP to the SBCFD in order to register the business as a hazardous materials handler.
Policy 1.J New and substantially remodeled development shall incorporate crime prevention design techniques, including the use of “defensible space,” high security hardware, optimal site planning and building orientation, and other design approaches to enhance security.	No Conflict. The Project site plan concept and proposed building designs would be reviewed by the Apple Valley Police Department to ensure incorporation of appropriate safety and security elements. Such design features would include secure building designs, defensible spaces, and area and facility security lighting.

Source: (Apple Valley, 2009)

3. North Apple Valley Industrial Specific Plan

The NAVISP was prepared to establish long-term development goals, standards and guidelines for 6,220-acres including and surrounding Apple Valley Airport. A majority of Project site lands are designated as (I-SP) Specific Plan Industrial, while the southeasterly portion of the site is designated (C-G) General Commercial. (Apple Valley, 2006)

To accommodate the Project’s anticipated future use mix, the Specific Plan would be amended to redesignate the 35 acres located in the southeastern part of the Project site (APN 0463-373-06) from C-G to I-SP. Please refer to Figure 3-12, presented within EIR Section 3.0, *Project Description*.

The Project would be implemented consistent with all development standards required by the I-SP land use designation, as presented in Table 4.1-1, *Zoning Development Standards Consistency Analysis*. All Project plans would be reviewed by Town staff to ensure consistency with all applicable development standards and regulations, precluding significant conflicts with the NAVISP.

4. Town of Apple Valley Development Code

Development Code Chapter 9.65, Airport Overlay Districts, sets forth goals and regulations aimed at protecting public health and safety, and encouraging compatible development in areas surrounding the Airport. Table 4.10-3 presents an analysis of the Project’s consistency with the criteria set forth in Chapter 9.65.010. As presented below, the Project would not conflict with the Development Code. (Apple Valley, 2024)



Table 4.10-3 Development Code Consistency Analysis

Chapter 9.65.010	Project Consistency
Goals	
1.Safeguarding the general welfare of the inhabitants within the vicinity of the airport and the public in general by minimizing public exposure to excessive noise and safety hazards.	No Conflict. Industrial development is not a noise sensitive use. Additionally, the Project would not attract large amounts of people, thus minimizing potential safety hazards to the public.
2.Coordinating land uses both on the airport property and in surrounding areas so that land uses are compatible and able to function without major constraints or annoyance.	No Conflict. The Project is consistent with the type of development envisioned by the NAVISP, and as such, represents compatible development.
3.Promote commercial and industrial developments that are capable of strengthening the local economy and enhancing the quality of life of Town residents.	No Conflict. The Project represents industrial development that would help strengthen the local economy.
4.Ensure that land use conflicts are minimized and that long term interest for industrial projects are maintained.	No Conflict. The Project helps to minimize land use conflicts by implementing industrial development in an area designated for such uses.
5.Encourage long-term investment in the community.	No Conflict. Development of the Project site represents a long-term investment in the community.
6.Protect adjacent property owners from negative impacts.	No Conflict. The Project helps achieve this goal by implementing a land use that is less sensitive to the potential negative impacts that can result from being located adjacent to an airport.
Regulations	
1.All uses shall be compatible with the continued operation of the airport. No uses shall be allowed that: a. Release into the air any substance that would impair aircraft visibility or otherwise interfere with its operation; b. Produce light emissions, either direct or reflective, that would interfere with pilot vision; c. Produce emissions that would interfere with aircraft communication systems or navigational equipment; or d. Attract birds or water fowl in such numbers as would create a hazard to aircraft operations.	No Conflict. The Project has been designed to be compatible with the continued operation of the Airport. No aspect of the Project would impair aircraft visibility or pilot vision or interfere with aircraft communication systems or navigational equipment. Detention basins to be implemented by the Project have been designed with a drawdown time of 48 hours after a storm event, ensuring standing water does not attract birds or water fowl.
2.Uses that cause or produce objectionable effects that would pose a hazard or nuisance to adjacent or other properties by reason of smoke, soot, dust, radiation, odor, noise, vibration, heat, glare, toxic fumes or other conditions that would adversely affect the public health, safety and general welfare are not permitted.	No Conflict. The Project does not propose uses that would pose a hazard or nuisance to the airport that would adversely affect the public health, safety and general welfare.
3.Uses that require the use or storage of materials that are explosive, flammable, toxic, corrosive, or otherwise exhibit hazardous characteristics shall be approved by the Fire District and the County Department of Environmental Health Services.	No Conflict. Although these types of uses are not anticipated, the Project is speculative. Should the end user store or use these types of materials, all Fire District and the County Department of Environmental Health Services regulations would be followed.



Chapter 9.65.010	Project Consistency
4. Uses that are labor intensive or that promote the concentration of people for extended periods of time are not permitted in areas designated by the Airport Overlay District.	No Conflict. As shown in Table 4.10-4, the Project would not exceed the recommended maximum population density for non-residential uses.
5. Structures on the premises of a permitted use shall not be used as a residence for the owner, operator, or caretaker, their family members or others.	No Conflict. No Project structures would be used as residences.
6. A noise level reduction (NLR) of thirty (30) decibels or more from exterior to interior shall be incorporated into the design and construction of office areas and those portions of structures where the public is regularly received. All interior noise level standards shall be met.	No Conflict. Appropriate noise reduction would be achieved by standard building practices. No portions of the Project include areas where the public is regularly received.

Source: (Apple Valley, 2024)

5. *Apple Valley Comprehensive Airport Land Use Compatibility Plan.*

The Town of Apple Valley Comprehensive Airport Land Use Compatibility Plan provides guidelines to reduce potential land use conflicts in areas surrounding the Airport, and protect public health, safety, and welfare by minimizing aircraft-related hazards. As previously mentioned, a small portion of the southeast corner of the Project site lies within the Overlay District A-1. This portion of the Project site would only contain parking areas; No buildings would be located within Overlay District A-1. None of the guidelines for Overlay District A-1 would pertain to parking areas. The entire building area of the site is located within Overlay District A-2. As such, Table 4.10-4 provides an analysis of the Project’s consistency with applicable guidelines of the A-2 District. As shown, the Project would not conflict with any applicable guidelines. (Apple Valley, 1995)

Table 4.10-4 Overlay District A-2 Consistency Analysis

Overlay District A-2 Guidelines	Project Consistency	
Recommended maximum population density for non-residential uses	150 persons per acre	No Conflict. Average occupancy per acre for the Project would be 31.49 persons. ¹
Maximum coverage by structures	Building envelope and lot coverage must comply with the underlying zoning district.	No Conflict. Under the site’s existing NAVISP land use designations, the site is permitted a maximum building coverage of 4.7 million square feet. As proposed, the Project would cover approximately 3.48 million square feet. ¹
Land Use Restrictions	No schools (not including trade schools), preschools, daycare centers, hospitals, community congregations, residential care facilities, concert halls, auditoriums, churches, stadiums, or arenas.	No Conflict. The Project does not propose any prohibited land uses.



Overlay District A-2 Guidelines		Project Consistency
Height Limitations	50 feet	No Conflict. Proposed buildings would be a maximum height of 48 feet above finished floor elevation.

Source: (ALUCP, 1995)

¹ Per Caltrans Divion of Aeronautics, Building Code Method. (Warehouse occupancy = 500 sf/person; Office occupancy = 100 sf/person x 50%)

² Per the NAVISP, permitted building coverage is 65% for C-G and 45% for I-SP. The Project (3,480,736 sf on 226.75 acres) would result in a building coverage of 35%.

4.10.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: No Impact. No residents would be displaced by the Project, nor would the physical arrangement of any neighboring residential communities be modified or divided by the Project.

Threshold b: Less than Significant Impact. Implementation of the Project would not conflict with Connect SoCal, the Town of Apple Valley General Plan, the NAVISP, the Town Development Code, or the Town of Apple Valley Comprehensive Airport Land Use Compatibility Plan. The Project would not result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations.

4.10.7 MITIGATION

Impacts would be less than significant, and mitigation is not required.

4.10.8 CUMULATIVE IMPACT ANALYSIS

The Project would not conflict with applicable General Plan Goals and Policies adopted for the purpose of avoiding or mitigating an environmental effect. The Town comprehensively updates and amends General Plan and Zoning documents to reflect cumulative land use changes within the impact area. Regional agencies employ development-specific information and General Plan/Zoning information provided by the Town in developing regional plans and growth projections. In combination, these actions ensure that potential cumulative effects of evolving land use plans are appropriately addressed at local and regional levels.

Based on the preceding discussions, the Project’s contributions to potential cumulative land use and planning impacts are not considerable, and the cumulative effects of the Project would be less than significant. There are no known or probable related projects that would interact with the less than significant effects of the Project and thereby result in cumulatively significant impacts. Other development projects within the cumulative impact area would also be required to comply with requirements of necessary land use and planning discretionary actions and permits, acting to preclude or minimize potential land use and planning impacts.



4.11 NOISE

The following analysis is based primarily on information obtained from the following technical reports:

- *Lake Creek Logistics Center, Noise and Vibration Analysis, Town of Apple Valley (Urban Crossroads, Inc.)* September 29, 2025.
- *Airport Land Use Compatibility Analysis – SPR2022-0003 Lake Creek Logistics Center, Apple Valley Airport, Apple Valley, CA (Johnson Aviation Consulting)* February 19, 2024.

The Noise Impact Analysis (Urban Crossroads, 2025e) is included in its entirety as EIR *Technical Appendix J*. The Airport Land Use Compatibility Analysis (JAC, 2024) is included in its entirety as EIR *Technical Appendix H2*. Refer also to EIR Section 7.0, *References*, for a complete list of reference sources.

4.11.1 ACOUSTICAL FUNDAMENTALS

A. Noise Definitions

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

B. Range of Noise

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 1,000 feet, which can cause serious discomfort.

C. Noise Descriptors

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



Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level, is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA Leq sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA Leq sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when noise can become more intrusive. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The Town of Apple Valley relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources.

D. Noise Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on geometric spreading, ground absorption, atmospheric effects, and shielding.

1. Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

2. Ground Absorption Noise

To account for the ground-effect attenuation (absorption) of noise, two types of site conditions are commonly used in noise models: soft site and hard site conditions. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed.

3. Atmospheric Effects

Receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Other factors that may affect noise levels include air temperature, humidity, and turbulence.



4. *Shielding*

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of-sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure.

E. Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dBA. Noise barriers are most effective when placed close to the noise source or receptor. For a noise barrier to work, it must be high enough and long enough to block the view of the noise source.

F. Land Use Compatibility With Noise

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area’s desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process.

G. Response to Noise

Approximately 16 percent of the population has a very low tolerance for noise and will object to any noise that is not of their making. Consequently, even in the quietest environment, some complaints may occur. Twenty to 30 percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Surveys have shown that community response to noise varies from no reaction to vigorous action for newly introduced noises averaging from 10 dB below existing to 25 dB above existing. According to research originally published in the Noise Effects Handbook, the percentage of high annoyance ranges from approximately 0 percent at 45 dB or less, 10 percent are highly annoyed around 60 dB and increases rapidly to approximately 70 percent being highly annoyed at approximately 85 dB or greater. A change of 3 dBA is considered barely perceptible, and changes of 5 dBA are considered readily perceptible.



H. Vibration

Per the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual, vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

Additionally, in contrast to airborne noise, ground-borne vibration outdoors is not a common environmental problem and annoyance from ground-borne vibration is almost exclusively an indoor phenomenon. Therefore, the effects of vibrations should only be evaluated at a structure and the effects of the vibration on the building structure should be considered. Wood-frame buildings, such as typical residential structures, are more easily affected by ground vibration than heavier buildings.

4.11.2 EXISTING SETTING

To assess the existing noise level environment, noise level measurements were taken at six locations in the Project study area during typical weekday conditions over a 24-hour period. Collecting ambient noise level measurements at nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels. Table 5-1 of the Noise Impact Analysis (*Technical Appendix J* of this DEIR), current ambient daytime noise levels range from 52.8 to 57.9 dBA Leq. Ambient nighttime noise levels currently range from 40.9 to 59.0 dBA Leq.

In accordance with the Town of Apple Valley General Plan, operation of the Apple Valley Airport is limited to general aviation aircraft, with noise impacts perceived as “barely perceptible” throughout most of the planning area. At the time of the General Plan, the airport housed approximately 119 aircraft, mostly single-engine airplanes, with an average of 103 operations (takeoffs/landings) a day, or 38,000 annually. Of these operations, approximately 67% were associated with local general aviation. Lands adjacent to the airport are generally vacant and are zoned for airport, industrial and commercial uses. Although overflights may occasionally be audible within the Town, these impacts are not considered significant. As shown on Exhibit III-19, Existing Airport Noise Contours, of the Town's General Plan, noise contours of 65 dBA or greater are contained within the airport's boundaries. (Apple Valley, 2009)

4.11.3 REGULATORY FRAMEWORK

The following is a brief description of the federal, State, and local environmental laws and related regulations related to noise.



A. *Federal*

1. *Noise Control Act of 1972*

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products.

While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control.

2. *Federal Transit Administration*

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents. In the interest of promoting quality and uniformity in assessments, the manual is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents. The manual sets forth the methods and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining what can be done to mitigate such impact. (FTA, 2018)

3. *Federal Aviation Administration*

The Federal Aviation Administration (FAA) regulates the maximum noise level that an individual civil aircraft can emit through requiring aircraft to meet certain noise certification standards. These standards designate changes in maximum noise level requirements by "stage" designation.

The U.S. noise standards are defined in the Code of Federal Regulations (CFR) Title 14 Part 36 – *Noise Standards: Aircraft Type and Airworthiness Certification* (14 CFR Part 36). The FAA publishes certificated noise levels in the advisory circular, *Noise Levels for U.S. Certificated and Foreign Aircraft*. This advisory circular provides noise level data for aircraft certificated under 14 CFR Part 36 and categorizes aircraft into their appropriate stages.

Any aircraft that is certified for airworthiness in the U.S. needs to also comply with noise standard requirements to receive a noise certification. The purpose of the noise certification process is to ensure that the latest available safe and airworthy noise reduction technology is incorporated into aircraft design and enables the noise reductions offered by those technologies to be reflected in reductions of noise experienced by communities. (FAA, 2022)

B. State

1. Noise Requirements

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor’s Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels.

2. California Public Utilities Code

State Law related to airport land use planning is governed in part by CPUC Sections 21670–21676.5. CPUC provides requirements for the establishment of ALUC and airport land use compatibility plans pursuant to Section 21674.5 (Department of Transportation, Division of Aeronautics, Airport Land Use Planning Handbook). Section 21675(b) requires an ALUC to update its airport land use compatibility plan for a military airport like JFTB Los Alamitos so that it “shall be consistent” with the safety and noise standards prepared for that military airport.

3. California Assembly Bill (AB) 2496

AB 2496 Vehicles: Exhaust Systems requires a court to require a certificate of compliance for a violation of the noise limit requirements mentioned for mufflers or exhaust systems for specified vehicles. The bill requires the court to utilize notification procedures and if a certificate of compliance is not provided to the court within three months of the violation date, the bill requires the court to treat this failure as noncompliance and inform the Department of Motor Vehicles.

This bill would also require stations providing referee functions to provide for the testing of exhaust systems of motor vehicles and the issuance of certificates of compliance for vehicles that have received a citation for installing, operating, or engaging in the business of installing a whistle-tip onto a vehicle’s exhaust system and for motorcycles that have received a citation for the violations mentioned above.

4. Building Standards Code

The State of California’s noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL. (CBSC, n.d.)



5. *OPR General Plan Guidelines*

Though not adopted by law, the 2017 California General Plan Guidelines, published by the California Governor’s Office of Planning and Research (OPR), provides guidance for local agencies in preparing or updating General Plans. The Guidelines provide direction on the required Noise Element portion of the General Plans. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. Local governments must “analyze and quantify” noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that “minimizes the exposure of community residents to excessive noise.” Noise level contours must be mapped and the conclusions of the element used as a basis for land use decisions. The element must include implementation measures and possible solutions to existing and foreseeable noise problems. Furthermore, the policies and standards must be sufficient to serve as a guideline for compliance with sound transmission control requirements. The noise element directly correlates to the Land Use, Circulation, and Housing Elements. The Noise Element must be used to guide decisions concerning land use and the location of new roads and transit facilities since these are common sources of excessive noise levels. The noise levels from existing land uses, including mining, agricultural, and industrial activities, must be closely analyzed to ensure compatibility, especially where residential and other sensitive receptors have encroached into areas previously occupied by these uses. (OPR, 2023)

C. Local

1. *Apple Valley Comprehensive Land Use Plan*

The Project is subject to the Apple Valley Comprehensive Land Use Plan (ALUCP) adopted in 1995. The ALUCP provides specific airport land use guidance and is used to evaluate land use compatibility and development proposals in the vicinity of the Airport. The primary compatibility concerns are aircraft noise, the safety of people and property on the ground and in aircraft, the protection of airspace, and concerns related to overflights. The ALUCP has established an Airport Master Plan Area and Airport Overlay Districts to promote the development of compatible land uses near the Airport. (Apple Valley, 1995)

2. *Town of Apple Valley General Plan Noise Element*

The Town of Apple Valley has adopted a Noise Element of the General Plan to consider the land use patterns of the Land Use Element in the context of the noise it will generate. The Land Use Compatibility for Community Noise Environments identified in the Town of Apple Valley Noise Element (Table IV-4) are guidelines to evaluate the land use compatibility of transportation-related noise. The compatibility criteria provides the Town with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The Land Use Compatibility for Community Noise Environments matrix describes categories of compatibility and not specific noise standards. Noise sensitive residential designated land uses in the Project study area are considered normally acceptable with exterior noise levels below 60 dBA CNEL, and conditionally acceptable with exterior noise levels of up to 70 dBA CNEL. The non-noise sensitive Project land use is considered normally acceptable with unmitigated exterior noise levels of less than 75 dBA CNEL and



conditionally acceptable with exterior noise levels ranging from 70 to 80 dBA CNEL. (Apple Valley, 2009)

The Apple Valley Airport is located west of the Project site. According to the Town of Apple Valley General Plan Noise Element, aircraft noise associated with the operation of the Apple Valley Airport, which is owned and operated by the County of San Bernardino, is limited to general aviation aircraft. The 60 dBA noise contour boundary for the airport has been identified as occurring within the Airport's property, and noise levels on surrounding lands are not significantly affected. While aircraft overflights may be heard within the Town, aircraft noise does not create significant noise impacts outside the immediate area.

3. *Town of Apple Valley Municipal Code*

Municipal Code Section 9.73.060[F][1], Construction/Demolition, limits construction work to between weekday hours of 7 p.m. and 7 a.m., or at any time on weekends or holidays, except for emergency work of public service utilities or by variance issued by the Town. In addition, Municipal Code Section 9.73.060[F][2] requires construction activities to be conducted in such a manner that the noise levels at affected residential properties will not exceed the daytime (7:00 a.m. to 7:00 p.m.) mobile exterior noise level limit of 75 dBA Leq and 60 dBA Leq during the nighttime hours of 7:00 p.m. to 7:00 a.m.

Operational noise is subject to Municipal Code, Table 9.73.050-A, which establishes the exterior noise level limits by the receiving land use. For noise-sensitive residential properties, a base daytime (7:00 a.m. to 10:00 p.m.) exterior noise level limit of 50 dBA Leq and 40 dBA Leq during the nighttime (10:00 p.m. to 7:00 a.m.) hours is identified. In addition, in the event the measured ambient noise level exceeds the base exterior noise level limit, the allowable noise exposure standard shall be adjusted in five dBA increments in each category as appropriate to encompass or reflect said ambient noise level. In effect, when the ambient noise levels exceed the base exterior noise level limits, the noise level standard shall be adjusted as appropriate to encompass or reflect the ambient noise level. (Apple Valley, 2024)

4.11.4 METHODOLOGY

A. *Construction-Related Noise*

To describe construction noise activities, the analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. The RCNM equipment database provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. Reference noise levels are shown below.



Table 4.11-1 Construction Reference Noise Levels

Construction Stage	Reference Construction Equipment	Reference Noise Level @ 50 Feet (dBA L _{eq})	Composite Reference Noise Level (dBA L _{eq})	Reference Power Level (dBA L _w)
Site Preparation	Tractor	80	84.0	115.6
	Backhoe	74		
	Grader	81		
Grading	Scraper	80	83.3	114.9
	Excavator	77		
	Dozer	78		
Building Construction	Crane	73	80.6	112.2
	Generator	78		
	Front End Loader	75		
Paving	Paver	74	77.8	109.5
	Dump Truck	72		
	Roller	73		
Architectural Coating	Man Lift	68	76.2	107.8
	Compressor (air)	74		
	Generator (<25kVA)	70		

Source: (Urban Crossroads, 2025e)

B. Operational Noise

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. The reference noise level measurements shown in Table 4.11-2, *Operational Reference Noise Levels*, were used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the cold storage loading dock activity, tractor trailer storage activity, roof-top air conditioning units, parking lot vehicle movements, trash enclosure activity, and truck movements all operating at the same time. These sources of noise activity will likely vary throughout the day.



Table 4.11-2 Operational Reference Noise Levels

Noise Source	Noise Source Height (Feet)	Min./Hour		Reference Noise Level @ 50 feet (dBA Leq)	Sound Power Level (dBA)
		Day	Night		
Cold Storage Loading Dock Activity	8'	60	60	65.7	111.5
Tractor Trailer Loading Dock Activity	8'	60	60	62.8	103.4
Roof-Top Air Conditioning Units	5'	39	28	57.2	88.9
Parking Lot Vehicle Movements	5'	60	60	52.6	81.1
Trash Enclosure Activity	5'	60	30	57.3	89.0
Truck Movements	8'	60	60	59.8	93.2

Source: (Urban Crossroads, 2025e)

C. Off-Site Traffic Noise

Consistent with the Town of Apple Valley General Plan Noise Element, all transportation-related noise levels are presented in terms of the 24-hour CNEL’s. Unlike a simple arithmetic average noise level, CNEL represents the logarithmic summation of the equivalent hourly noise levels with evening and nighttime noise penalties recognizing that noise may have different impacts on people depending on when it occurs. The expected roadway noise level increases from vehicular traffic were calculated using a computer program that replicates the FHWA Traffic Noise Prediction Model- FHWA-RD-77-108. This methodology is commonly used to describe the off-site traffic noise levels throughout southern California.

D. Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Ground vibration levels associated with various types of construction equipment are summarized in Table 4.11-3, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by the FTA.



Table 4.11-3 Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089
Vibratory Roller	0.210

Source: (Urban Crossroads, 2025e)

E. Airport Noise

The analysis of exposure of excessive noise levels due to proximity to airport operations is evaluated by determining whether the Project places residents or workers within noise contours deemed incompatible for sensitive land uses. This analysis included a review of the Town’s General Plan and CLUP.

4.11.5 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XIII of the CEQA Guidelines, the proposed Project would result in a significant impact to noise if the Project or any Project-related component would result in:

- a. *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
- b. *Generation of excessive ground borne vibration or ground borne noise levels;*
- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.*

Table 4.11-4, *Significance Criteria* Summary, shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases. Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development.



