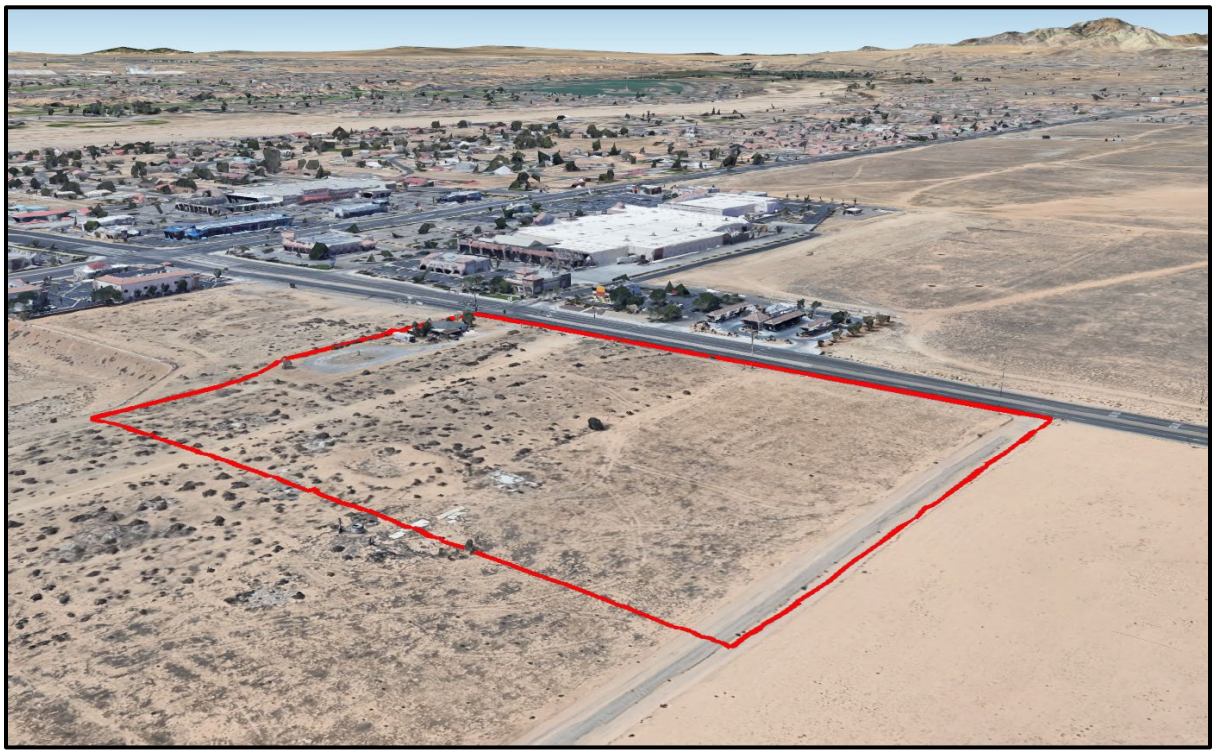
INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

APPLE BEAR COMMERCIAL PROJECT

TOWN OF APPLE VALLEY, SAN BERNARDINO COUNTY, CALIFORNIA

DEVELOPMENT PERMIT NO. 2022-004, SPECIAL USE PERMIT NO. 2022-002, TENTATIVE PARCEL MAP NO. 20473



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June 2023

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Town of Apple Valley

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Project No. WDN2201

LSA

June 2023

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APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
ADT	average daily traffic
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
AQAP	Air Quality Attainment Plan
Bcf	billion cubic feet
BMP	Best Management Practice
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
CNEL	Community Noise Equivalent Level
CO_2e	carbon dioxide equivalent
CWA	Federal Clean Water Act
dBA	A-weighted decibels
DCV	Design Capture Volume
DR	Design Review
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
EV	electric vehicle
FMMP	Farmland Mapping and Monitoring Program

GHG	greenhouse gas
HCP	Habitat Conservation Plan
HMBEP	Hazardous Materials Business Emergency Plan
HMMA	Hazardous Materials Management Act
HVAC	heating, ventilation, and air conditioning
IEUA	Inland Empire Utilities Agency
IS	Initial Study
ITE	Institute of Transportation Engineers
kBTU	thousand British thermal units
LBP	lead-based paint
L_{eq}	equivalent continuous sound level
LID	Low Impact Development
L_{max}	maximum instantaneous noise level
LOS	level of service
LRA	Local Responsibility Area
LST	localized significance threshold
MDAQMD	Mojave Desert Air Quality Management District
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
mpg	miles per gallon
MRF	Materials Recycling Facility
MT	metric ton
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NHTSA	National Highway Traffic and Safety Administration
NPDES	National Pollutant Discharge Elimination System
PRC	Public Resources Code
REC	Recognized Environmental Condition
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board

SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SO_2	sulfur dioxide
STC	Sound Transmission Class
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDR	Waste Discharge Requirement
WQMP	Water Quality Management Plan

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1.0 INTRODUCTION AND PURPOSE OF THE INITIAL STUDY

1.1 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to evaluate the potential environmental effects of the Apple Bear Commercial Project (project or proposed project) proposed by Wood Investment Companies, Inc. (Project Applicant) in the unincorporated Town of Apple Valley, in southwestern San Bernardino County, California. The proposed project involves the demolition of one vacant residential structure and the development of commercial uses on approximately 8.25 acres, consisting of one grocery store, three restaurants with drive-through operations, one multiple tenant commercial/retail building, and one car wash with car wash tunnel. Additionally, the project includes 0.52-acre of off-site improvements along adjacent roadways. A Tentative Parcel Map (No. 20473) is proposed to convert the 8.25-acre project site from three parcels (Assessor Parcel Numbers [APNs] 0434-021-10, -35, and -37) into five parcels, one for each of the proposed commercial buildings described below in Section 2.0, plus an additional 0.52 acre for off-site improvements along Apple Bear Road.

Chapter 1.0 of this Initial Study describes the purpose, environmental authorization, the intended uses of the Initial Study, documents incorporated by reference, and the processes and procedures governing the preparation of the environmental document. Pursuant to Section 15367 of the State of California Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines), the Town of Apple Valley (Town) is the Lead Agency under the California Environmental Quality Act (CEQA). The Town has primary responsibility for compliance with CEQA and consideration of the proposed project.

The Initial Study is organized as follows:

- **Chapter 1.0, Introduction** provides a discussion of the Initial Study's purpose, intended uses, and public review process.
- **Chapter 2.0, Project Description** provides a detailed description of the existing site conditions and proposed project, including requested approvals and entitlements.
- **Chapter 3.0, Initial Study Checklist** includes the CEQA Guidelines Appendix G, Environmental Checklist Form.
- **Chapter 4.0, Environmental Factors Potentially Affected** identifies the potential environmental factors that would be affected by the project and provides a determination that an IS/MND will be prepared pursuant to CEQA.
- **Chapter 5.0, CEQA Environmental Checklist** includes a checklist and accompanying analyses of the project's potential effect on the environment. For each environmental issue, the analysis identifies the level of the proposed project's environmental impact.
- **Chapter 6.0, List of Preparers** includes the list of preparers.

- **Chapter 7.0, References** details the references cited throughout the document.

- **Appendices** Include the technical material prepared to support the analyses contained in the Initial Study.

1.2 PURPOSE OF THE INITIAL STUDY

CEQA requires that the proposed project be reviewed to determine the environmental effects that would result if the project were approved and implemented. The Town, as the Lead Agency, has the responsibility for preparing and adopting the associated environmental document prior to consideration of the proposed project. The Town has the authority to approve discretionary actions relating to implementation of the proposed project.

This Initial Study has been prepared in accordance with the relevant provisions of CEQA (California Public Resources Code Section 21000 et seq.); the CEQA Guidelines,[1] and the rules, regulations, and procedures for implementing CEQA as adopted by the Town. The objective of the Initial Study is to inform Town decision-makers, representatives of other affected/responsible agencies, the public, and interested parties of the potential environmental consequences of the project.

As established in CEQA Guidelines Section 15063(c), the purposes of an Initial Study are to:

- Provide the Lead Agency (Town of Apple Valley) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND);

- Enable an applicant or Lead Agency to modify a project, thus mitigating significant impacts before an EIR is prepared, and thereby enabling the project to qualify for an ND or MND;

- Assist in the preparation of an EIR, if one is required;

- Facilitate environmental assessment early in the design of a project;

- Provide a factual basis for finding in an ND or MND that a project will not have a significant effect on the environment;

- Eliminate unnecessary EIRs; and

- Determine whether a previously prepared EIR could be used to evaluate environmental impacts associated with the project.

1.3 INTENDED USE OF THIS INITIAL STUDY

The Town formally initiated the environmental review process for the proposed project with receipt of the project application and preparation of this Initial Study. The Initial Study screens out those impacts that would be less than significant and do not warrant mitigation, while identifying those

[1] California Code of Regulations. Title 14, Chapter 3, Sections 15000 through 15387.

issues that require mitigation to reduce impacts to less than significant levels. As identified in the following analyses, project impacts related to various environmental issues either do not occur, are less than significant (when measured against established significance thresholds), or have been rendered less than significant through implementation of mitigation measures. Based on these analytical conclusions, this Initial Study supports adoption of an MND for the proposed project.

CEQA[2] permits the incorporation by reference of all or portions of other documents that are generally available to the public. The Initial Study has been prepared utilizing information from Town planning and environmental documents, technical studies specifically prepared for the project, and other publicly-available data. The documents utilized in the Initial Study are identified in Chapter 7.0, References, and are hereby incorporated by reference. These documents are available for review at the Town of Apple Valley Community Development Department, Planning Division.

1.4 PUBLIC REVIEW OF THE INITIAL STUDY

The Initial Study and a Notice of Intent (NOI) to adopt an MND will be distributed to responsible and trustee agencies, other affected agencies, and other parties for a 20-day public review period. Written comments regarding this Initial Study should be addressed to:

Daniel Alcayaga, AICP, Planning Manager
Town of Apple Valley
Community Development Department, Planning Division
14955 Dale Evans Parkway
Apple Valley, CA 92307
(760) 240-7000/ dalcayaga@applevalley.org

Comments raised during the 20-day public review period will be considered and addressed prior to adoption of the MND by the Town of Apple Valley.

[2] *CEQA Guidelines* Section 15150.