Table 4.11-4 Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic	Noise-Sensitive	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
	Non-Noise-Sensitive	If ambient is > 75 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational	Noise-Sensitive	Exterior Noise Level Standards	50 dBA L _{eq}	40 dBA L _{eq}
		If ambient is < 60 dBA L _{eq}	≥ 5 dBA L _{eq} Project increase	
		If ambient is 60 - 65 dBA L _{eq}	≥ 3 dBA L _{eq} Project increase	
		If ambient is > 65 dBA L _{eq}	≥ 1.5 dBA L _{eq} Project increase	
Construction	Noise-Sensitive	Noise Level Threshold	75 dBA L _{eq}	60 dBA L _{eq}
		Vibration Level Threshold	0.04 PPV (in/sec)	

Source: (Urban Crossroads, 2025e)

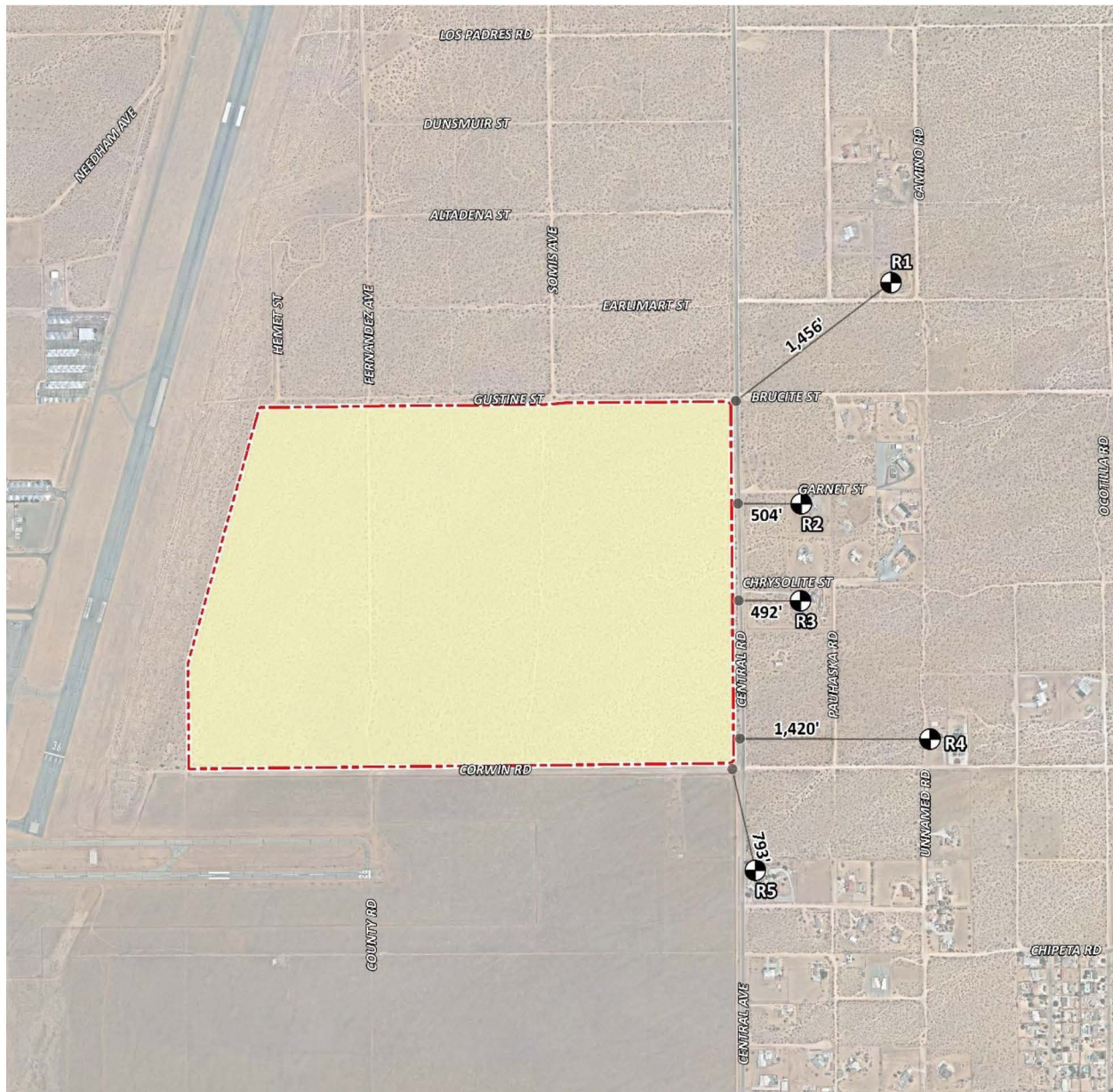
Federal and state regulations set 65 decibels (dB) Community Noise Equivalent Level (CNEL) as the normally acceptable limit for aircraft noise. The aircraft noise contours provided in the CLUP were adopted in 1989. The CLUP notes that there are no incompatible land uses within the 65 CNEL contour for the “future year 2010”, and that neither the 60 CNEL or 65 CNEL contours are projected to extend past the future Airport property line.

4.11.6 IMPACT ANALYSIS

To assess the potential for short-term construction and long-term operational noise impacts, the following sensitive receiver locations¹, as shown on Figure 4.11-1, *Noise Receiver Locations*, were identified as representative locations for analysis. Other sensitive land uses in the Project study area that are located at greater distances would experience lower noise levels than those presented in the following discussions due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the Project boundary to each receiver location.

- Location R1 represents the existing noise sensitive residence at 22672 Earlimart, approximately 1,456 feet northeast of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R1 is placed at the building façade.

¹ It is noted that the Noise Impact Analysis included an ambient measurement location at the southwestern corner of the Project site (L6). This location was presented for ambient informational purposes only, as there is no sensitive receiver at that location. As such, there is no corresponding R6 receiver location.



LEGEND:

- Site Boundary
- Receiver Locations
- Distance from receiver to Project site boundary (in feet)

Source(s): Urban Crossroads (09-19-2024)

Figure 4.11-1



Not to Scale



Noise Receiver Locations



- Location R2 represents the existing noise sensitive residence at 22425 Gustine Street, approximately 504 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R2 is placed at the building façade.
- Location R3 represents the existing noise sensitive residence at 17805 Central Road, approximately 492 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R3 is placed at the building façade.
- Location R4 represents the existing noise sensitive residence at 22522 Corwin Road Sherman Rd., approximately 1,420 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R4 is placed at the building façade.
- Location R5 represents the existing noise sensitive residence at 17525 Central Road, approximately 793 feet southeast of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R5 is placed at the building façade.

Threshold a: *Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

A. Construction Noise

Each stage of construction has a specific equipment mix, depending on the work to be completed during that stage. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. Project construction activities are expected to occur in the following stages: site preparation, grading, building construction, paving, and architectural coating.

As previously mentioned, the construction noise analysis relies on reference construction equipment noise levels from the FHWA published the RCNM, which includes a national database of construction equipment reference noise emission levels.

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearest sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. Consistent with FTA guidance for general construction noise assessment, Table 4.11-5, *Construction Equipment Noise Level Summary*, presents the combined noise level for all equipment, assuming they operate at the same time.



Table 4.11-5 Construction Equipment Noise Level Summary

Receiver Location	Construction Noise Levels (dBA L _{eq})		
	Highest Construction Noise Levels	Threshold	Threshold Exceeded?
R1	51.3	75	No
R2	57.5	75	No
R3	57.8	75	No
R4	52.4	75	No
R5	54.4	75	No

Source: (Urban Crossroads, 2025e)

As shown above, construction noise levels at the receiver locations would not exceed the daytime 75 dBA L_{eq} significance threshold during Project construction activities.

In addition to the daytime activities discussed above, nighttime concrete pouring activities will occur as a part of Project building construction activities. Nighttime concrete pouring activities are often used to support reduced concrete mixer truck transit times and lower air temperatures than during the daytime hours and are generally limited to the actual building pad area. Since the nighttime concrete pours take place outside the hours permitted by Section 9.73.060 of the Town of Apple Valley Municipal Code, the Project Applicant will be required to obtain authorization for nighttime work from the Town of Apple Valley.

Concrete pour noise sources may include concrete mixer truck movements and pouring activities, concrete paving equipment, rear mounted concrete mixer truck backup alarms, engine idling, air brakes, generators, and workers communicating/whistling. Noise levels that can be expected during the nighttime concrete pour activities are shown in Table 4.11-6, *Nighttime Concrete Pour Noise Level Summary*.

Table 4.11-6 Nighttime Concrete Pour Noise Level Summary

Receiver Location	Concrete Pour Construction Noise Levels (dBA L _{eq})		
	Exterior Noise Levels	Threshold	Threshold Exceeded?
R1	36.0	60	No
R2	42.2	60	No
R3	42.5	60	No
R4	37.1	60	No
R5	39.1	60	No

Source: (Urban Crossroads, 2025e)



As shown above, nighttime concrete pour activities will not exceed the 60 dBA L_{eq} nighttime residential noise level threshold at any of the nearest noise sensitive receiver locations.

In addition to the on-site construction activities analyzed above, the Project would require grading, trenching, and paving for off-site improvements associated with roadway construction and utility installation. All off-site improvements are described in detail in this EIR Section 3.0, *Project Description*, and illustrated in Figure 3-9, *Offsite Utility Improvements*. It is expected that the off-site construction activities would not take place at any one location for the entire duration of construction due to the nature of the linear construction activity. Construction noise from this off-site work would, therefore, be relatively short-term and the noise levels would be reduced as construction work moves linearly along the selected alignment and farther from sensitive uses. Off-site roadway and utility improvement construction activities would not result in significant noise impacts.

Based on the preceding discussions, construction-source noise would not result in a substantial temporary increase in ambient noise levels in the vicinity of the Project in excess of established standards. As such, construction noise impacts would be less than significant.

B. Operational Noise

To present the potential worst-case noise conditions, this noise analysis assumed the Project would be operational 24 hours per day, seven days per week. Consistent with similar warehouse and industrial uses, the Project business operations would primarily be conducted within the enclosed buildings, except for traffic movement, parking, as well as loading and unloading of trucks at designated loading bays.

Operational source noise levels were calculated using reference noise levels to represent the proposed Project operations, including cold storage loading dock activity, tractor trailer storage activity, roof-top air conditioning units, parking lot vehicle movements, trash enclosure activity, and truck movements. Operational noise levels that can be expected from the Project are shown in Table 4.11-7, *Daytime Project Operational Noise Levels*, and Table 4.11-8, *Nighttime Project Operational Noise Levels*, respectively.

As shown, the daytime hourly noise levels at the off-site receiver locations are expected to range from 42.1 to 47.6 dBA L_{eq} . The nighttime hourly noise levels at the existing off-site receiver locations are expected to range from 42.1 to 47.5 dBA L_{eq} .



Table 4.11-7 Daytime Project Operational Noise Levels

Noise Source	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Cold Storage Loading Dock Activity	40.6	46.4	47.1	41.6	43.9
Tractor Trailer Storage Activity	34.1	31.4	30.9	29.5	31.8
Roof-Top Air Conditioning Units	25.4	30.3	30.0	26.8	28.1
Parking Lot Vehicle Movements	26.1	30.2	29.7	26.6	29.5
Trash Enclosure Activity	22.1	30.1	25.8	18.9	18.1
Truck Movements	31.3	35.0	34.0	30.1	32.5
Total (All Noise Sources)	42.1	47.1	47.6	42.4	44.7

Source: (Urban Crossroads, 2025e)

Table 4.11-8 Nighttime Project Operational Noise Levels

Noise Source	Operational Noise Levels by Receiver Location (dBA Leq)				
	R1	R2	R3	R4	R5
Cold Storage Loading Dock Activity	40.6	46.4	47.1	41.6	43.9
Tractor Trailer Storage Activity	34.1	31.4	30.9	29.5	31.8
Roof-Top Air Conditioning Units	23.0	27.9	27.6	24.3	25.7
Parking Lot Vehicle Movements	26.1	30.2	29.7	26.6	29.5
Trash Enclosure Activity	18.1	26.1	21.8	14.9	14.2
Truck Movements	31.3	35.0	34.0	30.1	32.5
Total (All Noise Sources)	42.1	47.0	47.5	42.3	44.6

Source: (Urban Crossroads, 2025e)

To demonstrate compliance with local noise regulations, Table 4.11-9, *Operational Noise Level Compliance*, evaluates the Project-only operational noise levels against Town of Apple Valley exterior noise level thresholds at nearby noise-sensitive receiver locations.

Table 4.11-9 Operational Noise Level Compliance

Receiver Location	Project Operational Noise Levels (dBA Leq)		Noise Level Standards (dBA Leq)		Threshold Exceeded?	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	42.1	42.1	55	45	No	No
R2	47.1	47.0	60	60	No	No
R3	47.6	47.5	60	60	No	No
R4	42.4	42.3	55	45	No	No
R5	44.7	44.6	60	60	No	No

Source: (Urban Crossroads, 2025e)



As demonstrated in Table 4.11-9, Project operational noise would not exceed Town of Apple Valley exterior noise level standards at nearby noise-sensitive receiver locations.

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearby receiver locations that may be potentially impacted by Project operational noise sources. Table 4.11-10, *Daytime Operational Noise Level Increases*, and Table 4.11-11, *Nighttime Operational Noise Level Increases*, present the operational noise level increases that can be expected at the nearest receiver locations.

Table 4.11-10 Daytime Operational Noise Level Increases

Receiver Location	Total Project Operational Noise Level	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Increase Criteria	Increase Criteria Exceeded?
R1	42.1	52.8	53.2	0.4	5.0	No
R2	47.1	57.9	58.2	0.3	5.0	No
R3	47.6	57.2	57.7	0.5	5.0	No
R4	42.4	53.8	54.1	0.3	5.0	No
R5	44.7	56.9	57.2	0.3	5.0	No

Source: (Urban Crossroads, 2025e)

Table 4.11-11 Nighttime Operational Noise Level Increases

Receiver Location	Total Project Operational Noise Level	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Increase Criteria	Increase Criteria Exceeded?
R1	42.1	40.9	44.5	3.6	5.0	No
R2	47.0	57.2	57.6	0.4	5.0	No
R3	47.5	57.8	58.2	0.4	5.0	No
R4	42.3	43.6	46.0	2.4	5.0	No
R5	44.6	59.0	59.2	0.2	5.0	No

Source: (Urban Crossroads, 2025e)

As shown above, the Project will generate a daytime operational noise level increase ranging from 0.3 to 0.5 dBA Leq and a nighttime operational noise level increase ranging from 0.2 to 3.6 dBA Leq at the nearest receiver locations. As such, Project-related operational noise level increases will not exceed the Town’s operational noise level increase significance criteria. Operational impacts would be less than significant.



C. *Off-Site Traffic Noise*

Off-site traffic noise impacts were evaluated based on noise level increases resulting from the Project. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. To assess the off-site transportation CNEL noise level impacts associated with development of the Project, noise contours were developed based on the Traffic Impact Analysis (*Technical Appendix K2* of this EIR). Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at receiving land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 7-1 through 7-4 of the Noise Impact Analysis (*Technical Appendix J* of this EIR) present a summary of the noise contours under existing and opening year conditions, with and without the Project. Table 4.11-12, *Existing Plus Project*, and Table 4.11-12, *Opening Year (2029) Traffic Noise Level Increases*, provide the increases that can be expected along area roadways due to Project-generated traffic under existing and opening year conditions.



Table 4.11-12 Existing Plus Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Dale Evans Pkwy.	n/o Stoddard Wells Rd.	Sensitive	62.0	67.6	5.8	3.0	Yes
2	Dale Evans Pkwy.	s/o Stoddard Wells Rd.	Non-Sensitive	62.0	67.6	5.6	n/a	No
3	Dale Evans Pkwy.	n/o Johnson Rd.	Sensitive	61.1	67.3	6.2	3.0	Yes
4	Dale Evans Pkwy.	s/o Waalew Rd.	Sensitive	62.1	62.4	0.3	3.0	No
5	Central Rd.	s/o Johnson Rd.	Sensitive	60.0	74.0	14.0	1.5	Yes
6	Central Rd.	n/o Waalew Rd.	Sensitive	60.5	68.6	8.1	3.0	Yes
7	Central Rd.	s/o Waalew Rd.	Sensitive	61.7	66.4	4.7	3.0	Yes
8	Stoddard Wells Rd.	s/o Johnson Rd.	Non-Sensitive	62.8	73.3	10.5	n/a	No
9	Johnson Rd.	w/o Dale Evans Pkwy.	Non-Sensitive	63.2	74.1	10.9	n/a	No
10	Johnson Rd.	e/o Dale Evans Pkwy.	Non-Sensitive	64.1	75.1	11.0	n/a	No
11	Johnson Rd.	w/o Central Rd.	Non-Sensitive	58.4	74.8	16.4	n/a	No
12	Waalew Rd.	e/o Corwin Rd.	Sensitive	64.4	68.0	3.6	3.0	Yes
13	Waalew Rd.	e/o Dale Evans Pkwy.	Sensitive	64.9	68.3	3.4	3.0	Yes
14	Waalew Rd.	w/o Central Rd.	Sensitive	64.6	68.3	3.7	3.0	Yes

Source: (Urban Crossroads, 2025e)



Table 4.11-13 Opening Year (2029) Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use	CNEL at Receiving Land Use (dBA)			Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Dale Evans Pkwy.	n/o Stoddard Wells Rd.	Sensitive	69.0	70.8	1.8	1.5	Yes
2	Dale Evans Pkwy.	s/o Stoddard Wells Rd.	Non-Sensitive	69.0	70.8	1.8	n/a	No
3	Dale Evans Pkwy.	n/o Johnson Rd.	Sensitive	65.9	69.1	3.2	1.5	Yes
4	Dale Evans Pkwy.	s/o Waalew Rd.	Sensitive	63.4	63.7	0.3	3.0	No
5	Central Rd.	s/o Johnson Rd.	Sensitive	67.5	74.8	7.3	1.5	Yes
6	Central Rd.	n/o Waalew Rd.	Sensitive	65.9	70.0	4.1	1.5	Yes
7	Central Rd.	s/o Waalew Rd.	Sensitive	65.6	68.2	2.6	1.5	Yes
8	Stoddard Wells Rd.	s/o Johnson Rd.	Non-Sensitive	71.2	75.1	3.9	n/a	No
9	Johnson Rd.	w/o Dale Evans Pkwy.	Non-Sensitive	72.0	76.0	4.0	n/a	No
10	Johnson Rd.	e/o Dale Evans Pkwy.	Non-Sensitive	73.3	77.1	3.8	n/a	No
11	Johnson Rd.	w/o Central Rd.	Non-Sensitive	69.7	75.9	6.2	n/a	No
12	Waalew Rd.	e/o Corwin Rd.	Sensitive	67.2	69.4	2.2	1.5	Yes
13	Waalew Rd.	e/o Dale Evans Pkwy.	Sensitive	67.5	69.7	2.2	1.5	Yes
14	Waalew Rd.	w/o Central Rd.	Sensitive	65.8	68.9	3.1	1.5	Yes

Source: (Urban Crossroads, 2025e)

As shown above, eight of the study area roadway segments are shown to experience potentially significant off-site traffic noise level increases due to the Project’s off-site traffic noise under both the existing and opening year conditions. This is a potentially significant noise impact.

D. Summary

As demonstrated in the preceding discussions, Project construction and on-site operational noise would not exceed applicable Town thresholds. As such, the potential for Project construction and/or on-site operations to generate a substantial increase in ambient noise levels in the vicinity of the Project is considered less than significant. However, based on the significance criteria presented in Table 4.11-12 and Table 4.11-13, noise level increases associated with Project-generated off-site traffic would be potentially significant.

Threshold b: *Would the Project generate excessive groundborne vibration or groundborne noise levels?*

A. Construction Vibration

Table 4.11-14, *Project Construction Vibration Levels*, presents the expected Project-related vibration levels at the nearby receiver locations.



Table 4.11-14 Project Construction Vibration Levels

Receiver	Distance	Typical Construction Vibration Levels PPV (in/sec)						Thresholds PPV (in/sec)	Thresholds Exceeded?
		Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Vibratory Roller	Highest Vibration Level		
R1	1,456'	0.000	0.000	0.000	0.000	0.000	0.000	0.004	No
R2	504'	0.000	0.000	0.001	0.001	0.002	0.002	0.004	No
R3	492'	0.000	0.000	0.001	0.001	0.002	0.002	0.004	No
R4	1,420'	0.000	0.000	0.000	0.000	0.000	0.000	0.004	No
R5	793'	0.000	0.000	0.000	0.000	0.001	0.001	0.004	No

Source: (Urban Crossroads, 2025e)

At distances ranging from 492 to 1,456 feet from Project construction activities, construction vibration velocity levels are estimated to range from 0.000 to 0.002 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.04 (in/sec), the typical Project construction vibration levels will fall below the vibration thresholds at all the sensitive receiver locations. Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter. Therefore, the Project-related vibration impacts are considered less than significant during typical construction activities at the Project site.

B. Operational Vibration

Under long-term conditions, the operational activities of the Project would not include or require equipment, facilities, or activities that would result in perceptible ground-borne vibration. Trucks would travel to and from the Project site on surrounding roadways; however, vibration and groundborne noise levels for heavy trucks operating at the posted speed limits on smooth, paved surfaces, as is expected on the Project site and surrounding roadways is rarely perceptible. Accordingly, Project operation would not generate excessive groundborne vibration or groundborne noise levels and impacts would be less than significant.

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

The airport nearest the Project site is the Apple Valley Airport which is located westerly adjacent to the site. In accordance with the Town of Apple Valley General Plan, the County of San Bernardino County has plans to expand the Apple Valley Airport into a hub to better serve industrial and commercial development in and adjacent to the North Apple Valley Industrial Specific Plan area in which the airport is located. Airport upgrades would consist of 18 new hangars at the Airport and improvements to the terminal and taxiways to accommodate larger corporate aircraft. As shown on



Exhibit III-I-3, of the Town's General Plan, future noise contour boundaries are contained within the boundaries of the airport. The 60 dBA noise contour boundary for the airport would occur within the Apple Valley Airport property, and noise levels on surrounding lands are not significantly affected. (Apple Valley, 2009)

Federal and state regulations set 65 dB CNEL as the normally acceptable limit for aircraft noise. The aircraft noise contours provided in the CLUP were adopted in 1989. The CLUP notes that there are no incompatible land uses within the 65 CNEL contour for the "future year 2010", and that neither the 60 CNEL or 65 CNEL contours are projected to extend past the future Airport property line. Furthermore, at the time the CLUP was adopted, the total operations for future year 2010 were 151,000 and include Runway 8-26 (the noise contour for 1989 does not include Runway 8-26) and the most recent FAA terminal area forecast for APV notes 37,500 total operations for 2023 through 2050.

The CLUP notes that factories, warehouses, storage yards and open farmland are relatively insensitive to noise. As stated, Project site is outside any noise contours. No aircraft noise impacts are anticipated for the proposed Project land uses. As such, the Project site would not be exposed to excessive noise levels from airport operations, and impacts are considered less than significant.

4.11.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact (off-site traffic noise). Project off-site traffic noise level increases would result in potentially significant impacts to existing noise-sensitive uses. The Project would generate a less than significant short-term construction and long-term on-site operational noise levels impact.

Threshold b: Less than Significant Impact. The Project's construction and operational activities would not result in a perceptible groundborne vibration or noise.

Threshold c: Less than Significant Impact. The 60 dBA noise contour boundary for the Apple Valley Airport under existing and future conditions has been identified as occurring within the Airport's property, and noise levels on surrounding lands are not significantly affected. The Project site would not be exposed to excessive noise levels from airport operations, and impacts are considered less than significant.

4.11.8 MITIGATION MEASURES

Both rubberized asphalt and off-site noise barriers were considered as potential noise mitigation measures to reduce the potentially significant off-site traffic noise level increases, as discussed below. However, neither form of mitigation would eliminate the off-site traffic noise level increases at the adjacent land uses to the impacted roadway segments. Therefore, the Project-related off-site traffic noise level increases at adjacent noise-sensitive land are considered a significant and unavoidable impact.



A. Rubberized Asphalt

Caltrans research has shown that rubberized asphalt can provide noise attenuation of approximately 4 dBA for automobile traffic noise levels. Changing the pavement type of a roadway has been shown to reduce the amount of tire/pavement noise produced at the source under both near-term and long-term conditions. Traffic noise is generated primarily by the interaction of the tires and pavement, the engine, and exhaust systems. For automobile noise, as much as 75 to 90-percent of traffic noise is generated by the interaction of the tires and pavement, especially when traveling at higher and constant speeds. According to research conducted by Caltrans and the Canadian Ministry of Transportation and Highways a 4 dBA reduction in tire/pavement noise is attainable using rubberized asphalt under typical operating conditions.

The effectiveness of reducing traffic noise levels is higher on roadways with low percentages of heavy trucks, since the heavy truck engine and exhaust noise is not affected by rubberized alternative pavement due to the truck engine and exhaust stack height above the pavement itself. Per Caltrans guidance, a truck stack height is modeled using a height of 11.5 feet above the road. With the primary off-site traffic noise source consisting of heavy trucks with a stack height of 11.5 feet off the ground, the tire/pavement noise reduction benefits associated rubberized asphalt will be primarily limited to automobiles.