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2.0 PROJECT DESCRIPTION

The proposed project includes the development of commercial uses on the approximately 8.25-acre project site, with an additional 0.52-acre of off-site improvements along adjacent roadways in the Town of Apple Valley. A Tentative Parcel Map (No. 20473) is proposed to convert the 8.25-acre project site from three parcels (Assessor Parcel Numbers [APNs] 0434-021-10, -35, and -37) into five parcels, one for each of the proposed commercial buildings described below, plus an additional 0.52 acre for off-site improvements along Apple Bear Road. The project would result in the demolition of the existing, vacant residential structure in the northwestern portion of the site and development of an approximately 23,256-square-foot grocery store, an approximately 5,381-square-foot car wash with a 110-foot car wash tunnel, an approximately 3,546-square-foot restaurant with drive-through, an approximately 2,500-square-foot restaurant with drive-through, and an approximately 5,060-square-foot multiple tenant commercial/retail building with four attached suites, including at least one speculative restaurant with drive-through.

2.1 PROJECT LOCATION

The project site is located in the southwest portion of the Town of Apple Valley, in southwestern San Bernardino County, California. The project site is located in Section 06 of Township 4 North, Range 3 West of the San Bernardino Baseline and Meridian, as depicted on the U.S. Geological Survey (USGS) 7.5-minute series Apple Valley South, California quadrangle.[3] Specifically, the center of the project site is at latitude 34°28'12.67" N and longitude -117°14’16.85" W at an elevation of approximately 2,878 feet above mean sea level and consists of three parcels (Assessor Parcel Numbers [APNs] 0434-021-10, -35, and -37). Figure 1: Project Location and Vicinity depicts the location of the project site on a regional scale.

2.2 EXISTING SETTING

The project site is predominately flat and lacks significant slopes. The project site is bounded by Bear Valley Road and commercial/retail uses to the north; undeveloped vacant land, commercial/retail uses, and Apple Valley Road to the west; undeveloped vacant land to the south; and Flying Feather Road and undeveloped vacant land to the east. A medical office building is located approximately 500 feet west of the site along Bear Valley Road, and the nearest residential uses consist of single-family homes located approximately 560 feet east of the site and multi-family residential[4] uses located approximately 620 feet southwest of the site along Apple Valley Road. Figure 2: Existing Setting depicts the project site and surrounding development.

The project site consisted of an agricultural complex constructed in 1920, which is no longer present on the project site. Remnants of the agricultural complex structures (foundation slabs and water management/conveyance features) currently exist on the project site.

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3 United States Geological Survey. *Apple Valley South, California 7.5-Minute Series Topographic Quadrangle Map*. 1980.

4 This residential use is the Victor Valley Post-Acute Center (congregate/convalescent care center) within the Jess Ranch Specific Plan.

The project site is currently occupied with one vacant single-family residence (19439 Bear Valley Road) with ancillary shed in the northwestern corner of the site. Additionally, there is one septic system located near the existing single-family residence. Undeveloped portions of the site contain desert scrub vegetation and foundation remnants from the agricultural complex structures that previously occupied the site. At least two septic tanks are also located in undeveloped portions of the site near the foundation remnants. Additional disturbance on the project site includes evidence of off-highway vehicle use and modern refuse scattered throughout the site. Figures 3a through 3e include photographs of the project site and land uses adjacent to the site. Photo locations are depicted on Figure 2.

2.3 EXISTING LAND USE

Table 2.3.A summarizes the project site and surrounding land uses, General Plan designations, and zoning designations.

Table 2.3.A: Project Site and Surrounding Land Uses

Direction	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Single-family home with ancillary shed	General Commercial (C-G)	General Commercial (C-G)
North	Commercial (Restaurants)	Regional Commercial (C-R)	Regional Commercial (C-R)
East	Vacant/Undeveloped	General Commercial (C-G)	General Commercial (C-G)
South	Vacant/Undeveloped	General Commercial (C-G)	General Commercial (C-G)
West	Vacant/Undeveloped)	General Commercial (C-G)/Specific Plan (SP)	General Commercial (C-G)/Specific Plan (SP)

Sources: Town of Apple Valley. *General Plan Land Use Map.* Exhibit II-2. Adopted September 11, 2009, last Amended October 27, 2015. Town of Apple Valley. *Zoning Map.* Adopted April 27, 2010, last Amended September 24, 2019.

As shown in Table 2.3.A, the General Plan and Zoning designation for the project site is General Commercial (C-G). The Town's General Plan Community Development Element indicates the C-G land use category "allows a broad range of retail uses, as well as office and service land uses. Typical uses will serve the needs of the Town's residents and businesses, in a shopping center setting. General retail stores, including all types of consumer goods, furniture and appliance sales, auto repair and sales are permitted in this designation. Restaurants, both sit-down and fast food, gasoline service stations and general office (secondary to retail uses) are also permitted in this designation."[5] Pursuant to Section 9.35.020 of the Town's Development Code, the C-G District " is intended for the development of a full range of retail stores, offices and personal and business services, including shopping centers along major roadways, consistent with the General Commercial (C-G) land use designation of the General Plan."[6] Table 9.35.030-A (Permitted Uses) of the Town Development Code identifies drive-thru/drive up commercial uses as uses that would require a Special Use Permit (SUP) in the C-G District to ensure that development of the proposed drive-thru/drive up

[5] Town of Apple Valley. *General Plan, Community Development.* Page II-5. Adopted August 11, 2009, last Amended October 27, 2015.

[6] Town of Apple Valley. *Development Code 2010.* Chapter 9.35, Commercial and Office Districts. 2010.

commercial use would not result in adverse impacts (e.g. parking demand, traffic noise, light, and litter) on adjacent uses or the surrounding neighborhood.

2.4 PROPOSED PROJECT

A Tentative Parcel Map (No. 20473) is proposed to convert the 8.25-acre project site from three parcels (Assessor Parcel Numbers [APNs] 0434-021-10, -35, and -37) into five parcels, one for each of the proposed commercial buildings described below, plus an additional 0.52 acre for off-site improvements along Apple Bear Road. The project includes demolition of the existing on site structures totaling approximately 3,345 square feet and development of an approximately 23,256-square-foot grocery store, an approximately 5,381-square-foot car wash with a 110-foot car wash tunnel, an approximately 3,546-square-foot restaurant with drive-through, an approximately 2,500-square-foot restaurant with drive-through, and an approximately 5,060-square-foot multiple tenant commercial/retail building with four attached suites, including one speculative restaurant with drive-through, for a total building area of 39,743 square feet. Additionally, the project would include parking, landscaping, and lighting. Finally, the project would also include 0.52 acre of off-site improvements along existing roadways adjacent to the site, including Bear Valley Road to the north and Flying Feather Road to the east, and along Apple Bear Road to the west, which would be constructed as part of the proposed project. The conceptual site plan is presented as Figure 4, and Tentative Parcel Map No. 20473 is presented as Figure 5.

2.4.1 Facility Design and Site Operations

As detailed above, the project includes development of a grocery store, a car wash with 110-foot car wash tunnel, three fast-food restaurants with drive-through operations, and one multiple tenant commercial/retail building with four attached suites.

The grocery store building would be approximately 38 feet at its tallest point and feature a concrete block façade with cement plaster, stone veneer accents, and clay tile roofs to provide visual relief and varied massing. The grocery storefront along the western frontage of the building would feature square channel siding and the primary entryway to the building, which would include a metal canopy with aluminum accents, spandrel glass, and sliding doors.

The car wash building would be approximately 35 feet at its tallest point and feature a stone veneer finish, metal panels, and metal roof with an aluminum storefront with clear glazing and back framing to enclose the 110-foot car wash tunnel on the eastern and western frontages of the tunnel. The car wash tunnel would be enclosed on the northern and southern frontages of the tunnel by a stone veneer finish, metal panels, and metal roof with glazed aluminum air-lift doors which would be open, exposing the views of the car wash tunnel during the car wash's hours of operation. Additionally, there would be a self-service vacuum area east of the car wash building with 10 parking spaces and vacuum tools located on each side of the parking space.

The three restaurants with drive-through operations and multiple tenant commercial/retail building would be constructed to heights ranging between 23 feet and 31 feet at the tallest points. These buildings would feature varied façades and massing consistent with the grocery store design to provide a cohesive architectural character throughout the project. Additionally, the proposed restaurants with drive-through operations would be required to comply with all applicable

provisions of the Specific Use Regulations for Commercial and Office Districts, as codified in Chapter 9.36.140 of the Town Development Code. Figures 6a through 6e detail the building elevations.

Light poles would be installed throughout the surface parking lot and along on-site pedestrian pathways. The commercial buildings would have security lighting located on the building façades. Additionally, streetlights would be installed along the project frontages of Apple Bear Road, Bear Valley Road, and Flying Feather Road. All lighting on the project site would comply with Section 9.37.090, Lighting of the Town Development Code, which requires light shielding, functional and aesthetic design, and compatibility with surrounding uses.

Hours of operation for the proposed uses would be seven days a week and are as follows:

- Sprouts grocery store (Major): 7:00 a.m. to 10:00 p.m.
- Raising Cane's with drive-through (Pad 2): 10:30 a.m. to 10:00 p.m.
- Mister Carwash (Pad 1): 7:00 a.m. to 9:00 p.m.
- Multiple Tenant Building with drive-through (Shops): 11:00 a.m. to 9:00 p.m.
- Salad and Go with drive-through (Pad 3): 6:30 a.m. to 9:00 p.m.

2.4.2 Site Access

Proposed vehicle and pedestrian access to the project site would be provided by five ingress/egress driveways along the northern, eastern, and western frontages of the project site. One driveway (right-in/right-out) would be constructed along the northern frontage of the site off Bear Valley Road, two driveways (full access) would be constructed along the eastern frontage of the site off Flying Feather Road, and two driveways (full access) would be constructed along the western frontage of the site off Apple Bear Road (Figure 4). The project includes frontage improvements (paved roadways, curb, gutter, sidewalks, street trees, and lighting) along the northern, eastern, and western frontages of the site.

One loading dock for the proposed Spouts Grocery Store would be located on the east side of the building. The southernmost driveways off Flying Feather Road and Apple Bear Road would provide freight trucks with primary access to the loading dock. Additionally, trash receptables with enclosures in accordance with Chapter 9.35.080 of the Town Development Code would be located east of the Sprouts Grocery Store building, east of the Raising Canes building, south of the Salad and Go drive-through, and west of the Mister Car Wash (see Figure 4).[7] Passenger vehicles would enter and exit the site from any of the five project driveways. On-site drive aisles and an internal driveway in the central portion of the site would connect all perimeter driveways and facilitate internal access to parking areas and the proposed buildings and would ensure adequate access throughout the site for first responders to an emergency.

Entrances and exits to and from parking and loading facilities would be marked with appropriate directional signage, and all site access points and driveway aprons are designed and would be

[7] MCG Architecture. *Plan Check Response Sheet – Corrections*. 1.c. Site Plan. December 1, 2022.

constructed to adequate widths for public safety pursuant to Chapter 9.72 (Off-Street Parking and Loading Regulations) of the Town Development Code.