As such, while the off-site Project-related traffic noise level increases would theoretically be reduced with the 4 dBA reduction provided by rubberized asphalt, the reduction would not provide reliable benefits for the noise levels generated by heavy truck traffic. While rubberized asphalt will provide some noise reduction, this is only effective for tire-on-pavement noise at higher speeds and would not reduce truck-related off-site traffic noise levels associated with truck engine and exhaust stacks to less than significant levels. Since the use of rubberized asphalt would not lower the off-site traffic noise levels below a level of significance, rubberized asphalt is not proposed as mitigation for the Project and the off-site Project-related traffic noise level increases at adjacent land uses would remain significant.

B. Off-site Noise Barriers

Since the noise-sensitive receiving land uses are located adjacent to the impacted roadway segments in the Project study area, off-site noise barriers were considered in this analysis as a potential traffic noise mitigation measure to reduce the impacts. Off-site noise barriers are estimated to provide a readily perceptible 5 dBA reduction which, according to the FHWA, is simple to attain when blocking the line-of-sight from the noise source to the receiver. For design purposes, the noise barrier should intercept the line of sight from the exhaust stack of a truck to the receptor, and an 11.5-foot-high truck stack height is assumed to represent the truck engine and exhaust noise source. Therefore, any exterior noise barriers at receiving noise sensitive land uses experiencing Project-related traffic noise level increases would need to be high enough and long enough to block the line-of-sight from the noise source (at 11.5 feet high per Caltrans) to the receiver (at 5 feet high per FHWA guidance) in order to provide a 5 dBA reduction per FHWA guidance.



In addition, according to FHWA guidance, outdoor living areas are generally limited to outdoor living areas of frequent human use (e.g., backyards of single-family homes). Therefore, front and side yards of residential homes adjacent to off-site roadway segments do not represent noise sensitive areas of frequent human use that require exterior noise mitigation. Exterior noise mitigation in the form of noise barriers is not anticipated to provide the FHWA attainable reduction of 5 dBA required to reduce the off-site traffic noise level increases and would also require potential openings for driveway access to individual residential lots fronting the road. As such, off-site noise barriers would not be feasible and would not lower the off-site traffic noise levels below a level of significance, and therefore, noise barriers are not proposed as mitigation for the Project.

4.11.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Significant and Unavoidable Impact. Both rubberized asphalt and off-site noise barriers were considered as potential noise mitigation measures to reduce the potentially significant off-site traffic noise level increases, but neither mitigation measure would feasibly nor tangibly reduce the off-site traffic noise levels. Therefore, the Project-related off-site traffic noise level increases along certain roadway segments in the study area are considered a significant and unavoidable impact.

4.11.10 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area for noise considerations is generally defined as surrounding properties that could receive Project-generated noise (either construction-source or operational-source) and would also include roadway corridors affected by Project-related traffic and associated vehicular noise.

A. Construction Noise

As discussed in the preceding analysis, Project construction-source noise would not exceed applicable thresholds and would not substantially contribute to ambient noise conditions or to other related noise sources. There are no known or probable related projects that would interact with the less than significant effects of the Project and thereby result in cumulatively significant impacts. Related projects in the cumulative impact area would be required to minimize construction noise consistent with Town policies and regulations, thereby minimizing cumulative impacts. Based on the preceding, the potential for Project construction-source noise to result in or cause cumulatively significant impacts is considered less than significant.

B. Operational Noise

Project operational noise would not exceed applicable thresholds. Noise levels resulting from Project operations would not substantially contribute to ambient noise conditions or to other related noise sources. There are no known or probable related projects that would interact with the less than significant effects of the Project and thereby result in cumulatively significant impacts. Related projects in the cumulative impact area would be required to minimize operational noise consistent with Town policies and regulations, thereby minimizing cumulative impacts. Based on the preceding, the potential for Project operational noise to result in or cause cumulatively significant impacts is considered less than significant.



C. Off-Site Traffic Noise

Noise level increases associated with Project-generated off-site traffic would exceed applicable thresholds along certain roadway segments in the study area. No feasible mitigation exists to reduce this impact; Project-related off-site traffic noise level increases are considered a significant and unavoidable impact. Accordingly, impacts would be cumulatively significant.

D. Groundborne Vibration and Noise

During construction, the Project's peak vibration impacts would occur during the grading phase when large pieces of equipment, like bulldozers, are operating on-site. Vibration effects diminish rapidly from the source; therefore, the only reasonable sources of cumulative vibration in the vicinity of the Project site could occur on properties abutting these sites. As mentioned above, there are no known active or pending construction projects abutting the Project site that would overlap with the Project's proposed construction schedule. Accordingly, there is no potential for the Project to contribute to the exposure of persons to substantial temporary groundborne vibration or noise.

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration beyond the Project site. Trucks would travel to and from the site along local roadways; however, vibration levels for heavy trucks operating at the posted speed limits on paved surfaces are not perceptible beyond the roadway. The Project would not cumulatively contribute to the exposure of persons to excessive groundborne vibration or noise levels during long-term operation.

E. Airport Noise

There are no conditions associated with implementation of the Project that would contribute airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, there is no potential for cumulative development to expose persons residing or working in the Project area to excessive airport-related noise levels.



4.12 PUBLIC SERVICES

The following analysis is based on information obtained from public service providers, the Town of Apple Valley General Plan (Apple Valley, 2009); and the Town of Apple Valley Municipal Code (Apple Valley, 2024). All references used in this Subsection are listed in EIR Section 7.0, *References*.

4.12.1 EXISTING SETTING

A. *Fire Protection Services*

The Project site receives fire protection services from the Apple Valley Fire Protection District (AVFPD). AVFPD is an independent district, and its western boundary is the Mojave River while its eastern boundary extends as far as the dry lakes toward Lucerne Valley. AVFPD covers 206 square miles in the High Desert area of San Bernardino County. The current population within the AVFPD boundaries is approximately 90,000. The AVFPD currently employs 51 full-time and 3 part-time and reserve personnel. The AVFPD staffs five fire stations full time, all of which provide paramedic services. (AVFPD, n.d.)

AVFPD maintains a mutual aid agreement with Victorville, San Bernardino County Fire Department, and the Bureau of Land Management. This agreement allows fire departments in the region to actively support one another regardless of geographic or jurisdictional boundaries. A joint dispatch center that serves the mutual aid agencies is located in Victorville. AVFPD's desired response time is 6 minutes. Within the Town's corporate limits, the average response time is 6 minutes and 25 seconds (Apple Valley, 2009).

The nearest fire station to the Project site is Station 332 located at 18857 Highway 18, approximately 4.8 miles southwest of the site. The next closest fire station is AVFPD Station 331, located approximately 4.88 miles south of the site, at 22400 Headquarters Dr, Apple Valley, CA 92307.

B. *Police Protection Services*

The Town receives police protection services from the San Bernardino County Sheriff's Department (SBCSD) through a contractual agreement. SBCSD assigns staff to the Apple Valley Police Department (AVPD), which offers police protection services within the approximately 72 square miles that are encompassed by the Town's corporate limits. The Apple Valley Patrol Station is located at 14931 Dale Evans Parkway, approximately 3.8 miles southwest of the Project site. The Station consists of 51 officers and 13 general employees (SBCSD, n.d.). The Town has a population of approximately 75,867 residents, according to the U.S. Census Bureau (USCB, 2024). As such, the Town has approximately one police officer per every 1,500 residents, meeting its desired ratio. The Station responds to high priority calls within 3 to 7 minutes, depending on the time of the day and traffic flow (Apple Valley, 2009).



C. School Services

Under existing conditions, the Project site places no demand on the public school system because the Project site is undeveloped and vacant. The Project site is within the attendance boundaries of Apple Valley Unified School District (AVUSD). Sycamore Rocks Elementary School, Phoenix Academy, and Granite Hills High School are the AVUSD schools serving the Project site. (AVUSD, n.d.)

D. Parks

Within the Town and associated Sphere of Influence there are presently seven mini-parks, two neighborhood parks, three community parks and two special-use parks. The Town offers a comprehensive, year-round recreation program providing leisure time activities to all segments of the Apple Valley population. The Town offers programs designed for physically and mentally challenged children, adult athletic leagues, family activities, puppet theater, toddler and pre-school activities, as well as youth activities and athletics. (Apple Valley, 2009)

4.12.2 REGULATORY FRAMEWORK

A. State

1. Fire Protection Services Regulations and Plans

Public Resources Code (PRC) Sections 4290-4299

These sections establish minimum statewide fire safety provisions pertaining to: roads for fire equipment access; signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these Statewide standards. The State requirements, however, do not supersede more restrictive local regulations.

As defined by CalFire, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards. They consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CalFire has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CalFire every five years (1991, 1996, 2001, etc.) to provide maps identifying the boundaries of lands classified as SRAs to the Riverside County Assessor. (CA Legislative Info, n.d.)

PRC Sections 4102-4127 - State Responsibility Areas (SRAs)

PRC Section 4102 specifies that "State responsibility areas" means areas of the State in which the financial responsibility of preventing and suppressing fires has been determined by the [State Fire] Board pursuant to Section 4125, to be primarily the responsibility of the state." These areas may



contain State or privately-owned forest, watershed, and rangeland. Sections 4126-4127 of the PRC further specify the standards that define what does and does not constitute an SRA. (CA Legislative Info, n.d.)

California Code of Regulations (CCR) Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the CCR refers to the California Building Code which contains complete regulations and general construction building standards of State of California adopting agencies, including administrative, fire and life safety and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, “Materials and Construction Methods for Exterior Wildfire Exposure,” in the 2010 California Building Code addresses fire safety standards for new construction and Section 701A.3.2 addresses “New Buildings Located in Any Fire Hazard Severity Zone.” (CBSC, n.d.)

CCR Title 14 – Natural Resources

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They were prepared and adopted to establish minimum wildfire protection standards in conjunction with building, construction, and development within SRAs. Among other things, Title 14 requires the design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures (fire fuel modification zones, etc.). (CCR, n.d.)

California Government Code (CGC) Sections 51178-51179 – Very High Fire Hazard Severity Zones

Section 51178 specifies that the Director of CalFire, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria and the expected severity of fire hazard. It further specifies that VHFHSZs “shall be based on fuel loading, slope, fire weather and other relevant factors,” including areas subject to Santa Ana winds which are a “major cause of wildfire spread.” Section 51179 states that a local agency must also designate (and map) the VHFHSZs in its jurisdiction by ordinance. Other portions of the Government Code outline when a local agency may use its discretion to exclude areas from VHFHSZ requirements or add areas not designated by the State of California to its VHFHSZ areas. (CA Legislative Info, n.d.)

CGC Section 51182 – Defensible Space

Pursuant to this Code, a person who “owns, leases, controls, operates or maintains an occupied dwelling or occupied structure in, upon or adjoining a mountainous area, forest-covered land, brush-covered land, grass-covered land or land that is covered with flammable material” in a very high fire hazard severity zone designated by the local agency pursuant to § 51179, shall at all times maintain a



specified amount of “defensible space” to protect structures in high fire hazard areas. (CA Legislative Info, n.d.)

Fire Prevention Fees

Pursuant to PRC Section 4213, in July of 2011, the State of California began assessing an annual “Fire Prevention Fee” for all habitable structures within the State’s Responsibility Area (SRA) to pay for fire prevention services. The SRA is the portion of the State where the State of California is financially responsible for the prevention and suppression of wildfires. The SRA does not include lands within incorporated city boundaries, Tribal or federally owned land. As a result of AB 398, California Global Warming Solutions Act of 2006, the fire prevention fee was suspended as of July 1, 2017. (CCR, n.d.)

2. *School Services Regulations and Plans*

Assembly Bill (AB) 16

In 2002, AB 16 created the Critically Overcrowded School Facilities program, which supplements the new construction provisions within the School Facilities Program (SFP). The SFP provides State of California funding assistance for new facility construction projects and modernization projects. The Critically Overcrowded School Facilities program allows school districts with critically overcrowded school facilities, as determined by the California Department of Education (CDE), to apply for new construction projects in advance of meeting all SFP new construction program requirements. Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply. (CA Legislative Info, n.d.)

Leroy F. Greene School Facilities Act of 1998 (Senate Bill [SB] 50)

Senate Bill 50 (SB 50) was enacted by the State Legislature in 1998, which amended existing state law governing school fees. In particular, SB 50 amended prior California Government Code (CGC) Section 65995(a) to prohibit State or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with “any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property...”

The legislation also amended CGC Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “legislative or adjudicative act [involving] the planning, use or development of real property.” Further, SB 50 established the base amount of allowable developer fees: \$1.93 per square foot for residential construction and \$0.31 per square foot for commercial. These base amounts are commonly called “Level 1 fees” and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years.

In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. School districts can impose Level 2 fees, which are equal to 50% of land and construction costs if they: (1) prepare and adopt a school needs analysis for facilities; (2) are



determined by the State Allocation Board to be eligible to impose these fees; and (3) meet at least two of the following four conditions:

- At least 30% of the district’s students are on a multi-track year-round schedule.
- The district has placed on the ballot within the previous four years a local school bond that received at least 50% of the votes cast.
- The district has passed bonds equal to 30% of its bonding capacity.
- Or, at least 20% of the district’s teaching stations are relocatable classrooms.

Additionally, if the State of California’s bond funds are exhausted, a school district that is eligible to impose Level 2 fees is authorized to impose even higher fees. Commonly referred to as “Level 3 fees,” these fees are equal to 100% of land and construction costs of new schools required as a result of new developments. (CA Legislative Info, n.d.)

B. Local

1. Town of Apple Valley General Plan

The Town of Apple Valley identifies policies that relate to public service facilities within the Town. Applicable public service policies are discussed in Table 4.10-1, *General Plan Consistency Analysis*, presented in EIR Section 4.10, *Land Use and Planning*.

2. Town of Apple Valley Municipal Code

Chapter 3.32, Fire Suppression Development Fee Program, of the Town’s Municipal Code allows for the collection of Fire Suppression Development Fees to finance fire suppression facilities, vehicles, and equipment necessary to continue to provide an adequate level of fire protection services in the Town. Prior to the issuance of a building permit for the construction of any commercial, office, or industrial development project within the Town, each developer must pay the necessary Fire Suppression Development Fee.

4.12.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XV of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to public services if the Project or any Project-related component would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*



- i) Fire protection;
- ii) Police protection;
- iii) Schools;
- iv) Parks; or
- v) Other Public Facilities

4.12.4 IMPACT ANALYSIS

Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Fire Protection? Police protection? Schools? Parks? Other Public Facilities?

The Project proposes the construction and operation of three industrial buildings totaling approximately 3.48 million square feet. The Project does not include the construction of a new fires station, police station, school, public park, or recreation and other public facilities.

Project impacts would arise from the construction and operation of industrial uses at the Project site. The Project does not propose the construction of new homes or dwelling units that would directly introduce new residents to the area. Based on the estimated employment rates specified in Table II-B of the Employment Density Study Summary Report prepared by SCAG, warehouse uses within San Bernardino County generate approximately one employee per 1,195 s.f. of building space. As such, the Project may generate approximately 2,913 employees (3,480,646 s.f. ÷ 1,195 s.f./employee = 2,912.67 employees). (SCAG, 2001a, Table II-B) The Project’s employment generation would not induce substantial residential population growth in the area because it is anticipated in the employment growth projections of the Town and would result in industrial-oriented jobs, which are anticipated to attract employees from the Town and surrounding area (see Section 5.4.3, *Population and Housing*, of this EIR). The Project would supply employment opportunities to people already residing in the area.

A. *Fire Protection Services*

Construction of the Project would result in an increase in demand for fire protection services due to the increase of employees onsite. However, this increase would be temporary, short-term, and would cease upon completion of the construction activities. Therefore, impacts related to fire protection services during construction would be less than significant.

During operation, the Project is expected to create the typical range of fire and emergency service calls, and would increase call volumes due to the anticipated employee generation, which impacts response times for emergency and non-emergency services. As per Policy 1.H of the Police and Fire Protection Element of the Town’s General Plan, the AVFPD maintains a response goal of 6-minutes or less. Within the Town’s corporate limits, the average response time is 6 minutes and 25 seconds. The AVFPD’s desired ratio for full-time fire personnel to population is approximately 1:1,500. (Apple



Valley, 2009) The Town currently has full-time fire personnel ratio of 1:1,405 based on 54 fire personnel and the existing Town population of 75,867 (USCB, 2024). Project development would occur in an area of the Town already served by AVFPD. A need for new or expanded public services, such as fire protection facilities, is typically associated with a population increase. The Project does not propose the construction of new homes or dwelling units that would directly introduce new residents to the area, and as concluded in Section 5.4.3, *Population and Housing*, the Project would not directly or indirectly induce unplanned population growth in the Town. The Project's permanent employment requirements could likely be met by the Town's existing labor force without people needing to relocate into the Project region as the Town is within a housing-rich area. The AVFPD's ratio for full-time personnel to population would not decrease as the Project would not result in an increase in population growth. Therefore, the Project would not result in an expansion of AVFPD's service area as the service ratio would be maintained. In the event of an emergency within the Project site that requires more resources than the primary fire station (Station 332 located approximately 4.8 miles southwest of the site) that serve the area could provide, AVFPD would direct resources to the site from other AVFPD stations (Station 331 located approximately 4.88 miles south of the site) nearby. Additionally, as previously discussed, AVFPD maintains a mutual aid agreement with Victorville, San Bernardino County Fire Department, and the Bureau of Land Management. This agreement allows fire departments in the region to actively support one another regardless of geographic or jurisdictional boundaries.

The Project does not propose or require construction or modification of fire protection facilities. The Project site is not designated or proposed as the location for new or modified fire protection facilities. Incremental fire protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the Town's Development Impact Fees are allocated for fire protection services. The Project Applicant would pay incumbent Town Development Impact Fees at issuance of building permit(s). Furthermore, the Project is required to comply with Town and AVFPD fire prevention and suppression requirements, including building/site design requirements, fire flow adequacy, and provisions for emergency access, thereby reducing potential increased demands for fire protection services.

Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities is considered less than significant.

B. Police Protection Services

Buildout of the Project would increase demands for police protection services in the Project area. During the construction and operation of the Project, the need for police services is expected to grow due to the increase in employment and associated potential for additional crime and accidents. Crime and safety issues during Project construction may include theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. After construction, the Project is anticipated to generate a typical range of police service calls as similar developments, such as vehicle burglaries, disturbances, and driving under the influence.



A need for new or expanded public services, such as police facilities, is typically associated with a population increase. The proposed Project does not include the construction of new homes. While the proposed Project would lead to increased employment on site, the proposed Project would not induce substantial population growth as concluded in Section 5.4.3, *Population and Housing*. Police units are continuously mobile, and service calls are responded to by the nearest available mobile unit. The AVPD prefers a ratio of one police officer per 1,500 population. The average response time for highest priority emergency calls is five minutes (Apple Valley, 2009). The AVPD currently has a ratio of 1:1,488 based on 51 police officers and the existing Town population of 75,867 (USCB, 2024). The increase in potential services needed would not require the construction of a new police station or improvements to the existing station that serves the Project site. As concluded in Section 5.4.3, *Population and Housing*, no increases in population would result from the implementation of the Project; thus the Town's service ratio one police officer per every 1,500 residents would be maintained.

Moreover, the Project does not propose or require construction or modification of police protection facilities. The Project site is not designated or proposed as the location for new or modified police protection facilities. Incremental police protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the Town's Development Impact Fees are allocated for police protection services. The Project Applicant would pay incumbent Town Development Impact Fees at issuance of building permit(s).

Additionally, the Project site plan concept and proposed building designs would be reviewed by the Apple Valley Police Department to ensure incorporation of appropriate safety and security elements. Such design features would include secure building designs, defensible spaces, and area and facility security lighting. These design features would act to reduce Project demands for police protection services.

Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered police protection facilities is considered less than significant.

C. School Services

The Project does not propose residential uses that would result in populations of resident school-aged children requiring public education. As discussed in EIR Section 5.4.3, *Population and Housing*, the Project may generate approximately 2,913 employees which would likely be met by the Town and Project region's existing labor force without employees (or their children) needing to relocate into the Project region. The Project site is located within a housing-rich area and would contribute to a more balanced jobs-housing ratio at Project buildout. The Project would not stimulate population growth or a population concentration above what is assumed in the NAVISP and the Town's General Plan. Therefore, the Project would not directly cause or contribute to a need to construct new or physically altered public school facilities.



The Project does not propose or require construction or modification of school facilities. The Project site is not designated or proposed as the location for new or modified school facilities. Project incremental impacts to school services would be offset through payment of school impact fees. The Project Applicant would pay incumbent school impact fees at issuance of building permit(s). Payment of school impact fees would reduce the Project's potential impacts to school services to levels that would be less than significant.

D. Parks

As discussed in EIR Section 5.4.3, *Population and Housing*, the Project does not propose residential uses and would not directly or indirectly induce unplanned population growth in the Town. Thus, the Project would not increase demands for parks or park services. The potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered parks facilities is less than significant.

E. Other Public Facilities

Given the industrial nature of the Project and the lack of population growth that would result from the Project, the Project would not increase the use of libraries and other public facilities. Based on the preceding, the potential for the Project to result in substantial adverse physical impacts associated with the provision of the new or physically altered other public facilities is considered less than significant.

4.12.5 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The Project does not propose or require construction or modification of any public facilities. Incremental service demands generated by the Project would be offset through the payment of Development Impact Fees, a portion of which is allocated for the maintenance of public facilities. The potential for the Project to result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities is considered less than significant.

4.12.6 MITIGATION

No mitigation is required. Impacts would be less than significant, and mitigation is not required.

4.12.7 CUMULATIVE IMPACT ANALYSIS

The cumulative study area is based on the service area for the applicable public service provider serving the Project site. Local population growth would result in an increased demand for public services and facilities. Service providers would continue to evaluate levels of service and potential funding sources to meet demand. The Town performs long-range planning for the provisions of public services and facilities based on its growth projections, which are revised over time.

As discussed above, Project impacts to fire and police protection services would be less than significant. Development of the site has been anticipated by the Town's General Plan and thus included



in the planning and forecasting of the provision of public services. Additionally, as with the Project, all development within the Town is subject to payment of Development Impact Fees to ensure the adequate provision of services and maintenance of facilities. Increased property and sales tax from future new developments would provide funding for any capital improvements necessary to maintain adequate fire and police protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion or facility improvements, AVFPD and AVPD would be able to ensure that their performance objectives are consistently met. Furthermore, the Project, as well as all cumulative developments, would be subject to review by the AVFPD and the AVPD ensuring appropriate safety requirements are met. Accordingly, the Project would have a less-than-cumulatively-considerable impact on fire and police protection services.

Moreover, the Project does not include any residential land uses and, therefore, is not expected to result in a significant increase in demand for schools, parks, or other public facilities. Cumulative projects would also be required to pay school impact fees pursuant to Government Code Section 65995. Since the Project would have a less-than-significant impact on school service, park services, and other public facilities, cumulative project impacts would be less than significant.



4.13 TRANSPORTATION

This Subsection is based, primarily, on information presented in the following reports:

- *Lake Creek Logistics Center Vehicle Miles Traveled (VMT) Analysis* (Urban Crossroads, Inc.), October 31, 2024.
- *Lake Creek Logistics Center Traffic Analysis* (Urban Crossroads, Inc.), June 23, 2025.

These reports are included in this EIR as *Technical Appendix K1* and *Technical Appendix K2* respectively.

This Subsection assesses transportation impacts resulting from implementation of the Project. In accordance with Senate Bill (SB) 743, further discussed under Subsection 4.13.2 below, the California Natural Resources Agency (CNRA) adopted changes to the CEQA Guidelines in December 2018, which identify that starting on July 1, 2020, vehicle miles traveled (VMT) is the appropriate metric to evaluate a project's transportation impacts. As of December 2018, when the revised CEQA Guidelines were adopted, automobile delay, as measured by "level of service" (LOS) and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Lead agencies in California are required to use VMT to evaluate project-related transportation impacts.

4.13.1 ENVIRONMENTAL SETTING

The Project site is currently vacant and does not generate any vehicle trips. The existing roadway system, truck routes, transit service, and pedestrian facilities are described below.

A. Existing Roadway System

The Project site is located along Central Road, south of Gustine Street, and north of Corwin Road. Existing traffic on nearby roadways consists of both passenger vehicles and trucks passing through the area and accessing nearby land uses. The primary regional vehicular travel route serving the Project area is Interstate 15 (I-15), located approximately five miles west of the Project site.