2.4.3 Parking

Parking at the project site would comply the Town's minimum parking requirements as codified in Chapter 9.72, Off-Street Parking and Loading Regulations of the Town Development Code, which requires a minimum of 212 parking spaces. The project site would include 300 parking spaces (refer to Figure 4). Additionally, the project site would include one loading dock parking space, east of the Sprouts Grocery Store building.

2.4.4 Pedestrian and Bicycle Connectivity

The project site is accessible from a nearby public bus stop near the Bear Valley Road/Apple Valley Road intersection approximately 450 feet west of the site. Existing Class II bicycle lanes along Apple Valley Road and Kiowa Road and planned Class I bicycle lanes along the eastbound direction of Bear Valley Road would also provide bicyclists with access to the project site. Pedestrian access to the project site would occur via curb and sidewalks to be constructed along the project frontages of Bear Valley Road to the north, Apple Bear Road to the west, and Flying Feather Road to the east.

2.4.5 Landscaping

The project would incorporate landscape through a combination of accent plantings/groundcovers, hedges, and trees along the site perimeter and include additional trees throughout the parking area and along the internal drive aisles in accordance with Section 9.37.050, (Landscaping) of the Town Development Code. Landscaping within the project site would also include a planting system of adequate size and scale to screen and soften the effect of the proposed buildings until the plantings mature. Proposed landscaping would be drought-tolerant and complement existing natural and manmade features, including the dominant landscaping of surrounding areas. Figure 7 details the project landscape design.

2.4.6 Drainage

The project site is located within the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB), which is part of the Upper Mojave Hydrologic Area. The Lahontan RWQCB designates beneficial uses for waters in the Mojave Watershed, which are identified in the Water Quality Control Plan for the Lahontan Region (Basin Plan).[8]

The majority of the project site consists of pervious surface area. Currently, stormwater generally sheet flows in a northwesterly direction and drains offsite onto the adjacent vacant property or onto Bear Valley Road and enters the municipal storm drain system. Upon development of the site, all on-site storm water would be captured on-site in accordance with the 2013 Phase II Small Municipal Storm Sewer System Permit (Order No. 2013-0001-DWQ, as amended by Orders WQ 2015-0133-EXEC, WQ 2016-0069-EXEC, WQ 2018-0001-EXEC, and WQ-2018-007-EXEC; NPDES No. CAS000004)

[8] State of California Regional Water Quality Control Board. *Water Quality Control Plan for the Lahontan Region*. Chapter 2: Present and Potential Beneficial Uses. Pages 2-1 to 2-53. As amended through January 14, 2016.

(Phase II MS4 Permit) for the discharge of storm water to ensure Best Management Practices (BMPs) such as vegetated swales, buffers, and/or infiltration areas are incorporated into the project to maintain water quality.

The runoff from the site would drain to multiple on-site catch basins and enter the on-site storm drain system and be pretreated with a hydrodynamic separator before draining to one underground infiltration system proposed beneath the on-site drive aisles in the southern portion of the site. Stormwater runoff on the project site would be retained on-site and infiltrate into the soil and therefore would not be discharged off-site.

2.4.7 Infrastructure and Off-Site Improvements

The project would include 0.52 acre of off-site improvements consisting of installation of curb, gutter, sidewalk, landscaping, streetlights, and trees along the frontages of Bear Valley Road to the north, Apple Bear Road to the west, and Flying Feather Road to the east. Apple Bear Road would extend south from its existing terminus at the north side of Bear Valley Road to the site's western frontage and be constructed to its full width of 50 feet. Roadway improvements to Apple Bear Road would also include a 10-foot-wide sidewalk with parkway landscaping along the eastern and western sides of the roadway. Flying Feather Road along the site's eastern frontage would also be constructed to its full width of 50 feet and include a 10-foot-wide sidewalk with parkway landscaping along the western side of the roadway adjacent to the project site. Finally, the project would interconnect to existing sewer, water, electric, gas, and telecommunications utilities within the Bear Valley Road right-of-way.

2.4.8 Construction

The existing residential building and ancillary shed would be demolished, and all existing on-site vegetation would be removed. Construction activities would include excavation; grading; paving; development of the proposed buildings and parking areas; and the installation of lighting, landscaping, and utility connections. During grading, on-site soils would be excavated and recompacted in accordance with the 2022 California Building Code (CBC) to accommodate the development of the proposed buildings and parking areas.

Construction parking and staging would occur on the project site. However, it is possible there would be temporary lane closures necessary along existing roadways, including Bear Valley Road to the north and Flying Feather Road to the east during project construction. Construction hours would conform to the Town Development Code standards specified in Section 9.73.060(F)(1) and be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday. According to the project conceptual grading plans and consultation with the project applicant, the site is level, and no soil import or export is expected during rough grading activities. Therefore, grading activities are expected to balance on-site.

Construction of the project is anticipated to commence in fall 2023 and be completed in fall 2024, resulting in a total construction duration of approximately 12 months.

2.5 PROJECT APPROVALS

The Town of Apple Valley is the Lead Agency as set forth in CEQA Guidelines Section 21067 and is expected to use this IS/MND in consideration of the proposed Apple Bear Commercial Project and associated actions. These actions may include, but are not limited to, the following:

- Development Permit No. 2022-004;
- Special Use Permit No. 2022-002;
- Tentative Parcel Map No. 20473;
- Demolition Permit; and
- Grading Permit.