B. Existing Truck Routes

Town-designated Through Truck Routes within the Project area include Central Road, Waalew Road, Dale Evans Parkway and Johnson Road between Dale Evans Parkway and Central Road. Stoddard Wells Road and Johnson Road west of Dale Evans Parkway are also designated Local Truck Routes.

C. Existing Transit Services

The Project area is currently served by Victor Valley Transit Authority (VVTA), a public transit agency serving various jurisdictions within San Bernardino County. Route 42 currently runs along Dale Evans Parkway, Johnson Road, and Corwin Road. Transit service is reviewed and updated by VVTA



periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

D. Bicycle and Pedestrian Facilities

There are no pedestrian facilities in close proximity to the Project site. Field observations indicated nominal pedestrian and bicycle activity near the Project vicinity.

4.13.2 REGULATORY FRAMEWORK

A. Senate Bill 743 and VMT-Based Analysis

Senate Bill 743, which was codified in Public Resources Code (PRC) Section 21099, requires changes to the CEQA Guidelines regarding the analysis of transportation impacts. Pursuant to PRC Section 21099, the criteria for determining the significance of transportation impacts must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” To that end, in developing the criteria, OPR proposed, and the CNRA certified and adopted changes to the CEQA Guidelines in December 2018, which entailed changes to the thresholds of significance for the evaluation of impacts to transportation.

The updated CEQA Guidelines include the addition of Section 15064.3 which establishes criteria for evaluating a project’s transportation impacts based on project type and using automobile VMT as the metric. As identified in Section 15064.3(b)(4), a lead agency has the discretion to choose the most appropriate methodology to evaluate a project’s VMT. Pursuant to SB 743 and PRC Section 21099, the requirement for analyzing congestion impacts for CEQA purposes was eliminated in December 2018.

B. SCAG Regional Transportation Plan/Sustainable Communities Strategy

As further discussed in Section 4.10, *Land Use and Planning*, of this EIR, the Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. (SCAG, 2024a)The Project site is within SCAG’s regional authority.

In April 2024, SCAG adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also referred to as “Connect SoCal.” The RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. These goals are meant to provide guidance for considering a proposed project within the context of regional goals and policies. (SCAG, 2024b)



C. San Bernardino County Congestion Management Plan

The intent of the Congestion Management Plan (CMP) is to provide the analytical basis for transportation decisions. Although implementation of the CMP was made voluntary by the passage of AB 2419, the CMP requirement has been retained in all five urban counties within the SCAG region. The goals of the San Bernardino County CMP are to:

- Goal 1. Maintain or enhance the performance of the multimodal transportation system and minimize travel delay.
- Goal 2. Assist in focusing available transportation funding on cost-effective responses to subregional and regional transportation needs.
- Goal 3. Provide for technical consistency in multimodal transportation system analysis.
- Goal 4. Help to coordinate development and implementation of subregional transportation strategies across jurisdictional boundaries.
- Goal 5. Anticipate the impacts of proposed new development on the multimodal transportation system, provide consistent procedures to identify and evaluate the effectiveness of mitigation measures and provide for adequate funding of mitigations.
- Goal 6. Promote air quality and improve mobility through implementation of land use and transportation alternatives or incentives that reduce both vehicle trips and miles traveled and vehicle emissions.

D. Measure "I" Funds

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure "I", a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure "I" extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by San Bernardino County Transportation Authority (SBCTA) and concluded that each jurisdiction should include a regional fee component in their local programs to meet the Measure "I" requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in September 2017. Revenues collected through these programs are used in tandem with Measure "I" funds to deliver projects identified in the Nexus Study.

While Measure "I" is a self-executing sales tax administered by SBCTA, it bears discussion here because the funds raised through Measure "I" have funded in the past, and will continue to fund, new transportation facilities in San Bernardino County, including within the Town of Apple Valley.



E. Town of Apple Valley General Plan Circulation Element

The purpose of the Circulation Element of the General Plan is to provide for a safe, convenient and efficient transportation system for the Town. In order to meet this objective, the Circulation Element has been designed to accommodate the anticipated transportation needs based on the estimated intensities of various land uses within the region. The Circulation Element provides maps to guide the orderly development of all aspects of the transportation system, as well as goals, policies and programs that correlate the Town’s transportation system with the types, intensities, and locations of land uses within the planning area. The goals, policies and programs applicable to the proposed Project and a discussion of the Project’s consistency are provided under the discussion of Threshold a, below.

F. Town of Apple Valley Development Impact Fee Program

The Town of Apple Valley has implemented a Development Impact Fee (DIF) program. This program collects fees from new single-family residential, multi-family residential, commercial, office use, and industrial developments. These fees serve to fund compliant regional facilities as well as local facilities such as fire protection, law enforcement, storm drainage, sanitary sewer, parks, and general government fees. Under the Town’s DIF program, the Town may grant developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

G. Fair Share Contribution

Project improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the Town’s discretion). When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements.

4.13.3 METHODOLOGY

CEQA Guidelines Section 15064.3(b) establishes criteria for evaluating a project’s transportation impacts based on project type and using automobile VMT as the metric. As identified in Section 15064.3(b)(4) of the CEQA Guidelines, a lead agency has the discretion to choose the most appropriate methodology to evaluate a project’s VMT. The Governor’s Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA(OPR, 2018).

To comply with CEQA, the Town of Apple Valley adopted Resolution No. 2021-08, “A Resolution of the Town Council of the Town of Apple Valley, California, Adopting Thresholds of Significance for Vehicle Miles Traveled (VMT) Under the California Environmental Quality Act (CEQA)” on May 11, 2021, which documents the Town’s adopted VMT methodology and impact thresholds based on guidance as provided by the San Bernardino County Transportation Authority’s (SBCTA) “Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service



Assessment” (February 2020). The Project’s VMT analysis was prepared based on the Town’s adopted VMT Guidelines.

Due to the speculative nature of the Project, the use of cold storage has been assumed to account for potential future tenant needs. For the purposes of this analysis, the Project mix assumes 10% general light industrial, 10% high-cube cold storage warehouse use, and 80% high-cube fulfillment center warehousing use.

4.13.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XVI of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to transportation and traffic if the Project or any Project-related component would:

- a. *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*
- b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*
- c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- d. *Result in inadequate emergency access.*

4.13.5 IMPACT ANALYSIS

Threshold a: *Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Circulation system and mobility plans and policies applicable to the Project include SCAG’s Connect SoCal, San Bernardino County Congestion Management Plan, the NAVISP, and the Town of Apple Valley General Plan Circulation Element. An analysis of the Project’s potential to conflict with these plans is presented below.

A. *SCAG 2024-2050 RTP/SCS*

SCAG’s Connect SoCal seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. Table 4.10-1, *SCAG Policy Consistency Analysis*, in Section 4.10, *Land Use and Planning*, of this EIR, addresses the Project’s consistency with SCAG’s Connect SoCal. As shown, the Project would not conflict with any applicable 2024-2050 Connect SoCal policies such as Policy 03 and Policy 05 under the Mobility Element. The Project would contribute to a safe, multimodal network and would include roadway improvements to accommodate site access and maintain acceptable peak hour operations. Project consistency with Connect SoCal illustrates consistency with goals set forth for the Project region. As demonstrated,



implementation of the Project would not conflict with the goals and policies of SCAG's regional planning program.

B. San Bernardino County Congestion Management Plan

The intent of the San Bernardino County CMP is to provide the analytical basis for transportation decisions. The Project would be consistent with the applicable goals and elements of the San Bernardino County CMP shown in section 4.13.2 above. The Project would not impede the ability to maintain or enhance the performance of the multimodal transportation system. The Project would include roadway improvements to serve internal circulation needs and minimize impacts to travel delay. None of the proposed roadway improvements would interfere with the existing or potential future improvements to the County's multimodal transportation system. The Project would participate in the Town's Development Impact Fee program, which is coordinated with regional planning efforts in Victor Valley to meet regional transportation needs and to provide for adequate funding of mitigation for impacts of new development, consistent with the CMP. The CMP System LOS Element and Performance Measures Element also contain LOS standards for CMP designated highways and roadways. However, there are no designated CMP roadways in the Project study area; therefore, the Project would have no impact on these roadways. Accordingly, the Project would not conflict with the San Bernardino County CMP.

C. North Apple Valley Industrial Specific Plan

The NAVISP was prepared to establish long-term development goals, standards and guidelines for 6,220-acres including and surrounding Apple Valley Airport. A majority of Project site lands are designated as (I-SP) Specific Plan Industrial, while the southeasterly portion of the site is designated (C-G) General Commercial.

To accommodate the Project's anticipated future use mix, the Specific Plan would be amended to redesignate the 35 acres located in the southeastern part of the Project site (APN 0463-373-06) from C-G to I-SP. Please refer to Figure 3-12, presented within EIR Section 3.0, *Project Description*.

The Project would be implemented consistent with all development standards required by the I-SP land use designation, as presented in Table 4.1-1, *Zoning Development Standards Consistency Analysis*. All Project plans would be reviewed by Town staff to ensure consistency with all applicable development standards and regulations, precluding significant conflicts with the NAVISP. Accordingly, the Project would not conflict with the NAVISP.

D. Town of Apple Valley General Plan Circulation Element

Table 4.13-1, *General Plan Circulation Consistency Analysis*, presents a discussion of the Project's consistency with the goals, policies and programs of the Town's General Plan Circulation Element.



Table 4.13-1 General Plan Circulation Consistency Analysis

General Plan Goal, Policy or Program	Consistency Analysis
Goal – The Town shall continue to maintain and expand	a safe and efficient circulation and transportation system.
<p>Policy 1.A The street system recommended in the Town's Circulation Map shall be strictly implemented.</p>	<p>No Conflict. All roadway improvements constructed as part of the Project would be implemented consistent with Town standards. As discussed in Section 3.0, <i>Project Description</i>, six driveways would be constructed on Gustine Street, one driveway on Central Road, and six driveways on Corwin Road. All driveways would be stop-controlled and allow for full turning movements. Additionally, the Project would provide an additional 12 feet of pavement width along Gustine Street and Corwin Road to accommodate one lane on the opposite side of the street.</p>
<p>Policy 1.C Sidewalks shall be provided on Local Streets of 60 feet in width and on all roadways 88 feet wide or wider. In Rural Residential land use areas designated pathways may be provided as an alternate to sidewalks.</p>	<p>No Conflict. As presented in Section 3.0, <i>Project Description</i>, the Project would construct curb, gutter, and sidewalk improvements along the Project site frontages.</p>
<p>Policy 1.D Traffic calming devices shall be integrated into all Town streets to the greatest extent possible.</p>	<p>No Conflict. As discussed above and in Section 3.0, <i>Project Description</i>, all roadway improvements constructed as part of the Project would be consistent with Town standards.</p>
<p>Policy 1.E Bus pullouts shall be designed into all new projects on arterial roadways, to allow buses to leave the flow of traffic and reduce congestion.</p>	<p>No Conflict. Central Road is designated as an arterial roadway; however, transit service is not currently available adjacent to the site. Transit service is reviewed and updated by VVTA periodically to address ridership, budget and community demand needs. The Project would consult with VVTA as directed by the Town.</p>
<p>Policy 1.F Local streets shall be scaled to encourage neighborhood interaction, pedestrian safety and reduced speeds.</p>	<p>No Conflict. As discussed above and in Section 3.0, <i>Project Description</i>, all street improvements would be implemented consistent with Town requirements.</p>
<p>Policy 1.H New development proposals shall pay their fair share for the improvement of street within and surrounding their projects on which they have an impact, including roadways, bridges, and traffic signals.</p>	<p>No Conflict. As detailed in the Traffic Analysis (<i>Technical Appendix K2</i>) prepared for the Project, fair share fee contributions would be assessed of the Project toward the improvement of area roadways.</p>
<p>Policy 1.I Pedestrian access shall be preserved and enhanced.</p>	<p>No Conflict. As presented in Section 3.0, <i>Project Description</i>, the Project would construct curb, gutter, and sidewalk improvements along the Project site frontages. Additionally, the Project includes internal pedestrian circulation facilities where appropriate.</p>
<p>Policy 1.J The Town shall implement a coordinated and connected bicycle lane network consistent with the Bicycle Lane Map in this Element.</p>	<p>No Conflict. The Project would have no effect on the implementation of this Policy.</p>

Source: (Apple Valley, 2009)



As demonstrated above, the Project would not conflict with any program, plan, ordinance or policy addressing the circulation system. Impacts in this regard would be less than significant.

Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

VMT Guidelines, as adopted by the Town, state that a project would result in a significant project-generated impact if either of the following conditions are satisfied:

1. The baseline project generated VMT per Service Population (SP) exceeds the Town of Apple Valley General Plan Buildout VMT per SP, or
2. The cumulative project generated VMT per SP exceeds the Town of Apple Valley General Plan Buildout VMT per SP.

A project’s effect on VMT would be considered significant if it results in either of the following conditions to be satisfied:

3. The baseline link-level boundary Town-wide VMT per SP increases under the plus project condition compared to the no project condition, or
4. The cumulative link-level boundary Town-wide VMT per SP increases under the plus project condition compared to the no project condition.

The San Bernardino Transportation Analysis Model (SBTAM) is a travel forecasting model that represents a sub-area (San Bernardino County) of the SCAG regional traffic model and was designed to provide a greater level of detail and sensitivity in the San Bernardino County area as compared to the regional SCAG model. The Town of Apple Valley’s VMT per capita was calculated utilizing the SBTAM’s horizon year (2040) traffic model, which is the recommended model for VMT analysis for land use projects within the region as it considers interaction between different land uses based on socioeconomic data, such as population, households, and employment. All Traffic Analysis Zones (TAZs) located within Town of Apple Valley were selected and the Total VMT was calculated from SBTAM. For ease of comparison, the VMT for the Town was then divided by the Town’s service population. Resulting in the Town of Apple Valley’s General Plan Buildout average of 33.2 VMT per service population, as presented in Table 4.13-2.

Table 4.13-2 General Plan Buildout VMT per Service Population

	GP Buildout
Total VMT	4,212,258
Service Population	126,806
VMT per Service Population	33.2

Source: (Urban Crossroads, 2024)



Consistent with the Town’s adopted VMT Guidelines, the Origin/Destination (OD) method has been utilized to estimate project-generated VMT and is presented as total VMT per Service Population (SP). Total VMT provides an estimate of the total vehicle travel (inclusive of both cars and trucks), while VMT per person/employee measures the efficiency of travel. Total VMT per SP is an efficiency metric that represents all VMT generated on a typical weekday per person who lives and/or works in a given area (e.g., Project Boundary or Town of Apple Valley). As the Project proposes only industrial land uses, its SP would be comprised solely of employees. Project impacts were estimated using the following methods:

- **Origin/Destination (OD) VMT**
The OD method for calculating VMT sums all weekday VMT generated by trips with at least one trip ending in the study area and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific traffic analysis zone (TAZ) and destinations are all vehicle trips that end in a specific TAZ.
- **Boundary VMT Method**
The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (e.g., Town boundary or other designated geographic area). The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment’s length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary.

The VMT estimates performed for the Project along with a comparison of the Town’s impact threshold are presented in Table 4.13-3.

Table 4.13-3 Project-Generated VMT

	Baseline	Cumulative
SP	2,913	2,913
Total OD VMT	106,200	106,191
OD VMT per SP	36.5	36.5
Town Threshold	33.2	33.2
Potentially Significant?	Yes	Yes

Source: (Urban Crossroads, 2024)

As shown above, Project-generated VMT was found to exceed the Town’s VMT per SP impact threshold. This is considered a potentially significant impact.

Table 4.13-4 presents an assessment of the Project’s effect on VMT using the boundary method. The Project’s effect on VMT is measured by comparing Town-wide VMT per service population without and with the proposed Project for both baseline and cumulative traffic conditions.



Table 4.13-4 Boundary VMT

	Baseline		Cumulative	
	No Project	With Project	No Project	With Project
SP	103,011	105,923	126,806	129,718
Boundary VMT	912,359	939,288	1,206,225	1,233,765
VMT per SP	8.9	8.9	9.5	9.5
Change in VMT per SP	0.0		0.0	
Potentially Significant?	No		No	

Source: (Urban Crossroads, 2024)

The Project’s effect on VMT was found to remain unchanged in the With Project scenario as compared to the No Project scenario for both the baseline and cumulative conditions. The Project’s effect on VMT, using the Boundary VMT method, was found to be less than significant.

Threshold c: *Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

The Project is generally consistent with Town’s vision for the area, as evidenced by the site’s existing land use designation. The types of traffic generated during operation of the Project (i.e., passenger cars and trucks) would be compatible with the type of traffic observed along adjacent roadways under existing conditions.

Efficient and safe access within, and access to, the Project is provided by the site plan design concept, site access improvements, and site adjacent roadway improvements included as components of the Project. The Project would construct six driveways on Gustine Street, one driveway on Central Road, and six driveways on Corwin Road to accommodate safe and efficient site access as well as allow for full truck turning movements. Additionally, the Project would construct Gustine Street, Central Road, and Corwin Road along the Project’ frontages at their ultimate half section width in accordance with the Town’s standards. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the Project site. Sight distance at each Project access point would be reviewed to ensure conformance with Town sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

Trucks accessing the Project site would be required to travel along Town-designated truck routes. Mandatory use of truck routes would minimize potential conflicts between truck traffic and other motorized and non-motorized transportation modes.

The potential for the Project to substantially increase hazards due to a geometric design feature or incompatible uses is considered less than significant.



Threshold d: *Would the Project result in inadequate emergency access?*

The Project does not propose elements or aspects that would obstruct or restrict emergency access to or through the area. Additionally, representatives of the Apple Valley Fire Protection District (AVFPD) and San Bernardino County Sheriff's Department (SBCSD) would review the Project's plans to ensure that emergency access is provided consistent with AVFPD and SBCSD requirements.

A. Construction

All Project construction materials and equipment would be stored/staged on the Project site and would not interfere with emergency vehicles traveling adjacent to the site. Any Project construction activities that would occur within the public right-of-way and require a partial or full closure of a sidewalk or vehicle travel lane would require a traffic control plan that complies with the California Manual on Uniform Traffic Control Devices and that must be approved by Town to ensure that emergency response is not adversely affected.

B. Operation

The types of traffic generated during operation of the Project (i.e., passenger cars and trucks) would be compatible with the type of traffic observed along surrounding roadways under existing conditions and would not interfere with the circulation of emergency vehicles along public streets adjacent to the Project site. As discussed above, Project plans would be reviewed and approved by AVFPD and SBCSD to ensure that adequate emergency access is provided throughout the site.

Based on the preceding, the potential for the Project to result in inadequate emergency access is considered less than significant.

4.13.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The Project is consistent with the applicable adopted plans and policies.

Threshold b: Potentially Significant Impact. Project-generated VMT was found to exceed the Town's VMT per SP impact threshold and would result in a potentially significant VMT impact. The Project's effect on VMT was found to remain unchanged in the With Project scenario as compared to the No Project scenario for both the baseline and cumulative conditions. The Project would result in a potentially significant VMT impact.

Threshold c: Less than Significant Impact. No significant transportation safety hazards would be introduced as a result of the proposed Project.

Threshold d: Less than Significant Impact. Adequate emergency access would be provided to the Project site during construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.



4.13.7 MITIGATION

MM 4.13-1 Prior to the issuance of the certificate of occupancy for each tenant, the Project operator or tenant shall: 1) prepare and submit a Transportation Demand Management (TDM) Program to the Town Engineer for review, detailing strategies for reducing the use of single occupant vehicles by employees; and 2) provide written documentation to the satisfaction of the Town that the TDM Program requirement is incorporated into any lease agreement for the project site to ensure enforceability. The TDM Program shall include all feasible transportation measures recommended by California Air Pollution Control Officers Association (CAPCOA) and analyzed in the VMT report (see EIR *Technical Appendix KI*) as calculated pursuant to the “CAPCOA Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity” or other substantial evidence. Transportation measures to be considered in the TDM Program may include, but are not limited to:

- **T-11 Provide Employer-Sponsored Vanpool.** Employer-sponsored vanpool service to provide groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting and reduce overall commute VMT.
- **T-7 Commute Trip Reduction (CTR) Marketing,** to educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT, including:
 - Onsite or online commuter information services.
 - Employee transportation coordinators.
 - Onsite or online transit pass sales.
 - Guaranteed ride home service.
- **T-8 Ridesharing Program.**
 - Designating a certain percentage of desirable parking spaces for ridesharing vehicles.
 - Designating adequate passenger loading and unloading and waiting areas for ridesharing vehicles.
 - Providing an app or website for coordinating rides.
- **T-10 End-of-Trip Bicycle Facilities.** The Project shall install and maintain end-of-trip facilities for employee use. End-of-trip facilities may include bike parking, bike lockers, showers, and personal lockers.

4.13.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold b: Significant and Unavoidable Impact. Implementation of the preceding mitigation is expected to reduce a portion of the Project’s VMT impact as it promotes transit and alternative transportation, use of alternatively fueled vehicles, and practices to reduce vehicle trips. However, even with the inclusion of mitigation, the Project will not be able to mitigate its VMT impact to a level of less than significant and impacts would remain significant and unavoidable.



4.13.9 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development. The analysis under Threshold a indicates that the Project would not conflict with relevant SCAG’s Connect SoCal, the San Bernardino County CMP, the NAVISP, and the Town’s General Plan policies addressing the circulation system. Further, the Project does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. Other development projects would be expected to comply with all applicable relevant programs, plans, and policies. Therefore, no cumulative impact would occur.

The Governor's Office of Land Use and Climate Innovation’s Technical Advisory states that “a project that falls below an efficiency-based threshold (e.g., VMT per service population) that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less than significant project impact would imply a less than significant cumulative impact and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance.” As discussed under Threshold b, even with the implementation of mitigation, VMT impacts of the Project would be significant and unavoidable at the Project level, and therefore, would also be cumulatively significant and unavoidable. Related projects in the cumulative impact area would similarly be required to minimize impacts to the extent feasible and demonstrate compliance with Town programs, plans, policies and ordinances addressing the above topics, thereby minimizing potential cumulative impacts.

As discussed under Threshold c, based on the review of the Project site driveways and proposed roadway improvements, no safety concerns relating to geometric design of the Project site access points would occur. Furthermore, the Project is compatible with the uses in the immediately surrounding area. Therefore, impacts are not considered to be cumulatively-considerable and no significant cumulative impact would occur.

As discussed under Threshold d, the Project would not result in inadequate emergency access. Therefore, the Project would not cumulatively contribute to inadequate emergency access, and no cumulative impact would occur.



4.14 TRIBAL CULTURAL RESOURCES

The analysis presented within this Subsection is based primarily on information obtained from the following technical report:

- *Cultural Resources Assessment for the Lake Creek Logistics Center Project, Town of Apple Valley, San Bernardino County, California* (Chronicle Heritage) January 30, 2025.

The Cultural Resources Assessment is included as *Technical Appendix D* to this EIR. Confidential information has been redacted from *Technical Appendix D* for the purposes of public review. In addition, much of the written and oral communication between Native American tribes, the Town of Apple Valley, and Chronicle Heritage is considered confidential in respect to places that may have traditional tribal cultural significance (Government Code Section 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (California Code Regulations Section 15120(d)). As such, sensitive information is not appended to this EIR.

All references used in this Section are listed in EIR Section 7.0, *References*.

4.14.1 ENVIRONMENTAL SETTING

A. *Ethnohistoric Setting*

The Project area encompasses the traditional use area of the Vanyume and the Serrano. Ethnographic information on each of these groups is provided below.

1. *Vanyume*

The Vanyume, sometimes referred to as the Desert Serrano, are a subdivision of the Serrano who resided along the Mojave River corridor in the Victorville region and to the north and east along the river as far as Soda Lake. At the time of Spanish contact, the Project area was likely occupied by the Vanyume, a Takic-speaking branch of the larger Uto-Aztecan (or Shoshonean) language family. The Vanyume territory is generally accepted as consisting of the area south of the lower Mojave Riverbed and to the southeast into the foothills of the San Bernardino Mountains, and to the north and east along the river as far as Soda Lake.

Diary accounts of travel through the Mojave River region left by Franciscan missionaries Father Garces (1776), Zalvidea (1806), and Nuez (1819) have provided important information on Native settlement, village locations, and place names along the Mojave River. Both Garces and Jedediah Smith heard versions of the term Vanyume used to refer to the Native inhabitants of the Mojave River corridor. The Native peoples of the Mojave River region were a linguistically differentiated desert division of the Serrano language and culture group, the latter being historically associated with the San Bernardino Mountains and surrounding areas. Mojave groups along the Colorado River also appeared to



distinguish between what they called the Vanyume of the Mojave River and the Serrano-speakers of the San Bernardino Mountains region.

Ethnohistorical information on the Mojave River area from the 1770s through the 1840s makes it clear that the Mojave River communities of the Vanyume had developed long-standing political and social ties with the Mojave and functioned as intermediaries in the long-distance trade networks maintained by the Mojave. Mojave traders negotiating the Mojave River route on the way to the coast to obtain shell beads and ornaments, which served as an important medium of exchange, relied on the Vanyume for food and shelter along the trek, as they did not carry their own supplies. Gifts of shell beads and other goods were bestowed upon the Vanyume as reciprocal exchanges for this hospitality, and cemented relationships between the two groups.

Vanyume settlements were along the Mojave River drainage and to the southeast in the foothills of the San Bernardino Mountains. The location of Ahamoha, or birthplace of Moha, a Vanyume informant to Kroeber who survived an attack by the Mojaves in the 1830s, is somewhere in the Barstow-Daggett area. Moha herself placed the village near Daggett, though a Mojave informant to Kroeber stated that it was a few miles north of Victorville. The village was apparently occupied by the Vanyume during the 1820s.

A second village site, Timina, was reportedly at Newberry Springs. This village was apparently occupied by the Vanyume prior to the 1830s. Further to the east, along the lower reaches of the Mojave River, were the Vanyume settlements of Angayaba, near the later site of Camp Cady, Asambeat, in Afton Canyon, and Guanachique, on the vicinity of Soda Lake.

2. *Serrano*

The Serrano also belong to the Takic-speaking branch of the larger Uto-Aztecan language family. Serrano territory included the San Bernardino Mountains, east of Cajon Pass, and the desert area that is immediately south of Victorville, extending east as far as Twentynine Palms and south as far as Yucaipa Valley. The Serrano were primarily hunters and gatherers. Vegetal staples varied with village locality: acorns and pinyon nuts in the foothills; mesquite, yucca roots, cacti fruits, and piñon nuts in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds. An increased yield of herbaceous plants was created by periodic burning. Communal gathering expeditions, involving several lineages under one leader's authority, were not uncommon. Deer, mountain sheep, antelope, rabbits, and other small rodents were among the principal animals hunted. Various game birds were also hunted, with quail being the most important. The bow and arrow were used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, especially during annual mourning ceremonies.

Individual family dwellings were occupied by a husband, wife, their unmarried female children, sometimes the husband's parents, and occasionally a widowed aunt or uncle. The Serrano lived in circular, domed structures that were constructed of willow frames and covered with tule thatch. These structures were used primarily as sleeping and storage areas, with most Serrano activities taking place



outside or under a shade structure consisting simply of four posts and a roof. On occasion, an individual would erect a separate house for private use.

Technologically, the Serrano were quite accomplished and produced a vast array of articles. Their manufactured goods included baskets, pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats, bags, storage pouches, and nets. Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured.

The Serrano were organized into exogamous clans. Each of these, in turn, was affiliated with one of two exogamous moieties. Although the exact nature of these clans, including their structure, function, and number is unknown, it has been determined that the clan was the largest autonomous political and landholding unit of the Serrano. The clan was patrilineal: all the male members recognized descent from a common male ancestor. The descendants and wives of these men were also regarded as clan members. When women married, they retained their own lineage names and participated in ceremonies of their natal lineage.

Every clan had a headman or chief, which was a hereditary position passed from father to son. Under unusual circumstances this could pass to the wife of the previous headman. Duties of the head of the clan included determining when and where to collect or hunt, as well as conducting religious and other ceremonies. An assistant (also a hereditary post passing from father to son) assisted the head or chief in these ceremonies. The assistant's duties included taking charge of the sacred bundle (a kit of ceremonial paraphernalia), notification of the time and location of the ceremonies, carrying shell money between groups for ceremonial purposes, and attending to the division of shell money and food at ceremonies.

Like other California Native American groups, the Serrano had a shaman who acquired his various powers through datura-enhanced dreaming. Shamans were mainly curers, who healed their patients through administering herbal remedies and sucking out disease-causing agents.

4.14.2 REGULATORY FRAMEWORK

A. Federal

1. American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) requires each executive branch agency with statutory or administrative responsibility for the management of Federal lands shall, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies also are required to maintain the confidentiality of sacred sites. Each executive branch agency with



statutory or administrative responsibility for the management of Federal lands are required to implement procedures to ensure reasonable notice is provided of proposed actions or land management policies that may restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites. (NOAA, n.d.)

2. *Native American Graves Protection and Repatriation Act (NAGPRA)*

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation.

One major purpose of this statute is to require that federal agencies and museums receiving Federal funds inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies and museums must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. Once lineal descent or cultural affiliation has been established, and in some cases the right of possession also has been demonstrated, lineal descendants, affiliated Indian Tribes, or affiliated Native Hawaiian organizations normally make the final determination about the disposition of cultural items. Disposition may take many forms from reburial to long term curation, according to the wishes of the lineal descendent(s) or culturally affiliated Tribe(s).

The second major purpose of the statute is to provide greater protection for Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on Federal and tribal lands. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archaeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on Federal or tribal lands. Excavation or removal of any such items also must be done under procedures required by the Archaeological Resources Protection Act. This NAGPRA requirement is likely to encourage the in-situ preservation of archaeological sites, or at least the portions of them that contain burials or other kinds of cultural items.

Other provisions of NAGPRA: (1) stipulate that illegal trafficking in human remains and cultural items may result in criminal penalties; (2) authorizes the Secretary of the Interior to administer a grants program to assist museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; authorizes the Secretary of the Interior to penalize museums that fail to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with this Review Committee. (NPS, 2024d)



3. Federal Antiquities Act

The Antiquities Act is the first law to establish that archaeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. (NPS, 2024c)

B. State

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.” (CCR, n.d.)

2. California Code of Regulations Title 14, Section 1427

California Code of Regulations Title 14, Section 1427 provides that: “No person shall collect or remove any object or thing of archaeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archaeological or historical interest or value is found.” (NAHC, n.d.)

3. Traditional Tribal Cultural Places Act (SB 18)

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. SB 18 also requires the Governor’s Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 et seq.) and specific plans (defined in Government Code § 65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453).



Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)

4. *Assembly Bill 52 (AB 52)*

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process.

The Public Resources Code now establishes that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 21084.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015.

Section 21074 of the Public Resources Code defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the State register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017)



5. State Health and Safety Code

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease “In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery...” until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from “internment or a place of storage while awaiting internment” with the intent to sell them or to dissect them with “malice or wantonness” is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that “all California Indian human remains and cultural items are to be treated with dignity and respect.” It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Information, n.d.)

6. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows:

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource*



meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:

- *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
- *Is associated with the lives of persons important in our past;*
- *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
- *Has yielded, or may be likely to yield, information important in prehistory or history.*
- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

4.14.3 METHODOLOGY

The Cultural Resources Assessment included background research, communication with the Native American Heritage Committee (NAHC) and local Native American groups, a cultural resource survey of the Project area, and resource documentation and evaluation. Outreach letters were sent to 24 individuals representing 13 local Native American tribal groups to elicit information on Native American cultural resources that may be in the vicinity of the proposed Project.

4.14.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XVIII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to tribal resources if the Project or any Project-related component would:

- a. *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*
 - i. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*
 - ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c)*



of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.14.5 IMPACT ANALYSIS

Threshold a: *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

As discussed in Section 4.4, *Cultural Resources*, a records search at the South Central Coastal Information System indicated that no cultural resources have previously been recorded within the Project site boundaries. Additionally, results of the Native American Heritage Commission's (NAHC) Sacred Lands Files results were negative for the presence of Native American sacred sites or locations of ceremonial importance within the vicinity of the Project site. The field survey conducted as part of the Cultural Resources Survey did not identify any tribal resources within the Project site.

Assembly Bill 52 (AB 52), which became effective on July 1, 2015, requires lead agencies to provide notice to Native American tribes that are traditionally and culturally affiliated with the geographic area of a Project.

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code 65450 et seq.).

On February 1, 2024, outreach letters were sent to 19 individuals representing 8 local Native American tribal groups, including:

- Chemehuevi Indian Tribe
- Kern Valley Indian Community
- Morongo Band of Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians



- Serrano Nation of Mission Indians
- Twenty-Nine Palms Band of Mission Indians

The outreach letters provided formal notification of the Project, elicited information on Native American cultural resources that may be in the vicinity of the Project site, and offered formal consultation pursuant to AB 52/SB18.

Outreach responses received by the Town are summarized below.

- Agua Caliente Band of Cahuilla Indians (email dated 2/21/24) stated that the Project site is not located within their traditional use area and deferred to other tribes in the area.
- Yuhaaviatam of San Manuel Nation (YSMN) (email dated 2/23/24) stated that although the Project site is located within the Serrano ancestral territory, the Tribe does not have any concerns with the Project's implementation. However, the YSMN requested to be contacted in the event that previously undiscovered resources are unearthed during Project development, and a Cultural Resources Monitoring and Treatment Plan be created in cooperation with the Tribe.
- Morongo Band of Mission Indians (letter dated 2/26/24) stated that the Project site is located within the ancestral territory and traditional use area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. As such, the tribe requested that formal government-to-government consultation be initiated, and listed Project-related maps and documents to be provided for their review. The Tribe also requested tribal participation during all ground disturbing activities.
- Twenty-Nine Palms Band of Mission Indians provided two response letters. In the first letter (dated 2/26/24), the Tribe stated that they are not aware of any resources within the Project area but requested any cultural resource reports be provided for their review. The second letter (dated 4/17/24) stated that the Project site is outside of the known Chemehuevi traditional use area and suggested contacting other tribes who have cultural affiliation with the Project area.
- Kern Valley Indian Community (email dated 3/18/24) expressed concerns regarding the potential for ground disturbing activities to impact resources sacred to the Tribe. As such the Tribe recommended that an affiliated Native American monitor be included during Project-related ground disturbing activities.

At the conclusion of tribal consultation, based on the responses received from area tribes as summarized above, it was determined that Project implementation could potentially impact tribal cultural resources. This is a potentially significant impact.



4.14.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Potentially Significant Impact. The Project may impact previously undiscovered tribal resources.

4.14.7 MITIGATION

4.14-1 Any culturally-affiliated Tribes (including the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN), the Morongo Band of Mission Indians, and/or the Kern Valley Indian Community, as determined by the NAHC) shall be contacted, as detailed in Mitigation Measure MM 4.4-1, of any pre-contact cultural resources discovered during Project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the Tribe(s), and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents the Tribe(s) for the remainder of the Project, should the Tribe(s) elect to place a monitor on-site.

4.14.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less than Significant with Mitigation Incorporated. Mitigation Measure MM 4.14-1 addresses the requests of the responding tribes, and would ensure that any tribal cultural resources identified on-site during ground disturbing activities are appropriately treated as directed by a qualified archaeologist and consulting tribes. Implementation of the required mitigation would reduce the Project's potential impacts to subsurface cultural resources to below a level of significance.

4.14.9 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area for tribal cultural resources generally includes the Town and surrounding areas. Impacts to tribal cultural resources within this area would be site-specific. In the event that potentially significant tribal cultural resources are encountered at any development sites within the cumulative impact area, specific mitigation measures would be applied before construction activities could proceed. The Lead Agency has initiated tribal cultural consultation processes pursuant to AB 52/SB 18. The mitigation presented above establishes monitoring protocols, and provisions for avoidance, protection, or curation of tribal cultural resources that may be identified through the AB 52/SB 18 consultation process. These mitigation measures reduce the Project's potential impacts to tribal cultural resources to less than significant.

There are no known or probable related projects that would interact with the Project and thereby result in cumulatively significant impacts. Additionally, related projects in the cumulative impact area would be required to minimize tribal cultural resources impacts consistent with State, local, and potentially affected Tribe policies and regulations, thereby minimizing cumulative impacts. Based on the preceding, tribal cultural resources impacts of the Project are not cumulatively considerable and the Project cumulative tribal cultural resources impacts would be less than significant.



4.15 UTILITIES AND SERVICE SYSTEMS

Information presented within the Subsection is summarized from the following documents:

- *Preliminary Hydrology Calculations for the Apple Valley Assemblage, Southwest Corner Of Gustine Street and Central Road, Apple Valley, California* (Thienes Engineering, Inc.) September 5, 2024.
- *Water Supply Assessment, Apple Valley Logistics Center Project, San Bernardino County, California* (Dudek) September 2023.

These documents are provided as *Technical Appendix II and Appendix I3*, respectively. Please also refer to EIR Section 7.0, *References*.

4.15.1 ENVIRONMENTAL SETTING

A. Water Service

Liberty Utilities provides water service to residential, commercial, industrial, institutional, and open space customers in the Town of Apple Valley and unincorporated areas of San Bernardino County. Liberty Utilities' service area encompasses an area of approximately 50 square miles. In 2020, Liberty Utilities obtained 100% of its source water from 18 deep wells located throughout the service area. These wells draw water from the deep Alto sub-unit of the Mojave ground water basin, which is recharged from snowmelt from the San Bernardino Mountains to the south and the Mojave River to the west. (Liberty Utilities, 2021)

The Project site is located within the Upper Mojave River Valley Groundwater Basin (DWR Basin No. 6-042) as mapped by the California Department of Water Resources as well as the Mojave Basin (Alto Subarea) as designated by the Mojave Basin Area Watermaster. The Basin is an adjudicated groundwater basin and is exempt from the requirements of developing a Groundwater Sustainability Plan (GSP) as it is designated as a very-low priority basin. Because the Project site is within an adjudicated area, it is not subject to the requirements of California's Sustainable Groundwater Management Act (SGMA), but instead is subject to groundwater pumping allocations under the court adjudication set up to mitigate long-term overdraft, to keep subareas in balance, and to meet biological resource mitigation obligations. (CDWR, 2024)

B. Wastewater Services

The Town's Department of Public Works Wastewater Division owns, operates, and maintains a wastewater collection system, including approximately 140 miles of collector sewer, trunk lines and inceptors, as well as nine sewer lift pump stations. The Town is a member of the joint power agency, Victor Valley Wastewater Reclamation Authority (VWVRA). VWVRA operates a regional interceptor sewer system and wastewater reclamation plants. The Town's sewer system conveys wastewater to the Regional Wastewater Treatment Plant (RWWTP) operated by VWVRA in Victorville. The plant currently treats approximately 12 million gallons per day (mgd) and has a design capacity of 18 mgd.



The Apple Valley Subregional Water Recycling facility located at Brewster Park was completed in 2018. It can produce one million gallons per day of recycled water, which is used to irrigate Brewster Park and the Civic Center Park. The facility only treats wastewater and returns solid waste to the sewer line where it continues to the RWWTP in Victorville for treatment. (VWVRA, n.d.)

C. Stormwater

Under existing conditions, the Project site generally surface drains to the southwest and discharges into an earthen channel located on the south side of the Project site. The channel runs west and into a larger earthen channel adjacent to the airport. The existing condition 100-year peak flow rate from the Project site is 284.9 cubic feet per second (cfs).

The Project site currently receives offsite flows from adjacent properties to the northeast. The flows enter the site via surface flow. The existing condition 100-year peak flow rate from the neighboring property is 1,250.3 cfs. (Thienes, 2024a)

D. Solid Waste

The collection, transport, and disposal of solid waste and recyclables from business use and residential use in the Town are provided by Burrtec Waste Industries Inc.'s AVCO Disposal (Burrtec). After waste is collected, it is delivered to the Victor Valley Material Recovery Facility, located at 17000 Abbey Lane in Victorville, approximately 6.5 miles southwest of the Project site. Waste is collected and hauled to the Victorville Sanitary Landfill, which is approximately 5.1 miles northwest of the Project site.

As of 2020, the Victorville Sanitary Landfill had an estimated remaining capacity of 93,400,000 cubic yards and was expected to remain open until 2047. Daily maximum disposal capacity is 3,000 tons per day. (CalRecycle, n.d.)

E. Natural Gas, Electricity, and Telecommunications

Natural gas service for the Town is provided by the Southwest Gas Holdings, Inc. (Southwest Gas). Southwest Gas provides natural gas service to more than two million customers in Arizona, Nevada, and portions of California. Southwest Gas' southern division is a wholesale customer of SoCalGas. According to the Town's Climate Action Plan 2019 Update, Townwide natural gas demand in Apple Valley in 2019 was 15,526,732 therms. No natural gas would be utilized on the Project site.

Electrical power for the Town is provided by Southern California Edison (SCE). SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Energy Commission (CEC), approximately 106,552 gigawatt-hours of electricity were used in SCE's service area in 2022 (CEC, 2023). Demand forecasts anticipate that approximately 111,670 gigawatt-hours of electricity will be used in SCE's service area in 2025 under a high demand forecast (CEC, 2023).



There are a number of telecommunications service providers in the Town including Verizon, Charter, and Charter Spectrum. These are private companies that provide connections to their communication systems on an as-needed basis and maintain existing infrastructure in the vicinity of the Project site.

4.15.2 REGULATORY FRAMEWORK

A. Federal

1. *Applicable Water Supply Regulations*

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorizes the EPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary (health-related) standards. The 1996 amendments to SDWA require that the EPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for the EPA, also encourage attainment of secondary standards (nuisance-related). Under the Act, the EPA also establishes minimum standards for State programs to protect underground sources of drinking water from endangerment by underground injection of fluids.

B. State

1. *Applicable Water Supply Regulations*

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local



agencies to adopt a water efficient landscape ordinance. When such an ordinance has not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the “model” ordinance drafted by the State of California shall apply within the affected jurisdiction. (CA Legislative Info, n.d.)

Water Recycling in Landscaping Act

In 2000, Senate Bill 2095 (Water Recycling in Landscaping Act) was approved by Governor Davis requiring any local public or private entity that produces recycled water and determines that within 10 years it will provide recycled water within the boundaries of a local agency, to notify the local agency of that fact. In turn, local agencies are required to adopt and enforce within 180 days a specified recycled water ordinance, unless the local agency adopted a recycled water ordinance or other regulation requiring the use of recycled water in its jurisdiction prior to January 1, 2001. (CA Legislative Info, n.d.)

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) was adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to develop Urban Water Management Plans (UWMPs) over a 20-year planning horizon, and further requires UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA.

The UWMPs provide a framework for long term water planning and inform the public of a supplier’s plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and
- Water shortage contingency planning.

The UWMP Act has been modified over the years in response to the State’s water shortages, droughts, and other factors. A significant amendment was made in 2009, after the drought of 2007-2009 and as a result of the governor’s call for a Statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as SB X7-7. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020. Beginning in 2016, retail water suppliers are required to comply with the water conservation requirements in SB X7-7 in order to be eligible for State water grants or loans. Retail water agencies are required to set targets and track progress toward decreasing daily per capita urban water use in their service area, which will assist the State in meeting its 20 percent reduction goal by 2020. (DWR, 2016)



California Senate Bill 610

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. For the purposes of SB 610, a “project” includes a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area. (DWR, 2003; CA Legislative Info, n.d.)

CA. Water Code § 10610 et seq. (Senate Bill 901)

Signed into law on October 16, 1995, Senate Bill (SB) 901 required every urban water supplier to identify as part of its urban water management plan, the existing and planned sources of water available to the supplier over a prescribed 5-year period. The code requires the water service purveyor to assess the projected water demand associated with a proposed project under environmental review. Later provisions of SB 901 required compliance in the event that the proposed Project involved the adoption of a specific plan, amendment to, or revision of the land use element of a general plan or specific plan that would result in a net increase in the state population density. Upon completion of the water assessment, cities and counties may agree or disagree with the conclusions of the water service purveyors, but cannot approve projects in the face of documented water shortfalls without first making certain findings. (CA Legislative Info, n.d.)

Executive Order B-29-15

Executive Order (EO) B-29-15 ordered the State Water Resources Control Board (SWRCB) to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016; directed the California Department of Water Resources (DWR) to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes; and directed the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. (SWRCB, 2020)

Executive Order B-37-16

Signed on May 9, 2016, EO B-37-16 established a new water use efficiency framework for California. The order bolstered the State’s drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans. (SWRCB, 2020)



Executive Order B-40-17

Signed on April 7, 2017, EO B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibits wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, State agencies, including the Department of Water Resources (DWR), released a plan to continue making water conservation a way of life. (SWRCB, 2020)

Sustainable Groundwater Management Act (SGMA)

The Sustainable Groundwater Management Act (SGMA) established a new structure for managing California's groundwater resources at a local level by local agencies. SGMA required, by June 30, 2017, the formation of locally controlled groundwater sustainability agencies (GSAs) in the State's high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016. (DWR, n.d.)

2. *Applicable Solid Waste Regulations*

California Solid Waste Integrated Waste Management Act (AB 939, 1989)

The Integrated Waste Management Act (IWMA) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (CIWMB) and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal (it should be noted that the CIWMB no longer exists, and its duties have been assumed by CalRecycle). As part of the IWMA, the CIWMB was given a purpose to mandate the reduction of disposed waste. The IWMA also required:

- The establishment of a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element.
- Each city, by July 1, 1991, to prepare, adopt and submit a SRRE to the county which includes the following components: waste characterization; source reduction; recycling; composting; solid waste facility capacity; education and public information; funding; special waste (asbestos, sewage sludge, etc.); and household hazardous waste.
- Each county, by January 1, 1991, to prepare a SRRE for its unincorporated area, with the same components described above, and a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction which cannot be reduced or recycled for a 15-year period.



- Each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP), which includes all of the elements described above.
- Each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities.
- The CIWMB to review the implementation of each SRRE at least once every two years.
- The IWMA required the CIWMB, in conjunction with an inspection conducted by a Lead Enforcement Agency (LEA), to conduct at least one inspection per year of each solid waste facility in the State.

Additionally, the IWMA established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities. (CalRecycle, n.d.)

Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRRA also required local agencies to adopt a local ordinance by September 1, 1993, or allow the model ordinance to take effect. The WRRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued. (CalRecycle, n.d.)

Mandatory Commercial Recycling Program (AB 341)

Assembly Bill (AB) 341 (Chapter 476, Statutes of 2011 [Chesbro, AB 341]) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB 341 was designed to help meet California's recycling goal of 75% by the year 2020. AB 341 requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, n.d.)

2022 California Green Building Standards Code (CAL Green; Part 11 of Title 24, California Code of Regulations)

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code, Part 11 of Title 24, commonly referred to



as CALGreen, establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are updated periodically. The most recent edition of CalGreen became effective January 1, 2023, and is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including residential structures and elementary schools). (CBSC, 2022)

3. *Applicable Energy Conservation Regulations*

California Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CA. Code Regs. 6)

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. In 1975, the Department of Housing and Community Development adopted rudimentary energy conservation standards under their State Housing Law authority that were a precursor to the first generation of the Standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the Energy Commission (formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement the Standards. The Energy Commission's statute created separate authority and specific direction regarding what the Standards are to address, what criteria are to be met in developing the Standards, and what implementation tools, aids, and technical assistance are to be provided.

The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices were adopted along with the Standards that contain data and other information that helps builders comply with the Standards.

The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Public Resources Code Section 25402.1 also requires the Energy Commission to support the performance standards with compliance tools for builders and building designers. The Alternative



Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Standards establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance with the Standards. From this, the Energy Commission develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes provisions for private firms seeking to develop compliance software for approval by the Energy Commission, which further encourages flexibility and innovation.

C. Local

1. Town of Apple Valley General Plan

The Energy and Mineral Resources Element of the General Plan is intended to guide the Town in the long-term management and well-considered use of its energy and mineral resources. The element addresses the community's dependence on limited resources and the need for local and regional energy policies. The Element also focuses on the increasing need for effective new policies concerning conservation, greater energy efficiency and renewable energy resources. Included in the Element are descriptions of conventional and renewable energy resources, as well as an outline of the location and identity of mineral resources in the area. The Energy and Mineral Resources Element of the General Plan is intended to guide the Town in the long-term management and well-considered use of its energy and mineral resources.