The project may require approvals from other regulatory agencies as follows:

- **Mojave Desert Air Quality Management District:** Applicant must submit a Dust Control Plan and also obtain District permits for any miscellaneous process equipment that may not be exempt under District Rule 219 including, but not limited to internal combustion engines greater than 50 horsepower. Additionally, all businesses require clearance from the Mojave Desert Air Quality Management District before obtaining a Certificate of Occupancy or Building Permit.

- **State Water Resources Control Board:** The Project Applicant must submit a Notice of Intent to comply with the General Construction Activity National Pollutant Discharge Elimination (NPDES) Permit;[9]

- **Lahontan Regional Water Quality Control Board:** The Project Applicant must submit a Stormwater Pollution Prevention Plan (SWPPP); and

- **Utility Providers:** Connection permits.

[9] Construction General Permit requirements are transferred to local agencies by way of the NPDES program. Since the Town of Apple Valley (lead agency) complies with the NPDES program guidelines, the State Water Resources Control Board is not a responsible agency or trustee agency with jurisdiction over the proposed project.

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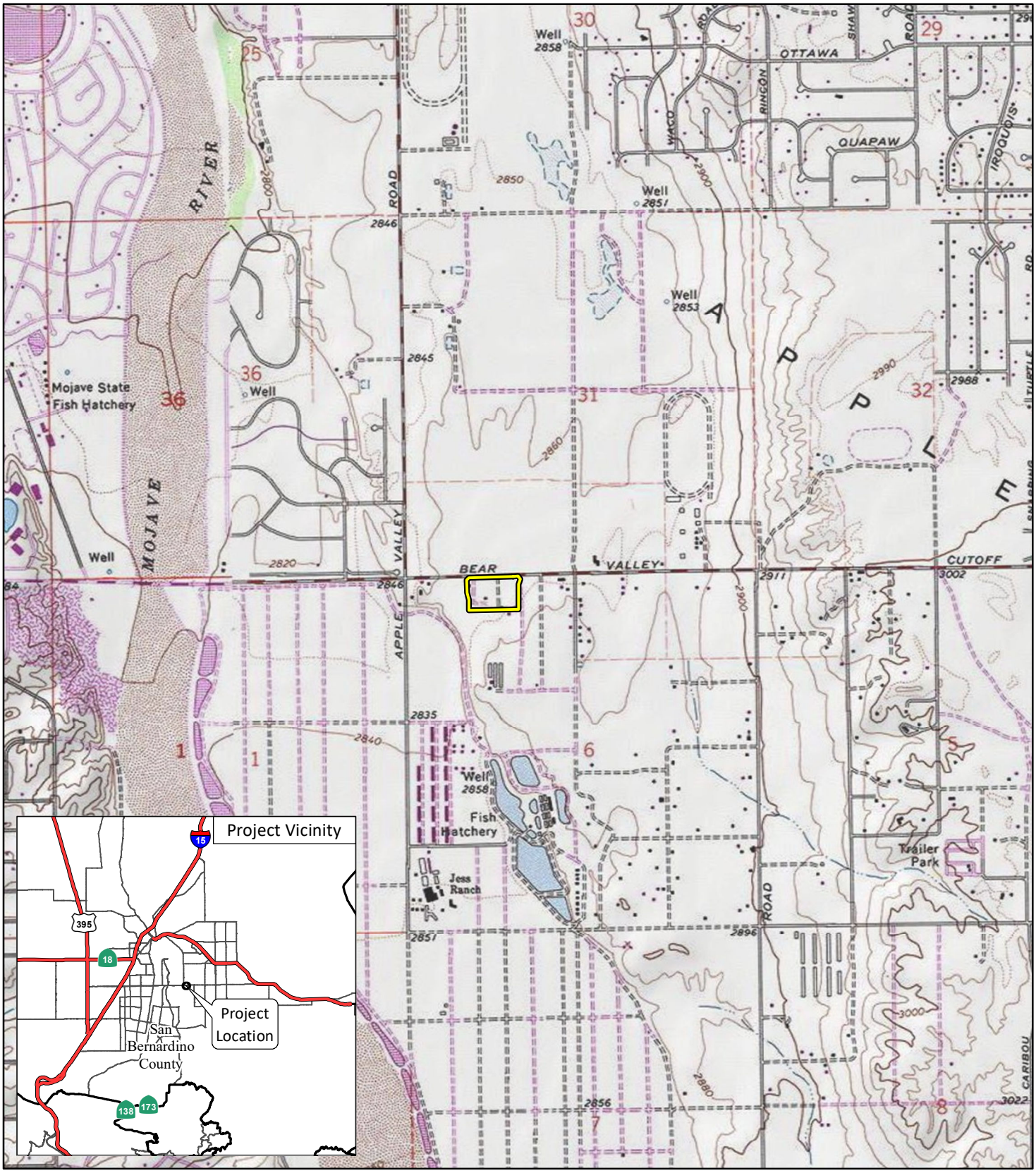

LSA

LEGEND

Project Location

FIGURE 1

N

0 1000 2000

FEET

SOURCE: USGS 7.5' Quad - *Apple Valley South* (1980), *Hesperia* (1980), CA

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Apple Bear Commercial Project

Project Location and Vicinity

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Project Site

Photo Locations

FIGURE 2

N

0 208 416

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SOURCE: Google Maps 2023

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Apple Bear Commercial Project

Existing Setting

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Photo 001: Bear Valley Road and Neighboring Uses Facing east-northeast.