The Water, Wastewater and Utilities Element sets forth goals, policies and programs intended to ensure the adequate provision of domestic water, sewage treatment and utility services to the community. The community's orderly growth and development depends on the provision of these services, which include domestic water, sanitary sewer, natural gas, electricity and solid waste management services. This Element describes these services as well as others, such as telephone and cable services. These utility facilities and services are essential to the orderly growth, development and management of the community. The Element also identifies standards for provision of infrastructure and services relative to population and land use intensity, and provides programs and courses of action necessary to implement the goals and policies established. (Apple Valley, 2009)

Project-applicable goals and policies of these Element and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*.

4.15.3 METHODOLOGY

Project-specific information regarding water supply/demand and stormwater drainage was obtained from the Project's Water Supply Assessment (WSA) and Hydrology Calculations, respectively. Wastewater was estimated using a generation factor from the Town of Apple Valley Sewer System Management Plan. The Project's solid waste generation was calculated using the California's Department of Resources Recycling and Recovery (CalRecycle) estimated solid waste generation rates.



4.15.4 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XIX of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would:

- a. *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;*
- b. *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;*
- c. *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;*
- d. *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;*
- e. *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

4.15.5 IMPACT ANALYSIS

Threshold a: *Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

A. Water Facilities

As shown in Figure 3-9, presented within EIR Section 3.0, water lines to serve the Project would be constructed from the site north to an existing line located at Central Road/Lafayette Street. Construction of all water lines would occur within the Project site, or within dedicated public easements/right-of-way. All Project water system improvements would be designed and constructed consistent with Town/provider requirements. The extension and construction of water lines necessary to serve the proposed land uses is considered part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this EIR. As Section 4.0 of the EIR demonstrates, construction impacts of the Project, including the water lines necessary to serve the Project, would be less than significant, or less than significant as mitigated. Additionally, the Project would pay applicable development impact fees, water connection fees, and service fees, which act to fund water improvement plans, operations, and maintenance generally. The potential for the Project to require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects, is considered less than significant.



B. Wastewater Facilities

Sewer infrastructure is not currently located immediately adjacent to the site. As such, the Project would install an approximately one-mile-long sewer line within the Corwin Road right-of-way westerly to an existing sewer main located at the intersection of Corwin and Ramona Roads. The alignment would require the sewer line to be installed under the Apple Valley Airport runway. The sewer line would be installed using trenchless construction techniques (jack and bore) so that the runway is not affected. A 10' wide sewer easement, extending westerly from the terminus of Corwin Road, would be dedicated to the Town. Please refer also to Figure 3-9, presented within EIR Section 3.0.

The San Bernardino County Department of Airports has reviewed the Project sewer plan and provided a letter of support. All Project sewer system improvements would be designed and constructed consistent with Town requirements. The extension and construction of sewer lines necessary to serve the proposed land uses is considered part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this EIR.

As Section 4.0 of the EIR demonstrates, the construction impacts of the Project, including the sewer lines necessary to serve the Project, would be less than significant, or less than significant as mitigated. Additionally, the Project would pay applicable development impact fees, sewer connection fees, and service fees, which act to fund water improvement plans, operations, and maintenance generally. The potential for the Project to require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects, is considered less than significant.

C. Stormwater Drainage Facilities

Runoff from the developed site would be collected via four proposed onsite detention basins. From the detention basins, the flows will discharge to an onsite channel where it will eventually spillover to an existing adjacent earthen channel to the west. The detention basins have been sized to reduce runoff when compared to existing conditions.

All Project stormwater drainage facilities would be constructed within the Project site. The construction of stormwater drainage facilities necessary to serve the proposed land uses is considered part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this EIR. As Section 4.0 of the EIR demonstrates, the construction impacts of the Project, including the storm water drainage facilities necessary to serve the Project, would be less than significant, or less than significant as mitigated. The potential for the Project to require or result in the relocation or construction of new stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects is considered less than significant.



D. Electricity and Telecommunications

As shown in Figure 3-9, presented in EIR Section 3.0, the Project would connect to utility lines currently located in the Project vicinity. Dry utilities internal to the site would be installed underground in accordance with applicable purveyor standards and specifications, and to the satisfaction of the Town Engineer. The locations and configurations of utilities connections, transformers, switches, pull boxes, and manholes would be determined in conjunction with final Project designs and engineering. Again, it is noted that no natural gas would be utilized on the Project site.

The extension and construction of dry utilities necessary to serve the site is considered part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this EIR. As Section 4.0 of the EIR demonstrates, the construction impacts of the Project, including the dry utilities necessary to serve the Project, would be less than significant, or less than significant as mitigated. The potential for the Project to require or result in the relocation or construction of new electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects is considered less than significant.

E. Environmental Impacts from Utility and Infrastructure Systems

Water infrastructure, sewer lines, storm drain infrastructure, and dry utilities would be installed in compliance with the requirements of the respective utility providers, and consistent with final plans approved by the utility providers. The installation of the proposed infrastructure improvements would result in physical environmental impacts; however, these impacts have been included in the analyses of construction-related effects presented throughout this EIR, (e.g., air quality impacts, impacts to biological and cultural resources, water quality impacts, and noise and vibration impacts, etc.). Any applicable Project-specific mitigation measures for construction identified for each topical issue would address potential significant impacts associated with construction and installation of utilities. Therefore, through consistent implementation of a variety of measures related to construction impacts, no additional impacts related to construction and operation of utility systems would occur. Impacts would be less than significant.

Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As previously mentioned, Liberty Utilities would provide water service to the site. Liberty Utilities does not use surface water or purchase imported water to meet its water demands, but instead relies solely on groundwater obtained from 20 active wells in the Mojave Basin Area. Liberty only pumps the amount of water necessary to serve the demand.

According to the Project's WSA, the projected water demand for the Project was estimated using the water demand from three different commercial warehouse businesses within the Liberty Utilities service area and applying the average of the demands to the Project footprint. The water usage estimates account for both operational and irrigation water demand and assumes that the Project would



utilize low water use plantings and efficient drip irrigation. The Project’s WSA concluded that the projected water demand in 2025 would be 419 AF (includes construction), and 44 AF (operations only) for every year after that. Based on review of the Liberty Utilities Urban Water Management Plan and the 2021-2022 Watermaster Report, the WSA concluded that Liberty Utilities can meet its water demands (including the Project) during normal years, single dry years, and a five consecutive year drought period over the next 20 years. Therefore, water supply impacts would be less than significant.

Threshold c: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

As previously discussed, upon build-out of the Project, the Project’s wastewater would be conveyed to the Regional Wastewater Reclamation Facility operated by Victor Valley Wastewater Reclamation Authority (VWVRA). VWVRA has a treatment capacity of 18.0 mgd, and currently treats an average flow of 10.7 mgd, or approximately 60% of its total capacity. According to the Town’s Sewer System Master Plan Update, using the Town’s wastewater generation rate criterion of 1,500 gpd per acre (URS, 2013), the Project would generate approximately 0.34 mgd of wastewater¹. Projected wastewater from the Project would represent approximately 4.7% of the daily remaining capacity of the treatment facility. Given the remaining capacity, the VWVRA RWWTP would be able to adequately accommodate the Project’s contribution of wastewater.

The Project would pay applicable sewer connection fees and service fees, which act to fund wastewater treatment/reclamation improvement plans, operations, and maintenance generally. The Town, in consultation with VWVRA, would determine when and in what manner area-serving facilities would be constructed and/or upgraded to meet increasing demands of areawide development.

Based on the preceding, the potential for the Project to result in capacity impacts to the wastewater treatment provider which serves the site is less than significant.

Threshold d: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

As stated previously, solid waste from the Town is transported to the Victorville Landfill, which is currently operated by the County of San Bernardino. As of 2020, the Victorville Landfill has a permitted disposal capacity of 3,000 tons per day with a remaining capacity of 79,400,000 cubic yards.

Construction and operation of the Project would be required to comply with State and local solid waste reduction, diversion, and recycling policies and regulations. The Project proposes conventional

¹ 226.75 acres (Project site) *1,500 gpd/acre = 340,125 gpd (0.340 mgd)



industrial uses and would not generate volumes or types of waste not already considered and addressed under existing policies, regulations, and infrastructure systems.

Based on the anticipated building square footage of 3,480,736 million square feet and the US EPA’s construction waste generation factor of 4.34 pounds per sf for non-residential uses, approximately 15,106,394.24² pounds or 7,553.20³ tons would be generated during the building construction phase (EPA, 2009). Additional waste would be expected from infrastructure installation and other Project-related construction activities. (EPA, 2009)

During Project operation, based on CalRecycle’s estimated waste generation rate of 1.42 pounds per 100 sf per day for manufacturing/warehousing uses, the Project would generate approximately 49,426.45⁴ pounds of solid waste per day (24.7 tons per day) (CalRecycle, 2019). The Project’s estimated solid waste generation represents less than 0.8% of the Victorville landfill’s capacity and would not contribute significantly to the daily throughput. Accordingly, the potential for the Project to generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure is considered less than significant.

Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Town has implemented programs to ensure compliance with Statewide solid waste source reduction and recycling strategies and targets. The Project would be required to comply with applicable Town and State waste diversion and recycling mandates. Moreover, the Project would implement conventional industrial uses and would not establish uses or activities that would conflict with or obstruct local, State and federal solid waste management regulations. All solid waste generated by the Project would be collected and disposed of as part of the Town’s municipal waste stream. In this latter regard, solid waste management services are provided throughout the Town including collection and transfer of refuse, green waste, and bulky items. Recycling services are also provided. The potential for the Project to conflict with federal, State, and local management and reduction statutes and regulations related to solid waste is therefore considered less than significant.

4.15.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less than Significant Impact. The installation of utility and service system infrastructure improvements necessary to serve the site is considered part of the Project; the disturbance footprint, construction techniques, and associated impacts have been accounted for within this EIR and no adverse impacts specific to the provision utilities services have been identified. Mitigation measures are identified, where necessary, for construction-related effects that would reduce construction-phase impacts to the maximum feasible extent. Impacts would be less than significant.

² 3,480,736 sf * 4.34 lbs/sf = 15,106,394.24 lbs
³ 15,106,394.24 * 1 ton/2000 lbs = 7,553.20 tons
⁴ 3,480,736 sf * 1.42 lbs/100sf per day = 49,426.45 lbs per day



Threshold b: Less than Significant Impact. Water supplies are sufficient to meet area demands (including the Project) during normal years, single dry years, and a five consecutive year drought period over the next 20 years.

Threshold c: Less than Significant Impact. VVWRA is currently operating at approximately 60% of its total capacity. Projected wastewater from the Project would represent approximately 4.7% of the daily remaining capacity of the treatment facility. As such, sufficient wastewater treatment capacity is available to serve the Project.

Threshold d: Less than Significant Impact. The Project's estimated solid waste generation represents less than 0.8% of the Victorville Landfill's capacity and would not contribute significantly to the Landfills daily throughput.

Threshold e: Less than Significant Impact. The Project would implement conventional industrial uses and would not establish uses or activities that would conflict with or obstruct local, State and federal solid waste management regulations.

4.15.7 MITIGATION

Impacts would be less than significant, and mitigation is not required.

4.15.8 CUMULATIVE IMPACT ANALYSIS

The cumulative impact area when considering potential cumulative utilities and service systems impacts comprises affected purveyor service areas including service sources/supplies, and service conveyance/distribution/treatment facilities.

As discussed within this Section, the Project would implement all necessary infrastructure improvements. Utilities and service systems distribution and conveyance lines implemented by the Project would be constructed, operated, and maintained pursuant to purveyor requirements and consistent with applicable infrastructure master plans. Infrastructure improvements would be located within existing improved streets or otherwise disturbed properties, thereby limiting or avoiding potential environmental impacts.

This EIR evaluates likely maximum impacts associated with all Project actions and operations, including but not limited to construction and operation of utilities and service systems distribution and conveyance lines. Construction and operation of the Project utilities and service systems distribution and conveyance lines would not result in conditions or environmental impacts not already considered and addressed elsewhere in this EIR.

Other related projects within the cumulative impact area would be required to minimize utilities and services impacts consistent with Town, State, and service purveyor requirements, thereby minimizing potential cumulative utilities and services impacts. There are no known or probable related projects that would interact with the less than significant effects of the Project and thereby result in cumulatively



significant impacts. On this basis, Project contributions to cumulative impacts regarding utilities and service systems would not be considerable, and the cumulative effects of the Project would be less than significant.



5.0 OTHER CEQA CONSIDERATIONS

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project that cannot be avoided if the proposed project is implemented (CEQA Guidelines § 15126[b]). As thoroughly described in Subsections 4.1 through 4.15 of this EIR, the Project would result in a significant and unavoidable direct and cumulatively-considerable impact related to the topics of air quality, noise, and transportation. All other Project-related impacts (direct, indirect, and/or cumulatively-considerable), to the environment would either be less than significant or be reduced to below a level of significance due to mandatory compliance with applicable laws and regulations, and implementation of feasible mitigation measures that have a proportional nexus to the Project’s impacts.

5.1 SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

Table 5-1, *Significant Environmental Effects Which Cannot be Avoided*, describes the significant and unavoidable impacts that would occur should the Project be implemented and after the application of regulatory requirements and the application of feasible mitigation measures.

Table 5-1 Significant Environmental Effects Which Cannot be Avoided

Topic	Type of Impact	Details of Impact
Air Quality, Subsection 4.2	Inconsistency with AQMP	Even with the application of mitigation, the Project would exceed the applicable regional thresholds during operation for emissions of VOCs, NO _x , CO, and PM ₁₀ . The Project is therefore considered to be inconsistent with the AQMP.
	Direct and Cumulatively Considerable Operational-Source Emissions Impact	Mitigation presented with Subsection 4.2 has been designed to reduce Project operational-source VOC, NO _x , CO, and PM ₁₀ emissions. However, even with application of mitigation, the Projects operational-source emissions impact is considered significant and unavoidable.
Noise, Subsection 4.11	Direct and Cumulatively Considerable Off-Site Traffic Noise Impact	Project off-site traffic noise level increases would result in a potentially significant impact to existing noise-sensitive uses. Both rubberized asphalt and off-site noise barriers were considered as potential noise mitigation measures to reduce the potentially significant off-site traffic noise level increases, but neither mitigation measure would feasibly nor tangibly reduce the off-site traffic noise levels. Therefore, the Project-related off-site traffic noise level increases along certain roadway segments in



Topic	Type of Impact	Details of Impact
		the study area are considered a significant and unavoidable impact.
Transportation, Subsection 4.13	Direct and Cumulatively Considerable VMT Impact	Project-generated VMT was found to exceed the Town's VMT impact threshold. Proposed mitigation would reduce a portion of the Project's VMT impact. However, even with the inclusion of mitigation, the Project will not be able to mitigate its VMT impact to a level of less than significant.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROJECT SHOULD IT BE IMPLEMENTED

The CEQA Guidelines Sections 15126, subd. (c), 15126.2, subd. (c), 15127, require that for certain types or categories of projects, an EIR must address significant irreversible environmental changes that would occur should the Project be implemented. As presented at CEQA Guidelines §15127, the topic of Significant Irreversible Environmental Changes need be addressed in EIRs prepared in connection with any of the following activities:

- (a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;
- (b) The adoption by a local agency formation commission of a resolution making determinations; or
- (c) A project which will be subject to the requirements for preparing of an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321-4347.

The Project qualifies under Guidelines Section 15127 (a) in that an amendment to the NAVISP is required in order to implement the Project. As such, this EIR analysis addresses significant irreversible environmental changes which could be involved in the proposed action should it be implemented [Guidelines, Sections 15126.2(d) and 15127]. An impact would fall into this category if:

- A project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses;
- A project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; or



- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the Project may result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. The Project site is currently and has historically been vacant and undeveloped. The Project would permanently alter the site by converting vacant and undeveloped property to urban uses, which would commit future generations to similar uses. This is a significant irreversible environmental change that would occur because of Project implementation.

The Project presents no significant possibility of irreversible environmental damage “from any potential environmental incidents associated with the project.” That is, the Project does not propose facilities or uses that would result in potentially significant environmental incidents. Moreover, all feasible mitigation is incorporated in the Project to reduce its potential environmental effects.

Construction and long-term operation of the Project would require the commitment and reduction of nonrenewable and/or slowly renewable resources, including petroleum fuels and natural gas (for vehicle emissions, construction, lighting, heating, and cooling of structures) as well as lumber, sand/gravel, steel, copper, lead, and other metals (for use in building construction, piping, and roadway infrastructure). Other resources that are slow to renew and/or recover from environmental stressors would also be impacted by Project implementation, such as air quality (through the combustion of fossil fuels and production of greenhouse gases) and water supply (through the increased demands for potable water for drinking, cleaning, landscaping, and general maintenance needs). However, use of nonrenewable resources is not expected to negatively impact the availability of these resources. Additionally, the Project is required by law to comply with the California Green Building Standards Code (CALGreen), which will minimize the Project’s demand for energy, including energy produced from non-renewable sources. The Project would not utilize natural gas. Further, as indicated in Section 4.5, *Energy*, of this EIR, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

An increased commitment of public and utility services (e.g., police, fire, sewer, and water services) would also be required. Due to the proposed size of the development, the Project would result in an irreversible commitment of land, energy resources, and public services. After the 50- to 75-year structural lifespan of the building is reached, it is improbable that the site would revert to its current use due to the large capital investment that will already have been committed. Therefore, the Project would generally commit future generations to similar uses.

5.3 GROWTH INDUCING IMPACTS

CEQA requires a discussion of the ways in which the Project could be growth-inducing. A project may be growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines § 15126.2[e]). New employees from commercial or industrial development and new population from



residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

To address this issue, potential growth-inducing effects are examined through analysis of the following questions:

1. Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development)?
2. Would this project result in the need to expand one or more public services to maintain desired levels of service?
3. Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
4. Would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. This issue is presented to provide additional information on ways in which the Project could contribute to significant changes in the environment, beyond the direct consequences of implementing the Project examined throughout Section 4.0, *Environmental Analysis* of this EIR.

Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development)?

The Project would require the construction and extension of roadways and utility infrastructure to serve the development. The Project would construct Gustine Street, Central Road, and Corwin Road along the Project's frontages at their ultimate half-section width according to the Town of Apple Valley General Plan and consistent with the Town's standards. Additionally, the Project would provide an additional 12 feet of pavement width along Gustine Street and Corwin Road to accommodate one lane on the opposite side of the street. Since all proposed roadways would be constructed on site and for the exclusive purpose of serving the proposed development, the Project would not create major new infrastructure that could result in substantial, unplanned growth.



Water service to the Project site would be provided by Liberty Utilities. The Project proposes 12-inch DIP connections along Corwin Road and Gustine Street, a 16-inch DIP connection along Central Road north to Lafayette Street, and an 8-inch PRV. Sewer service to the Project site would be provided by the Town of Apple Valley Public Works Wastewater Division. Sewer infrastructure is not currently located immediately adjacent to the site. As such, the Project would install an approximately one-mile-long sewer line within the Corwin Road right-of-way westerly to an existing sewer main located at the intersection of Corwin and Ramona Roads. Since all proposed utility infrastructure would connect to existing infrastructure near the Project site and would be sized to exclusively serve the proposed development, this Project infrastructure would not indirectly induce substantial unplanned population growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As discussed in subsection 4.12.4, *Impact Analysis*, of Section 4.12, *Public Services*, the Project would not necessitate the expansion of existing public service facilities to maintain the desired levels of service. The Project does not propose or require construction or modification of any public facilities. Incremental service demands generated by the Project would be offset through the payment of Development Impact Fees, a portion of which is allocated for the maintenance of public facilities. The potential for the Project to result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities is considered less than significant. If these facilities or associated resources do need to be expanded in the future, funding mechanisms such as the Town Development Impact Fees are in place through existing regulations and standard practices to accommodate such growth. This Project would not, therefore, have significant growth inducing consequences with respect to public services.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with the increase in Project population and thus reducing or removing the barriers to growth. This occurs in suburban or rural areas where population growth results in increased demand for service and commodity markets responding to the new population. This type of growth is, however, a regional phenomenon resulting from the introduction of a major employment center or regionally significant housing project. For example, additional commercial uses may be drawn to the area by the increased number of residents in the area because of a project.

Jobs created by the Project are typical of the region, and are expected to be filled by existing local residents. Project employees would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services needs is expected to be marginal, and accommodated by existing providers.



As discussed in Section 5.4.3, *Population and Housing*, the Project would generate up to approximately 2,913 employees. According to SCAG’s Connect SoCal, the Town’s employment opportunities are estimated to group up by 9,400 in 2050 (SCAG, 2024b). As such, the Project-related increase of approximately 2,913 employees would be accounted for in the Town’s employment growth estimate upon General Plan build-out, including the NAVISP. Thus, the Project’s employment generation due to Project construction and operation is already accounted for in the Town’s General Plan.

According to the California Department of Finance (DOF) Current Month Unemployment Rate and Labor Force Summary, as of December 2024, the most current data available, the Town had a labor force of 31,100 with an unemployment population of 1,800 (5.8 percent) (EDD, 2025). As such, the Project’s temporary and permanent employment requirements could likely be met by the Town’s existing labor force without people needed to relocate into the Project region, and the Project would not induce substantial unplanned population growth in the Project area, either directly or indirectly, and would not exceed regional or local growth projections.

In summary, because it is anticipated that most of the Project’s future employees would already be living in the Town of Apple Valley or the surrounding areas, the Project’s introduction of employment opportunities on the Project site would not induce substantial growth in the area.

Would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

The entire Project site is located within the NAVISP. Surrounding properties to the north, west and south are also located within the NAVISP and zoned Airport Industrial (I-A) and Industrial – Specific Plan (I-SP). The properties to the east are within San Bernardino County, and zoned Apple Valley/Rural Living. The Project uses are limited to the Project site’s boundaries and does not include any components that would indirectly affect existing or planned uses on neighboring properties. The development of the proposed industrial uses on the Project site would not reasonably or foreseeably cause the redevelopment of other properties or cause development on other properties.

Furthermore, the Project’s potential influence on other nearby properties to redevelop at greater intensities and/or different uses than the Town’s General Plan and Development Code allow is speculative beyond the rule of reason; however, it should be noted that implementation of the Project would not result in the approval of proposed uses on any other property outside of the Project site. CEQA does not require the analysis of speculative effects (CEQA Guidelines § 15145). All projects proposed within the Town would require evaluation under CEQA based on their own merits, including an analysis of direct and cumulatively considerable effects.

The Project represents growth anticipated by the Town, as evidenced by the site’s existing General Plan and zoning designations. Incremental public service demands generated by the Project are offset through the payment of Town Development Impact Fees. A portion of the Town’s Development Impact Fees are allocated for the maintenance of public service facilities. The Project Applicant would



pay incumbent fees at issuance of building permit(s). Accordingly, the Project would not directly promote growth either at the Project site or at the adjacent and surrounding properties that were not accounted for in the Town’s General Plan. Upon the approval of the Project Applicant’s requested discretionary applications (Site Plan Review 2022-003, Specific Plan Amendment 2023-001, Tentative Parcel Map No. 20659 and a Development Agreement), the Project would be consistent with the existing General Plan land use designation and Zoning classification for the Project site.

5.4 IMPACTS CONSIDERED LESS THAN SIGNIFICANT

Section 15128 of the CEQA Guidelines states that “an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.” Based on review of the Project and supporting technical studies, it was determined that the following environmental topical issues would result in no impact or less than significant impacts: agriculture and forestry resources, mineral resources, population and housing, recreation, and wildfire.

5.4.1 AGRICULTURE AND FORESTRY RESOURCES

Threshold a: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

According to the California Department of Conservation (DOC) Farmland Mapping & Monitoring Program, the Project site is designated as grazing land (DOC, 2024). The Project site is not located within lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No impact would occur.

Threshold b: Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is currently zoned as Specific Plan and within the NAVISP, the site is designated as both Specific Plan Industrial (I-SP) and General Commercial (C-G). The Project’s implementation will not result in a loss of land zoned for agriculture. There are no farming activities occurring at the site. The Project site is not located within any agricultural preserves, nor is the Project site subject to any Williamson Act Contracts (DOC, 2024). As a result, the Project will not result in conflict with existing agricultural zoning or Williamson Act contracts. No impacts would occur.

Threshold c: Would the Project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?

The Project site does not contain forest land. Within the NAVISP, the site is designated as both Specific Plan Industrial (I-SP) and General Commercial (C-G). The Project site is not zoned for timberland production. Accordingly, no impact would occur.



Threshold d: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

The Project site and surrounding areas do not consist of forest land. Therefore, the Project would not result in the loss of forest land or result in the conversion of forest land to non-forest use. Accordingly, no impact would occur.

Threshold e: Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

As stated previously, the Project site is not located within lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. There are no farming activities occurring on the Project site. As such, the Project would not result in changes in the environment which, due to their location and nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Accordingly, no impact would occur.

5.4.2 MINERAL RESOURCES

Threshold a: Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The Project does not conflict with California Legislature’s 1975 Surface Mining and Reclamation Act (SMARA), which provides guidelines of the classification and designation of mineral lands. According to the Town’s General Plan, the Project site is not within an area that has been identified to contain mineral resources. The California Department of Conservation does not show oil, gas, or geothermal fields underlying the Project site; and no oil or gas wells are recorded on or near the site in the Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder (DOC, n.d.). No mines, wells, or other resource extraction activity occurs, or is known to have ever occurred, on the Project site. Accordingly, no impacts would occur.

Threshold b: Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

As discussed above, no known valuable mineral resources exist on or near the Project site, and no mineral resource extraction activities occur on the site. Thus, the proposed Project would not result in the loss of availability of locally important mineral resources. Accordingly, no impacts would occur.



5.4.3 POPULATION AND HOUSING

Threshold a: *Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

No residential uses are located on the Project site, nor are any proposed as part of the Project. Jobs created by the Project are typical of the region, and are expected to be filled by existing local residents. Project employees would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services needs is expected to be marginal, and accommodated by existing providers. The Project would create short-term jobs during the construction phase which would be filled by workers who, for the most part, would already reside in the local area. A small portion of workers may be employed from outside the local area but construction would not induce substantial unplanned population growth in the area as the construction phase would be temporary and would not require permanent relocation. Therefore, construction of the Project would not generate a substantial temporary or permanent increase in population within the Project area.

Based on Table II-B of Southern California Association of Governments (SCAG’s) Employment Density Report with an employment rate of 1,195 s.f. per employee for warehouse uses in San Bernardino County, the Project would generate up to approximately 2,913 employees during operation (SCAG, 2001a). According to SCAG’s Connect SoCal, the Town’s employment opportunities are estimated to grow up by 9,400 in 2050 (SCAG, 2024b). As such, the Project-related increase of approximately 2,913 employees are within the estimated employment growth projections.

Table 5-2, *Town of Apple Valley Population, Households, and Employment Projections*, shows the existing, 2035 and 2025 population, employment, and housing projections.

Table 5-2 Town of Apple Valley Population, Households, and Employment Projections

	Existing (2025)	Town General Plan 2035 ³	SCAG 2050 ⁴	Increase from Existing to 2050
Population	75,262 ¹	109,000	106,516	31,254
Employment	29,300 ²	22,500	30,100	800
Households	27,485 ¹	37,100	38,700	11,215
Jobs-Housing Ratio	1.07	0.61	0.78	–

¹ (DOF, 2025). California Department of Finance Current Month Unemployment Rate and Labor Force Summary and Population and Housing Estimates for Cities, Counties, and the State.

² (EDD, 2025). Monthly Labor Force Data for Cities and Census Designated Places.

³ (Apple Valley, 2009). Town of Apple Valley General Plan.

⁴ (SCAG, 2024b). Demographics and Growth Forecast.

SCAG’s Connect SoCal contains newer projections than the Town’s General Plan. As shown, SCAG’s population forecasts are lower than was anticipated by the Town’s General Plan and employment has outpaced projections under both the Town’s General Plan and SCAG projections. However, both sources project that the Town will be housing-rich in 2035 and 2050, at 0.61 and 0.78, respectively.



Additionally, according to the Town's 2022-2029 Housing Element, 16.6 percent of the Town's population works within the Town of Apple Valley and the remaining 83 percent work elsewhere, which suggests a jobs-housing imbalance within the Town limits (Apple Valley, 2022). As of June 2025, the most current data available, the Town had a labor force of 29,300, employment of 27,200 with an unemployment population of 2,100, a 7.1% rate (EDD, 2025).

The jobs-housing ratio is a general measure of the number of jobs as compared to housing in a defined geographic area, without regard to economic constraints or individual preferences. The jobs-housing ratio as well as the type of jobs versus the price of housing, has implications for mobility, air quality, and the distribution of tax revenues. A project's effect on the jobs-housing ratio is one indicator of how it will affect growth and quality of life in the project area. SCAG applies the jobs-housing ratio at the regional and subregional levels in order to analyze the fit between jobs, housing, and infrastructure. Generally, a ratio of less than 1 to 1 indicates a housing-rich area, and a ratio of one or more than 1 to 1 indicates a jobs-rich area (SCAG, 2001b).

As shown in Table 5-2, although the Town is slightly jobs-rich under existing conditions (1.07), the Town's General Plan and SCAG project that the Town will be housing-rich in 2035 and 2050, respectively. The Town forecasts the employment housing ratio to be 0.61 by 2035 while SCAG forecasts the employment housing ratio to be 0.78 by 2050, which is closer to the recommended range for the jobs-housing ratio of 1.0. The jobs generated by the Project would be consistent with this trend and would assist in providing a more balanced jobs-housing ratio.

The Project-related increase of up to approximately 2,913 employees would bring new employment which would contribute to a more balanced jobs-housing ratio for the Town of Apple Valley at Project buildout. With a more balanced jobs-housing ratio, the unemployment rate, and the fact that the majority of residents work outside of Town limits indicates that the Project's temporary and permanent employment requirements will be met by the Town's existing labor force without people needing to relocate into the Project region. Therefore, the Project would not induce substantial unplanned population growth in the Project area, either directly or indirectly, and would not exceed regional or local growth projections. Therefore, impacts would be less than significant.

Threshold b: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The property has remained undeveloped since at least 1952 and no residential uses are located on the Project site, nor are any proposed as part of the Project. Construction of the Project would not displace any existing housing or residents, nor require the construction of replacement housing elsewhere. No impact would occur.



5.4.4 RECREATION

Threshold a: Does the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Project does not propose residential uses that would increase the use of existing parks and/or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. As discussed above, the Project would develop the Project site in accordance with the underlying General Plan land use designation. Thus, the Project's employment generation due to Project construction and operation is already accounted for in the Town's General Plan. Incremental public service demands generated by the Project are offset through the payment of Town Development Impact Fees. A portion of the Town's Development Impact Fees are allocated for the maintenance of recreational facilities. The Project Applicant would pay incumbent fees at issuance of building permit(s). No impact would occur.

Threshold b: Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The Project does not propose any recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment. In addition, no offsite parks or recreational improvements are proposed or required as part of the Project. No impact would occur.



5.4.5 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire severity zones, would the project:

- Threshold a:** *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- Threshold b:** *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- Threshold c:** *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- Threshold d:** *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

According to the California Department of Forestry and Fire Protection (CalFire), the Project site is located within the limits of the Town of Apple Valley outside of the State Responsibility Area (SRA) and is not located within a Very High Fire Hazard Severity Zone. The Project site is located within a Local Responsibility Area (LRA) and is designated as a Moderate Fire Hazard Severity Zone. (CalFire, 2025).

Incremental fire protection service demands generated by the Project are offset through the payment of Development Impact Fees. A portion of the Town's Development Impact Fees are allocated for fire protection services. The Project Applicant would pay incumbent Town Development Impact Fees at issuance of building permit(s).

To the satisfaction of the Apple Valley Fire Protection District, the Project would comply with Town and Fire District fire prevention and suppression requirements, including building/site design requirements, fire flow adequacy, and provisions for emergency access, thereby reducing potential wildfire impacts. The Project would also be required to comply with State and local regulations pertaining to emergency access. The proposed Project would provide on-site and off-site water, sewer, electricity, and gas infrastructure improvements which would be constructed in compliance with regulatory requirements and would not exacerbate fire risk.

In addition, the Project site is generally flat and lacks factors that are typically associated with the uncontrolled spread of wildfire. The Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes. Therefore, no impact would occur.



6.0 ALTERNATIVES

6.1 INTRODUCTION

California Environmental Quality Act (CEQA) Guidelines Section 15126.6(a) describes the scope of analysis that is required when evaluating alternatives to proposed projects, as follows:

“An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

As discussed in Draft EIR Section 4.0, *Environmental Analysis*, the Project would result in significant adverse environmental effects associated with air quality, noise and transportation that cannot be mitigated to below levels of significance after the implementation of feasible mitigation measures. The Project’s significant and unavoidable impacts are summarized below in Section 6.1.2.

6.1.1 PROJECT OBJECTIVES

The underlying purpose and goal of the Lake Creek Logistics Center is to develop modern industrial uses in the Town of Apple Valley in close proximity to the State highway system in order to increase employment opportunities and improve the Town’s economic competitiveness. The Project would achieve its underlying purpose and goal through the following objectives.

- A. To efficiently develop a vacant and underutilized property with industrial uses to help meet the regional demands for goods movement facilities.
- B. To expand economic development, facilitate job creation, and increase the tax base for the Town of Apple Valley by establishing new industrial development adjacent to established and planned industrial areas.
- C. To attract new businesses to the Town of Apple Valley and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.



- D. To make efficient use of a property in the Town of Apple Valley by maximizing its buildout potential for employment-generating uses.
- E. To develop Class A speculative industrial buildings in the Town of Apple Valley that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.
- F. To develop industrial buildings in close proximity to the I-15 and SR-18 freeways that can be used as part of the southern California goods movement network.

6.1.2 SUMMARY OF THE PROPOSED PROJECT'S SIGNIFICANT IMPACTS

As discussed in Draft EIR Section 4.0, Environmental Analysis, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are as follows:

- Air Quality (Air Quality Management Plan Conflict): The Project proposes land uses that are consistent with development anticipated under the site's existing General Plan designation, and would therefore conform to local land use plans. However, the Project would exceed the applicable regional thresholds during operation for emissions of VOCs, NO_x, CO, and PM₁₀. The Project is therefore considered to be inconsistent with the AQMP.

The Project would implement development-specific air quality Mitigation Measures (MM 4.2-1 through 4.2-3) to reduce the Project's operational-source air pollutant emissions. Additionally, the Project would incorporate contemporary energy-efficient technologies and operational programs. However, exceedances of MDAQMD thresholds for VOCs, NO_x, and PM₁₀ would still occur, and impacts would remain significant and unavoidable on a direct and cumulatively considerable basis.

- Air Quality (Criteria Pollutant Emissions): Project operations would exceed regional thresholds of significance established by the MDAQMD for emissions of VOC, NO_x, CO, and PM₁₀. Even with the Project's compliance with applicable rules, and the imposition of all feasible mitigation measures identified (see Mitigation Measures MM 4.2-1 through MM 4.2-3), the Project's operational emissions would exceed the applicable regional thresholds of significance for VOCs, NO_x, and PM₁₀. Accordingly, Project-related emissions would not meet MDAQMD air quality standards and contribute to the non-attainment of ozone standards in the Mojave Desert Air Basin (SCAB). Therefore, Project operational-related impacts would be significant and unavoidable on a direct and cumulatively considerable basis.
- Noise (Traffic Noise): Eight of the study area roadway segments are shown to experience potentially significant off-site traffic noise level increases due to the Project's off-site traffic noise under both the existing and opening year conditions. There are no feasible mitigation



measures that exist to reduce Project traffic noise impacts. Therefore, Project-related off-site traffic noise level increases are considered significant and unavoidable on a direct and cumulatively considerable basis.

- Transportation (Vehicle Miles Traveled [VMT]): The Project would result in a significant and unavoidable VMT impact at a project and cumulative level. Strategies that have potential to reduce the Project VMT have been incorporated as mitigation, however, there is no means to definitively quantify VMT reductions that could result from measures implemented by the Project, or that could result from actions beyond the control of the Project. The effectiveness of these measures is dependent on yet unknown Project building tenant(s) and employee participation; as well as actions of other developments and government(s) that may directly or indirectly affect Project VMT. Therefore, no reduction in VMT was assumed for implementation of VMT strategies. After the application of Project design features and feasible mitigation measures, Project impacts related to VMT would be significant and unavoidable on a direct and cumulatively considerable basis.

6.2 ALTERNATIVES UNDER CONSIDERATION

CEQA Guidelines Section 15126.6(e) requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future if the proposed Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., “no project” alternative). For development projects that include a revision to an existing land use plan, the “no project” alternative is considered to be the continuation of the existing land use plan into the future. For projects other than a land use plan (for example, a development project on an identifiable property such as the proposed Project evaluated herein), the “no project” alternative is considered to be a circumstance under which the proposed Project does not proceed (CEQA Guidelines Section 15126.6(e)(3)(A-B).

6.2.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the entire site would remain as is (vacant, undeveloped land). This alternative was selected by the Town as required by CEQA Guidelines Section 15126.6(e)(3)(B) to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition (as described in EIR Section 2.0, *Environmental Setting*).

6.2.2 NO PROJECT/EXISTING SPECIFIC PLAN DESIGNATION ALTERNATIVE

To accommodate the proposed Project, the NAVISP would be amended to redesignate approximately 35 acres in the southeasterly portion of the Project site (APN 0463-373-06) from General Commercial (C-G) to Specific Plan Industrial (I-SP). The No Project/Existing Specific Plan Designation Alternative would consider the development of the Project site with a use that conforms to the existing land use designations for the Project site, specifically the I-SP zone and C-G zone.



This alternative was selected as required by CEQA Guidelines Section 15126.6(e)(3)(A) to compare the environmental effects of the Project with an alternative that would allow the continuation of uses permitted by the NAVISP. Using the maximum building coverage permitted for each zone, this alternative would allow 3,758,356 s.f. of industrial uses on 191.75 acres and 990,990 s.f. of commercial uses on 35 acres.

6.2.3 REDUCED INTENSITY ALTERNATIVE

The Reduced Intensity Alternative was selected to reduce impacts associated with air quality, noise, and transportation. The Reduced Intensity Alternative would consider development of the Project site with a 15% reduction in building square footage. Under this alternative, a total of 2,958,000 s.f. of industrial uses would be constructed. This alternative would generate approximately 2,475 employees using an employment generation rate of 1 employee per 1,195 square feet for warehouse uses, compared to the 2,912 employees that would be generated by the Project. The development impact area would generally remain the same as the Project. Access to the site would be the same with a proportional reduction in the number of parking spaces.

6.3 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Town but were rejected as infeasible. Factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR include: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines Section 15126.6(f)(1) notes:

“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries...and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site...”

In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected are described below.

6.3.1 ALTERNATIVE SITES

CEQA requires that the discussion of alternatives focus on alternatives to a project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be



avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines Section 15126[5][B][1]). In addition, an alternative site need not be considered when implementation is “remote and speculative,” such as when the alternative site is beyond the control of a project applicant.

The Project proposes to develop a 226.75-acre site with three industrial warehouse buildings totaling approximately 3.48 million square feet. The Project Applicant has ownership and control over the Project site, and the Project site’s location in proximity to I-15 and SR-18 provides direct access to the regional transportation network.

Given the size and type of the proposed development, a similarly sized project and land use elsewhere in the Town of Apple Valley would result in the same or greater project-level and cumulative air quality and GHG emissions, transportation, and noise impacts. Significant and unavoidable regional air quality emission impacts of the Project relate primarily to mobile emissions during operation and are not site specific; Therefore, relocation of the Project would not substantially reduce these impacts. The Project’s location is preferable for industrial development compared to other areas of the Town because of its proximity to the regional transportation network and major infrastructure, reducing VMT. The NAVISP is largely undeveloped with minimal traffic, any development of this size in this area would increase off-site traffic noise on surrounding roadways similar to the Project. Therefore, analysis of an alternative site for the Project is neither meaningful nor necessary because the significant impacts resulting from the Project would not be avoided or substantially lessened by its implementation in an alternate location.

Regarding the feasibility of finding another potential vacant location for the Project, there are no existing, undeveloped sites for sale that are a similar size as the Project site within close proximity to the key freeway infrastructure (i.e. I-15, SR-18) and that could reasonably be controlled by the Project Applicant for the purpose of developing the Project. Furthermore, the Project Applicant does not hold ownership control over any other parcels of land in or near the Project site that could be used as an alternative location for the proposed Project. Therefore, because an alternative location is not available that would avoid or substantially lessen the significant environmental effects of the Project, and because the Project Applicant does not have ownership control over, and cannot reasonably obtain ownership control over, any other parcels of land in the jurisdiction of the Town that could accommodate the Project, an alternative site is not feasible. As a result, this alternative was rejected from further consideration.

6.4 ANALYSIS OF ALTERNATIVES

The Town has identified a range of reasonable alternatives to the Project in accordance with CEQA Guidelines Section 15126.6. The following discussions compare the impacts of each alternative considered by the Town with the impacts of the Project, as detailed in Section 4.0, *Environmental Analysis*, of this EIR. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), CEQA



Guidelines Section 15126.6(d) requires that the discussion of alternatives focus on alternatives which are capable of avoiding or substantially lessening the significant effects of the Project. Therefore, the analysis provided herein focuses on a comparison of the Project's significant impacts to the level of impact that would occur under each evaluated alternative.

6.4.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the entire 226.75-acre site would remain as is. This alternative was selected by the Town as required by CEQA Guidelines Section 15126.6(e)(3)(B) to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition (as described in EIR Section 2.0).

A. Aesthetics

Under existing conditions, the Project site is currently vacant and undeveloped. The subject property is located at approximately 2,975 to 3,085-feet above mean sea level. The contour lines in the area of the subject property indicate the area is sloping gently toward the southwest.

According to the Apple Valley General Plan, the Project site is not located within an area identified for scenic preservation. There are no scenic vistas within the Project site, nor would the Project otherwise adversely affect a designated scenic vista. Under the No Project/No Development Alternative, the visual character and quality of the site would be maintained in its existing condition. No landform modifications would occur on the Project site under this alternative, and implementation of the Project to allow for industrial uses, lighting, or landscaping would not occur. Accordingly, although the Project would result in less than significant impacts associated with aesthetics, the No Project/No Development Alternative would result in no impacts.

B. Air Quality

The No Project/No Development Alternative would avoid the introduction of new potential sources of short-term (construction) and long-term (operational) air pollutant emissions that would occur during the implementation of the Project. As such, all of the Project's short- and long-term air quality impacts would be avoided under this alternative, because no construction and operational activities would occur at the Project site. Accordingly, in comparison to the Project's significant and unavoidable impacts associated with air quality, no impacts would occur under this alternative.

C. Biological Resources

The No Project/No Development Alternative would leave the property in its existing condition. Under this alternative, impacts would be less than the Project because the Project site would not be disturbed compared to the permanent disturbance that would occur as a result of the Project's proposed development. Overall, although the Project would result in less than significant biological resources impacts with incorporation of mitigation measures, the No Project/No Development Alternative would



eliminate the Project's potential biological resource impacts that could occur during construction activities to burrowing owl, desert tortoise, nesting birds, and impacts to waters of the State, and no mitigation would be required. There would be no impact to biological resources under this alternative.

D. Cultural Resources

The field survey conducted as part of the Cultural Resources Assessment for the Project site identified various historic-period refuse and one prehistoric artifact. The Cultural Resources Assessment determined that the resources found on the site do not have a clear association with significant events, or contain any attributes that convey specific association with an important person of national, statewide, or local significance. The resources do not embody the distinctive characteristics of a type, period, or method of construction, nor represent the work of a master, or possess artistic value. Furthermore, due to their secondary nature, the resources are unlikely to fulfill the data requirements to address research questions or to provide any other information valuable to our understanding of the past. As such, none of the resources identified within the Project site are eligible for inclusion in the CRHR. There are no known significant historic resources, archaeological resources, or human remains identified on the Project site under existing conditions.

Based on the low occurrence of prehistoric archaeological remains documented in the vicinity, the level of existing disturbance of the Project site, and the results of the field survey, the Project area has a low sensitivity for encountering intact buried prehistoric archaeological resources. While unlikely, the potential to impact buried prehistoric archaeological resources during ground disturbance activities (i.e., grading and excavation activities) in native soils still exists. Accordingly, although the Project would result in less than significant cultural resources impacts with mitigation measures incorporated, the No Project/No Development Alternative would eliminate the Project's potential impacts to cultural resources, and no mitigation would be required. There would be no impact to cultural resources under this alternative.

E. Energy

Under the No Project/No Development Alternative, no new development would occur; therefore, the site would not require any near-term or long-term energy resources. Accordingly, although the Project would result in less than significant impacts associated with energy, the No Project/No Development Alternative would have no impact related to energy use.

F. Geology and Soils

The No Project/No Development Alternative would result in no grading of the Project site; therefore, no impacts to geology or soils would occur. The Project site is entirely underlain by old alluvial deposits (Qoa) deposited approximately 129,000 to 11,700 years ago during the late Pleistocene. Elsewhere in San Bernardino County, Pleistocene deposits have produced remains of a diverse terrestrial fauna and have a high potential for paleontological resources.



The No Project/No Development Alternative would avoid potential impacts associated with unearthing previously undiscovered paleontological resources during grading activities. This alternative has no potential to impact resources that may exist in undisturbed soils beneath the ground surface. Accordingly, this alternative would eliminate the Project's potential (less than significant, as mitigated) paleontological resource impacts.

G. Greenhouse Gas Emissions

Under the No Project/No Development Alternative, no development would occur on the Project site; therefore, there would be no potential sources of near-term or long-term GHG emissions. Accordingly, although the Project would result in less than significant GHG impacts, the No Project/No Development Alternative would have no impact related to GHG emissions.

H. Hazards and Hazardous Materials

Project impacts were determined to be less than significant related to hazards and hazardous materials, including those associated with the routine transportation, storage, and use of hazardous materials during the operation of the Project. Because no development would occur under the No Project/No Development Alternative, no impacts related to hazards or hazardous materials would occur. This alternative would reduce the Project's already less than significant hazards and hazardous materials impacts.

I. Hydrology and Water Quality

The No Project/No Development Alternative would result in no grading or development of the property; therefore, the existing drainage pattern would remain the same and no impacts to hydrology or water quality would occur. Moreover, under the No Project/No Development Alternative, drainage improvements or water quality features would not be installed. The Project site would continue to receive offsite flows from the adjacent properties in the northeast. Additionally, the site would continue to surface drain to the southwest and discharge into an earthen channel on the south side of the Project site. Therefore, water quality impacts, including erosion and sedimentation, would be greater under this alternative because the Project site would not receive the benefits from the stormwater drainage and water quality filtration features that would be constructed by the Project. Therefore, this alternative would result in increased impacts associated with hydrology and water quality when compared to the Project, which were determined to be less than significant.

J. Land Use and Planning

The No Project/No Development Alternative would not result in any new development that would directly or indirectly result in environmental impacts due to a conflict with an existing land use plan. In addition, the No Project/No Development Alternative would not result in any new development that would cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Accordingly,



although the Project would result in less than significant impacts associated with land use and planning, no impacts associated would occur under this alternative.

K. Noise

Under the No Project/No Development Alternative, existing noise/vibration conditions would be maintained. This alternative would realize no new development and would generate no additional noise or vibration. The significant and unavoidable off-site traffic noise levels that would occur under the Project would be avoided. This alternative would result in reduced noise and vibration levels when compared to the Project.

L. Public Services

Under the No Project/No Development Alternative, the Project site would remain vacant and undeveloped. There would be no increase in demand for fire protection, police protection, schools, or libraries. Accordingly, although the Project would result in less than significant impacts associated with public services, the No Project/No Development Alternative would have no impact related to public services.

M. Transportation

Under the No Project/No Development Alternative, no new development would occur on the Project site and no traffic would be generated at the Project site. Therefore, this alternative would have no impacts related to conflict with a program, plan, ordinance, or policy addressing the circulation system; vehicle miles traveled; hazards due to a design feature; or emergency access. The No Project/No Development Alternative would eliminate the Project's significant and unavoidable transportation impacts and no impacts would occur.

N. Tribal Cultural Resources

Based on Native American consultation, there is a potential to encounter tribal cultural resources within the Project site during ground-disturbing construction activities on the site. Project impacts to tribal cultural resources were determined to be less than significant with mitigation. The No Project/No Development Alternative would leave the Project site in its existing condition; no grading or disturbance of soil would occur. As such, this alternative would not result in impacts to undiscovered tribal cultural resources. Accordingly, this alternative would have no impacts related to tribal cultural resources and mitigation would not be required; therefore, there would be no impact to tribal cultural resources.