Photo 002: Bear Valley Road and Neighboring Uses Facing north.

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FIGURE 3a

Apple Bear Commercial Project
Representative Site Photographs

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Photo 003: Bear Valley Road and Neighboring Uses Facing west.

Photo 004: Eastern Project Site Boundary Facing south.

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FIGURE 3b

Apple Bear Commercial Project
Representative Site Photographs

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Photo 005: Off-Site Residential Uses Facing east.

Photo 006: Eastern Project Site Boundary Facing north.

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FIGURE 3c

Apple Bear Commercial Project
Representative Site Photographs

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Photo 007: Project Site Overview Facing northwest.

Photo 008: Off-Site Residential Uses Facing south.

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FIGURE 3d

Apple Bear Commercial Project
Representative Site Photographs

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Photo 009: Off-Site Congregate Care Uses Facing southwest.

Photo 010: Off-Site Commercial Uses_Facing west.

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FIGURE 3e

Apple Bear Commercial Project

Representative Site Photographs

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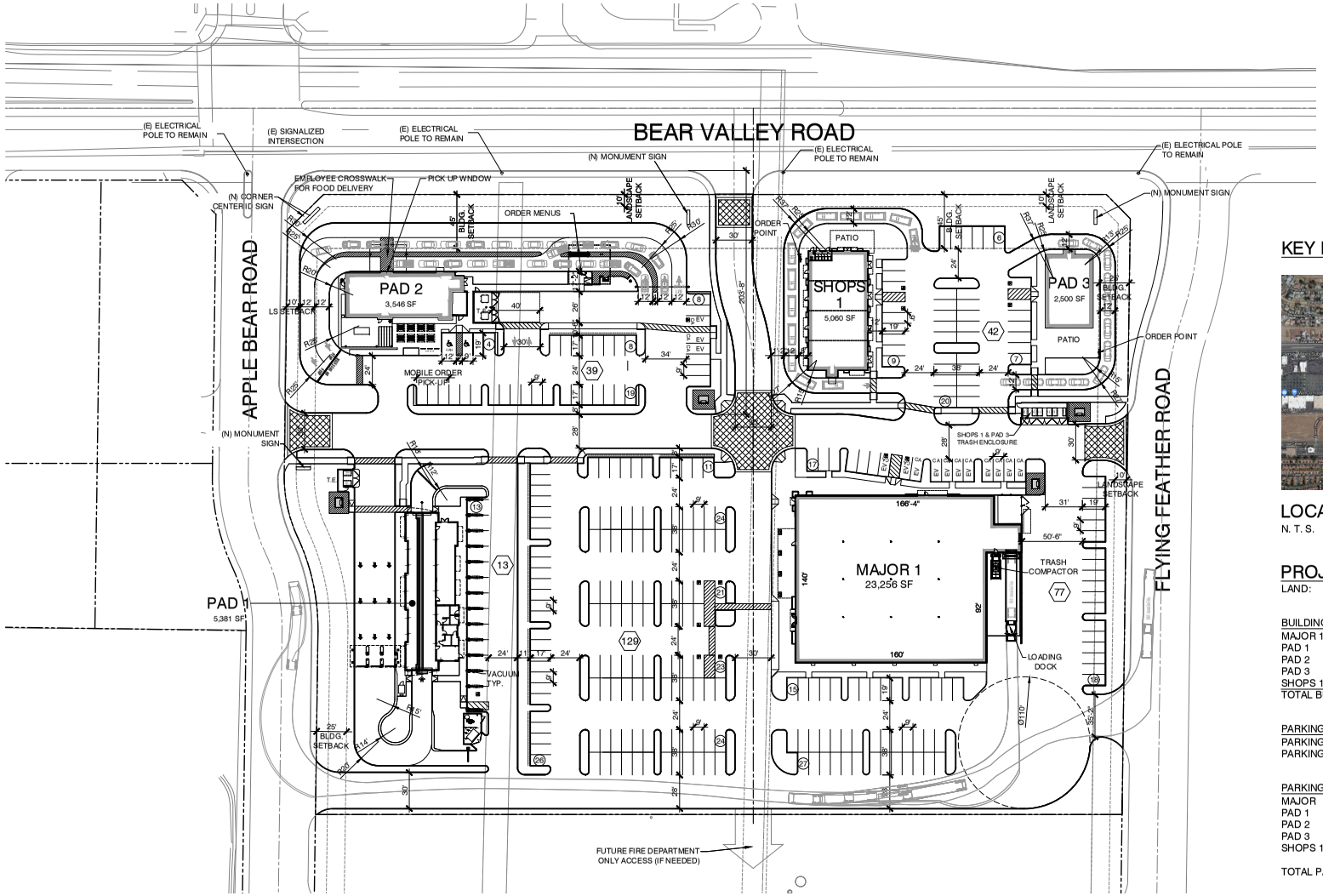
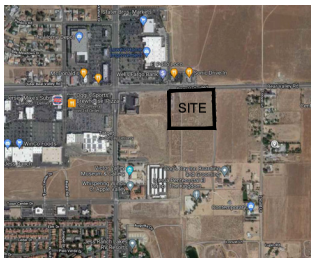