O. Utilities and Service Systems

Under the No Project/No Development Alternative, the Project site would not generate any need for additional utilities and service systems, including domestic water, wastewater treatment, or solid waste disposal; therefore, the implementation of this alternative would avoid the increases in the demand for utility services that would be generated by the Project. Although the Project would have less than



significant impacts, implementation of this alternative would result in no impacts associated with utilities and service systems.

P. Conclusion

1. Avoid or Substantially Lessen the Significant Impacts of the Project

The No Project/No Development Alternative would result in no physical environmental changes to the Project site. This alternative would eliminate the Project’s significant and unavoidable impacts related to air quality, noise and VMT. However, this alternative would not receive the environmental benefits from the implementation of stormwater drainage and water quality filtration features that would be constructed by the Project.

2. Attainment of Project Objectives

The No Project/No Development Alternative would fail to meet all the Project Objectives, as described in Section 6.1.1.

6.4.2 NO PROJECT/EXISTING SPECIFIC PLAN DESIGNATION ALTERNATIVE

To accommodate the proposed Project, the NAVISP would be amended to redesignate approximately 35 acres in the southeasterly portion of the Project site (APN 0463-373-06) from C-G to I-SP. The No Project/Existing Specific Plan Designation Alternative would consider the development of the Project site with a use that conforms to the existing land use designations for the Project site, specifically the Specific Plan Industrial (I-SP) zone and General Commercial (C-G) zone.

Using the maximum building coverage permitted for each zone, this alternative would allow 3,758,356 square feet of industrial uses on 191.75 acres and 990,990 sf of commercial uses on 35 acres (see Table 6-1). As shown in Table 6-1, this alternative exceeds that which is proposed by the Project by almost 1.3 million square feet, however a portion of that square footage would be commercial uses.

Table 6-1 Allowable Site Buildout Under the No Project/Existing Specific Plan Designation Alternative

Zone	Total Acreage	Max Building Coverage ¹	Max Sq. Ft. Allowed
I-SP	191.75	45%	3,758,356
C-G	35.00	65%	990,990
<i>Total</i>	<i>226.75 acres</i>	-	<i>4,749,346 sq. ft.</i>

¹ See Table III-2, Development Standards, of the NAVISP.

This alternative was selected as required by CEQA Guidelines Section 15126.6(e)(3)(A) to compare the environmental effects of the Project with an alternative that would allow the continuation of uses anticipated by the NAVISP.



B. Aesthetics

The Project site is not located within an area identified for scenic preservation. There are no scenic vistas within the Project site, nor would the Project otherwise adversely affect a designated scenic vista. The Project would not conflict with applicable zoning or other regulations governing scenic quality. No significant aesthetics impacts would result from the Project. The No Project/Existing Specific Plan Designation Alternative would cover the same development impact area as the Project, with potentially more building coverage. However, this alternative would result in less than significant impacts similar to the Project.

C. Air Quality

As with the Project, construction of the No Project/Existing Specific Plan Designation Alternative has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project site. In addition, fugitive dust emissions would result from construction activities. Under the No Project/Existing Specific Plan Designation Alternative, the overall amount of building construction would increase in comparison to the Project.

Operational activities associated with either the Project or this alternative would result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from area source emissions, energy source emissions, mobile source emissions, stationary source emissions, on-site cargo handling equipment emissions, and transportation refrigeration unit (TRU) emissions. Out of all Project emissions, exceedance of NO_x emissions is the highest. The primary source of NO_x emissions is mobile source emissions, due to both passenger vehicles and large trucks.

The amount of industrial square footage allowed under this alternative exceeds that which is proposed by the Project. With the addition of the traffic generated by the commercial uses allowed under this alternative, mobile source emissions associated with this alternative would exceed those of the Project. As such, the No Project/Existing Specific Plan Designation Alternative would increase the Project's significant and unavoidable air quality impacts.

D. Biological Resources

The No Project/Existing Specific Plan Designation Alternative would involve the same development impact area as the Project. Therefore, this alternative would result in the same potential impacts to biological resources (including burrowing owl, desert tortoise, nesting birds, and impacts to the WOTS) as the Project, and mitigation measures would be implemented to reduce impacts to such resources. Therefore, impacts to biological resources under this alternative would be similar to the Project.



E. Cultural Resources

The No Project/Existing Specific Plan Designation Alternative would have the same development impact area as the Project. No known historical or archaeological resources, as defined by CEQA Guidelines Section 15064.5, are present on the Project site. However, there is a remote potential for the Project site to contain unidentified surface or subsurface archaeological resources. Like the Project, this alternative would be required to implement mitigation measures to reduce potential impacts. Therefore, impacts to cultural resources from the No Project/Existing Specific Plan Designation Alternative would be similar to those of the Project.

F. Energy

Under the No Project/Existing Specific Plan Designation Alternative, the total building square footage would increase. Therefore, construction activities and facility energy demands during operation (energy consumed by building operations and site maintenance activities), as well as transportation fuel demands (fuel consumed by passenger car and truck vehicles accessing the Project site), associated with this alternative could also increase when compared to the Project. As such, this alternative would not reduce the Project's less than significant energy impacts.

G. Geology and Soils

Grading and development of the entire Project site would still occur under the No Project/Existing Specific Plan Designation Alternative, and therefore, impacts to geology and soils would be similar to those generated by the Project. This alternative would also result in a similar potential to impact undiscovered paleontological resources during grading. Development realized under this alternative, like the Project, would be required to implement mitigation measures to reduce potential impacts. Therefore, impacts from the No Project/Existing Specific Plan Designation Alternative would be similar to those of the Project.

H. Greenhouse Gas Emissions

When compared to the Project, the No Project/Existing Specific Plan Designation Alternative would result in increased GHG emissions due to the expanded scope of facilities, increases in building/facility energy demands, and increased trip generation. The Project would not exceed the significant emissions threshold of 100,000 Tons CO₂e (35,753.76 MTCO₂e) per year. Although significant impacts would not be expected, GHG emissions under the No Project/Existing Specific Plan Designation Alternative would exceed those of the Project.

I. Hazards and Hazardous Materials

The Project would not result in significant impacts related to hazards and hazardous materials. The Project site is not located within one-quarter mile of any existing or proposed school, nor is the site located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Uses implemented under the No Project/Existing Specific Plan Designation Alternative would be subject to the same federal, state, and local regulations and permitting requirements as would



occur with the Project. Similar to the Project, this alternative would result in less than significant impacts related to hazards and hazardous materials.

J. Hydrology and Water Quality

The No Project/Existing Specific Plan Designation Alternative would result in the same area of impervious surfaces compared to the Project. This alternative would introduce new sources of water pollutants from construction and operational activities, and result in similar runoff and potential for impacts to drainage, erosion, and water quality as the Project. Similar to the Project, this alternative would be required to include storm drain facility improvements, source control, site design, and treatment control BMPs. Therefore, the No Project/Existing Specific Plan Designation Alternative would result in similar less than significant impacts to hydrology and water quality.

K. Land Use and Planning

The NAVISP amendment proposed under the Project would not be necessary under the No Project/Existing Specific Plan Designation Alternative. This alternative's land use was accounted for in the modeling for the SCAG's SCS/RTP. Therefore, this alternative is consistent with the SCS/RTP (Connect SoCal) policies, the Town's General Plan, and Municipal Code. Comparative land use and planning impacts under this alternative would be reduced when compared to the Project. Both the Project and the No Project/Existing Specific Plan Designation Alternative would result in less than significant impacts related to land use and planning.

L. Noise

Construction noise duration could increase under the No Project/Existing Specific Plan Designation Alternative due to the potential for increased building square footage and longer construction schedule. Under this alternative, the types of construction activities and equipment employed would be similar to those associated with construction of the Project. Maximum received construction-source noise/vibration levels would be unchanged, however the duration may be increased.

Stationary operational noise could be increased due to the increased square footage and the addition of commercial noise sources. Vehicular noise could also be expected to increase under this alternative, in relation to the increase in vehicle trips. The Project's significant and unavoidable off-site vehicular noise impacts would increase under the No Project/Existing Specific Plan Designation Alternative.

M. Public Services

Under the No Project/Existing Specific Plan Designation Alternative, buildout would result in an increase in employees and the addition of commercial customers. This would result in overall greater demands placed on public services, including fire protection and law enforcement. Although significant public service impacts would not be anticipated under this alternative, impacts would be greater than those identified for the Project.



N. Transportation

Due to the addition of commercial uses and the increase in potential industrial square footage, the No Project/Existing Specific Plan Designation Alternative can be expected to increase vehicle trips associated with the site (from both an increased number of employees and new commercial customers). This would result in an increase in overall VMT and VMT per employee compared to the Project. Therefore, the Project's significant and unavoidable VMT impact would increase under the No Project/Existing Specific Plan Designation Alternative.

O. Tribal Cultural Resources

The No Project/Existing Specific Plan Designation Alternative would result in a similar potential to adversely affect buried tribal cultural resources as the Project, since the development impact area would be the same. As with the Project, this alternative would be required to implement mitigation measures to reduce potential impacts. Therefore, potential impacts to tribal cultural resources under this alternative would be similar to those associated with the Project.

P. Utilities and Service Systems

Like the Project, the No Project/Existing Specific Plan Designation Alternative would implement all necessary on-site and off-site utilities and service infrastructure system improvements. Based on the increased scope and intensity of development under this alternative, demands for utilities and services under this alternative would be increased. However, no significant impacts would result from either the Project or the No Project/Existing Specific Plan Designation Alternative.

Q. Conclusion

1. Avoid or Substantially Lessen the Significant Impacts of the Project

Based on the preceding discussions, the No Project/Existing Specific Plan Designation Alternative would not avoid or substantially lessen any of the Projects significant impacts. Furthermore, given the increase in building intensity allowed by the site's existing land use designation and associated vehicle trips, this alternative would increase the Projects significant and unavoidable air quality, noise, and VMT impacts.

2. Attainment of Project Objectives

The No Project/Existing Specific Plan Designation Alternative would meet the Project Objectives, as described in Section 6.1.1.

6.4.3 REDUCED INTENSITY ALTERNATIVE

The Reduced Intensity Alternative was selected to reduce impacts associated with air quality, noise, and transportation. The Reduced Intensity Alternative would consider development of the Project site with a 15% reduction in building square footage. Under this alternative, a total of 2,958,000 s.f. of industrial uses would be constructed. This alternative would generate approximately 2,475 employees



using an employment generation rate of 1 employee per 1,195 square feet for warehouse uses, compared to the 2,912 employees that would be generated by the Project. The development impact area would generally remain the same as the Project. Access to the site would be the same with a proportional reduction in the number of parking spaces.

A. *Aesthetics*

The Reduced Intensity Alternative would have the same development area as the Project. The Project site is not located within an area identified for scenic preservation. There are no scenic vistas within the Project site, nor would the Project otherwise adversely affect a designated scenic vista. The existing vacant and undeveloped site would still be replaced with industrial uses, although the building square footage would be reduced by 522,110 sq. ft. under this alternative. Site design and architectural features would be similar to the Project under this alternative. Walls and fences will be provided for screening, buffering, and security purposes along building site perimeters and interior to building sites. Landscaping would include a variety of trees, shrubs, vines, and accent plants along the site's perimeter. Accordingly, the Reduced Intensity Alternative would result in less than significant impacts associated with aesthetics, similar to the Project.

B. *Air Quality*

Although the development impact area would be similar to the Project, the Reduced Intensity Alternative would result in an approximate 15% reduction of allowable building square footage. Therefore, construction-related air quality impacts would be slightly reduced during the building construction phase compared to the Projects already less than significant impacts.

The Project's operational emissions of VOCs, NO_x, and PM₁₀ emissions would exceed the applicable MDAQMD regional thresholds for these pollutants and would therefore contribute to the violation of an air quality standard and result in a cumulatively considerable net increase of an ozone precursor. No feasible mitigation measures exist that would reduce the Project's emissions to levels that are less than significant.

The 15% reduction in development intensity under the Reduced Intensity Alternative would translate to an approximate 15% reduction in operational-source air pollutant emissions when compared to the Project. Table 6-2 compares operational-source air pollutant emissions under the Project and Reduced Intensity Alternative.



Table 6-2 Operational Source Emissions Comparison

Pollutant	MDAQMD Threshold	Project		Reduced Intensity Alternative	
		Maximum ¹ Daily Emissions	Threshold Exceeded?	Maximum ² Daily Emissions	Threshold Exceeded?
VOC - Summer	137	176.86	YES	150.33	YES
VOC - Winter		149.26	YES	126.87	No
NO _x - Summer	137	190.98	YES	162.33	YES
NO _x - Winter		198.71	YES	168.90	YES
CO - Summer	548	520.45	No	442.38	No
CO - Winter		289.45	No	246.03	No
SO _x - Summer	137	2.11	No	1.79	No
SO _x - Winter		2.02	No	1.71	No
PM ₁₀ - Summer	82	125.77	YES	109.90	YES
PM ₁₀ - Winter		125.50	YES	106.67	YES
PM _{2.5} - Summer	65	35.90	No	30.51	No
PM _{2.5} - Winter		35.70	No	30.34	No

¹ See DEIR Table 4.2-7.

² Reflects a 15% reduction.

As shown above, the reduction in intensity realized under the Reduced Intensity Alternative would still result in operational exceedances of MDAQMD thresholds for VOC, NO_x, and PM₁₀. This is a significant and unavoidable impact of both the Project and the Reduced Intensity Alternative.

C. Biological Resources

The Reduced Intensity Alternative would involve the same development impact area as the Project. As such, this alternative would result in the same potential impacts to biological resources (including burrowing owl, desert tortoise, nesting birds, and impacts to the WOTS) as the Project. As with the Project, mitigation measures would be necessary to reduce impacts. Impacts to biological resources under the Reduced Intensity Alternative would be comparable to the Project.

D. Cultural Resources

The Reduced Intensity Alternative would have the same development impact area as the Project. No known historical or archaeological resources, as defined by CEQA Guidelines Section 15064.5, are present on the Project site. However, there is a remote potential for the Project site to contain unidentified surface or subsurface archaeological resources. Like the Project, this alternative would be required to implement mitigation measures to reduce potential impacts. Therefore, impacts to cultural resources from the Reduced Intensity Alternative would be similar to those of the Project.

E. Energy

Under the Reduced Intensity Alternative, the total building square footage would be reduced by approximately 15 percent with a proportional decrease in construction energy demands, operational



building energy consumption, and vehicle fuel. Like the Project, energy impacts associated with this alternative would be less than significant.

F. Geology and Soils

Grading and development of the entire Project site would still occur under the Reduced Intensity Alternative, and therefore, impacts to geology and soils would be similar to those generated by the Project. This alternative would also result in a similar potential to impact undiscovered paleontological resources during grading. Development realized under this alternative, like the Project, would be required to implement mitigation measures to reduce potential impacts. Therefore, impacts from the Reduced Intensity Alternative would be similar to those of the Project.

G. Greenhouse Gas Emissions

When compared to the Project, the Reduced Intensity Alternative would result in decreased GHG emissions due to the reduced scope of facilities, reduced building/facility energy demands, and decreased trip generation. Neither the Project, nor this alternative, would exceed the applicable threshold. The Reduced Intensity Alternative would further reduce the Projects already less than significant GHG emissions.

H. Hazards and Hazardous Materials

The Project would not result in significant impacts related to hazards and hazardous materials. The Project site is not located within one-quarter mile of any existing or proposed school, nor is the site located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Uses implemented under the Reduced Intensity Alternative would be subject to the same federal, state, and local regulations and permitting requirements as would occur with the Project. Similar to the Project, this alternative would result in less than significant impacts related to hazards and hazardous materials.

I. Hydrology and Water Quality

The Reduced Intensity Alternative would result in a slight reduction in the amount of impervious surfaces when compared to the Project. Regardless, this alternative would introduce new sources of water pollutants from construction and operational activities, and result in similar runoff and potential for impacts to drainage, erosion, and water quality as the Project. Similar to the Project, this alternative would be required to include storm drain facility improvements, source control, site design, and treatment control BMPs. Therefore, the Reduced Intensity Alternative would result in similar less than significant impacts to hydrology and water quality.

J. Land Use and Planning

Similar to the Project, the Reduced Intensity Alternative would require a Specific Plan Amendment to accommodate the proposed uses. This alternative would be consistent with the SCAG's RTP/SCS



policies, the Town's General Plan and Zoning Ordinance. Land use impacts under the Reduced Intensity Alternative would be comparable to the Project.

K. Noise

Construction noise duration would decrease under the Reduced Intensity Alternative due to the decreased building square footage and shorter construction schedule. Under this alternative, the types of construction activities and equipment employed would be similar to those associated with construction of the Project. Maximum received construction-source noise/vibration levels would be unchanged, however the duration may be decreased.

Stationary operational noise could be reduced due to the decreased square footage. However, the 15% reduction in the scope of development would not be sufficient to reduce the Projects significant off-site vehicular noise. While operational noise would be reduced under the Reduced Intensity Alternative, off-site traffic noise would remain a significant and unavoidable impact.

L. Public Services

Under the Reduced Intensity Alternative, buildout would result in a less intense industrial use and associated reduction of employees. This would result in slightly less demands placed on public services, including fire protection and law enforcement. This alternative would further reduce the Projects already less than significant impacts to public services.

M. Transportation

The Reduced Intensity Alternative would result in reduced total VMT when compared to the Project. Because the intensity and scope of uses would be decreased under the Reduced Intensity Alternative, the Service Population would also be decreased. The Reduced Intensity Alternative would therefore not substantially alter the VMT/SP ratio otherwise resulting from the Project. As with the Project, VMT impacts under this alternative would be significant and unavoidable. Significant and unavoidable impacts resulting from the Project in this regard would be reduced, but would persist at a lower level under this alternative.

N. Tribal Cultural Resources

The Reduced Intensity Alternative would result in a similar potential to adversely affect buried tribal cultural resources as the Project, since the development impact area would be the same. As with the Project, this alternative would be required to implement mitigation measures to reduce potential impacts. Therefore, potential impacts to tribal cultural resources under this alternative would be similar to those associated with the Project.

O. Utilities and Service Systems

Like the Project, the Reduced Intensity Alternative would implement all necessary on-site and off-site utilities and service infrastructure system improvements. Based on the decreased scope and intensity



of development under this alternative, demands for utilities and services under this alternative would be reduced. The Reduced Intensity Alternative would further reduce the Projects already less than significant impacts.

P. Conclusion

1. Avoid or Substantially Lessen the Significant Impacts of the Project

Under the Reduced Intensity Alternative, impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, transportation, and tribal cultural resources would be similar to the Project

The Reduced Intensity Alternative would result in reduced impacts related to air quality, energy, GHG emissions, noise, public services, and utilities and service systems due to the reduction in square footage and associated vehicular trips.

The significant and unavoidable impacts identified under the Project (air quality, noise, and transportation) would continue to occur under this alternative.

2. Attainment of Project Objectives

The Reduced Intensity Alternative would meet Project Objectives B, C, F, G, and H, as described in Section 6.1.1. As compared with the Project, this alternative would not meet the following objectives to the same extent, due to the reduced square footage and proportional reduction in employees:

A. To efficiently develop a vacant and underutilized property with industrial uses to help meet the regional demands for goods movement facilities.

D. To make efficient use of a property in the Town of Apple Valley by maximizing its buildout potential for employment-generating uses.

E. To develop Class A speculative industrial buildings in the Town of Apple Valley that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the CEQA Guidelines states that, if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.



Table 6-3 Comparison of Alternatives and Project-Related Environmental Impacts

Impact Area	Project	No Project/ No Development	No Project/ Existing SP Designations	Reduced Intensity Alternative
Aesthetics	LTS	No Impact (less)	LTS (similar)	LTS (similar)
Air Quality				
Construction	LTS	No Impact (less)	LTS (greater)	LTS (less)
Operation	SU	No Impact (less)*	SU (greater)	SU (less)
Biological Resources	LTS/M	No Impact (less)	LTS/M (similar)	LTS/M (similar)
Cultural Resources	LTS/M	No Impact (less)	LTS/M (similar)	LTS/M (similar)
Energy	LTS	No Impact (less)	LTS (greater)	LTS (less)
Geology and Soils	LTS/M	No Impact (less)	LTS/M (similar)	LTS/M (similar)
GHG Emissions	LTS	No Impact (less)	LTS (greater)	LTS (less)
Hazards and Hazardous Materials	LTS	No Impact (less)	LTS (similar)	LTS (similar)
Hydrology and Water Quality	LTS	No Impact (greater)	LTS (similar)	LTS (similar)
Land Use and Planning	LTS	No Impact (less)	LTS (less)	LTS (similar)
Noise				
Construction	LTS	No Impact (less)	LTS (greater)	LTS (less)
On-Site Operations	LTS	No Impact (less)	LTS (greater)	LTS (less)
Off-Site Traffic-Related	SU	No Impact (less)*	SU (greater)	SU (less)
Public Services	LTS	No Impact (less)	LTS (greater)	LTS (less)
Transportation	SU	No Impact (less)*	SU (greater)	SU (similar)
Tribal Cultural Resources	LTS/M	No Impact (less)	LTS/M (similar)	LTS/M (similar)
Utilities & Service Systems	LTS	No Impact (less)	LTS (greater)	LTS (less)

LTS = Less than Significant; LTS/M = Less than Significant with Mitigation; SU = Significant and Unavoidable

* = Eliminates SU impact

Table 6-4 Alternatives Attainment of Project Objectives

Project Objectives	No Project/ No Development	No Project/ Existing SP Designations	Reduced Intensity Alternative
A. To efficiently develop a vacant and underutilized property with industrial uses to help meet the regional demands for goods movement facilities.	Not Met	Partially Met	Partially Met
B. To expand economic development, facilitate job creation, and increase the tax base for the Town of Apple Valley by establishing new industrial development adjacent to established and planned industrial areas.	Not Met	Met	Met
C. To attract new businesses to the Town of Apple Valley and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.	Not Met	Met	Met
D. To make efficient use of a property in the Town of Apple Valley by maximizing its buildout potential for employment-generating uses.	Not Met	Met	Partially Met
E. To develop Class A speculative industrial buildings in the Town of Apple Valley that are designed to meet contemporary industry	Not Met	Met	Partially Met



Project Objectives	No Project/ No Development	No Project/ Existing SP Designations	Reduced Intensity Alternative
standards, can accommodate a wide variety of users, and are economically competitive with similar industrial buildings in the local area and region.			
F. To develop industrial buildings in close proximity to the I-15 and SR-18 freeways that can be used as part of the southern California goods movement network	Not Met	Met	Met
G. To develop a use that has architectural design and operational characteristics that are compatible with other existing and planned developments in the local area	Not Met	Met	Met
H. To develop a vacant property that has access to available infrastructure, including roads and utilities	Not Met	Met	Met



7.0 REFERENCES

7.1 PERSONS CONTRIBUTING TO EIR PREPARATION

7.1.1 TOWN OF APPLE VALLEY PLANNING DIVISION

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7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the Lake Creek Logistics Center EIR and are bound separately as Technical Appendices. The Technical Appendices are available for review at the Town of Apple Valley Planning Department, 14955 Dale Evans Parkway, Apple Valley, California 92307, during the Town's regular business hours or can be accessed on the Town's website at the following address: <https://www.applevalley.org/services/planning-division/environmental>.



- A: Notice of Preparation (NOP) and NOP Comment Letters
- B1: Air Quality Impact Analysis
- B2: Mobile Source Health Risk Assessment
- C: Biological Resources Assessment
- D: Cultural Resources Assessment
- E: Energy Impact Analysis
- F1: Geotechnical Investigation
- F2: Paleontological Resources Technical Memorandum
- G: Greenhouse Gas Analysis
- H1: Phase I Environmental Site Assessment
- H2: Airport Land Use Compatibility Analysis
- I1: Preliminary Hydrology Calculations
- I2: Water Quality Management Plan
- I3: Water Supply Assessment
- J: Noise Impact Analysis
- K1: Vehicle Miles Traveled (VMT) Analysis
- K2: Traffic Analysis

7.3 DOCUMENTS INCORPORATED BY REFERENCE

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

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7.5 PERSONS CONSULTED/Written OR VERBAL COMMUNICATION

7.5.1 TRIBAL CONSULTATION

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7.5.2 FEDERAL AVIATION ADMINISTRATION

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