KEY MAP



LOCATION MAP

N. T. S.

PROJECT INFORMATION

LAND:	±8.35 AC	±363,526 SF

BUILDING AREA	
MAJOR 1	±23,256 SF
PAD 1	±5,381 SF
PAD 2	±3,546 SF
PAD 3	±2,500 SF
SHOPS 1	±5,060 SF
TOTAL BUILDING AREA	±39,743 SF

PARKING PROVIDED	
PARKING PROVIDED	300 STALLS
PARKING RATIO	7.55 /1000

PARKING REQUIRED		
MAJOR	1 PER 250	93 STALLS
PAD 1	7 SPACES PER WASH LINE	7 STALLS
PAD 2	1 PER 100	36 STALLS
PAD 3	1 PER 100	25 STALLS
SHOPS 1	1 PER 100	51 STALLS
TOTAL PARKING REQUIRED:		212 STALLS

LSA

FIGURE 4

0 85 170

FEET

SOURCE: MCG Architecture

I:\WDN2201\G\Site_Plan (6/16/2023)

Apple Bear Commercial Project

Conceptual Site Plan

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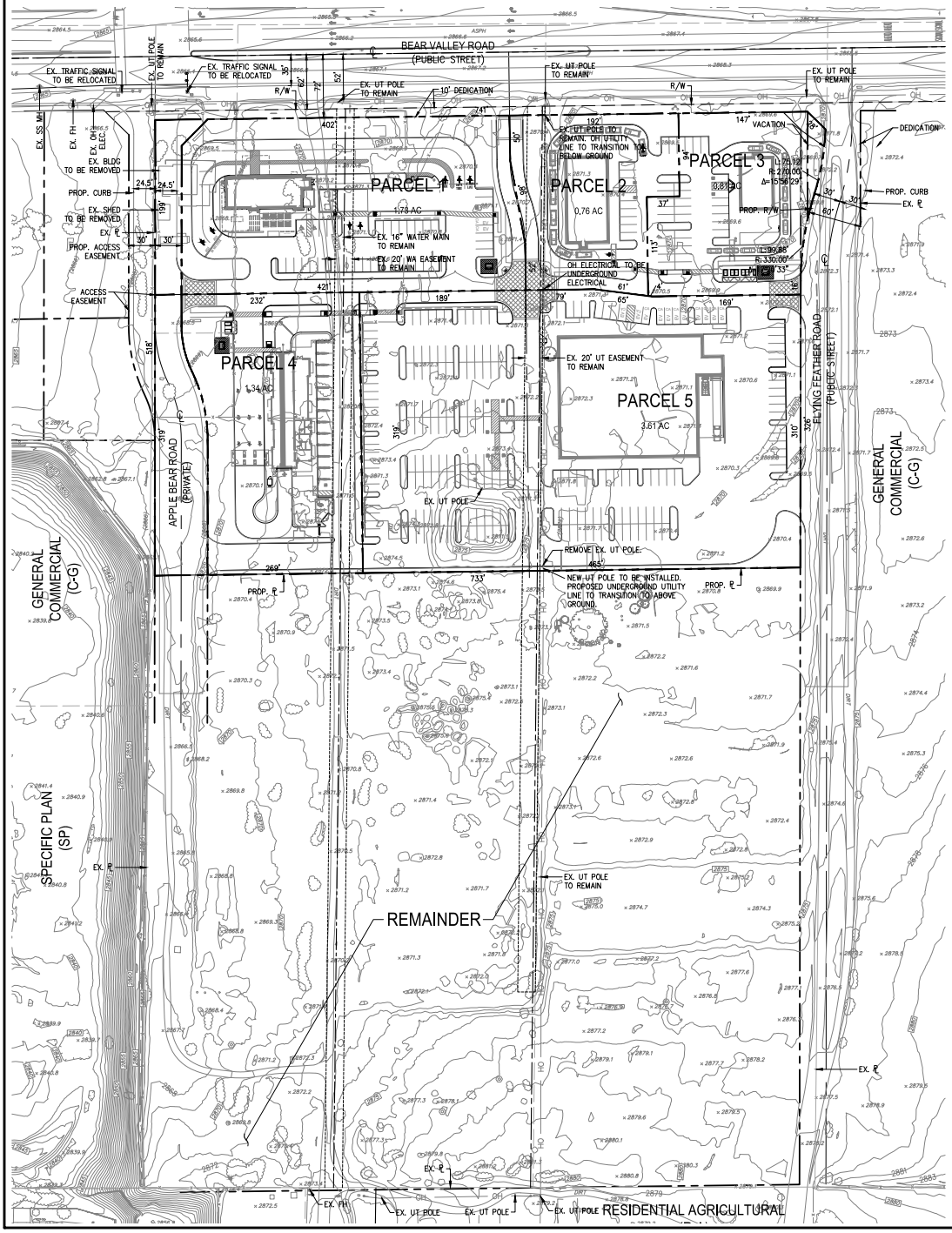
TENTATIVE PARCEL MAP NO. 20473

IN THE TOWN OF APPLE VALLEY
COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA
BEING A SUBDIVISION OF A PORTION
OF GOVERNMENT LOT 2 OF THE NORTHWEST ONE-QUARTER OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 3 WEST, S.B.M. AND
THE NORTH 350 FEET OF THE EAST 93.3 FEET OF THE WEST 1000.3 FEET OF THE NORTH ½ OF THE NORTHWEST ¼ OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 3 WEST, S.B.M., AND
THE EAST 443.30 FEET OF THE WEST 1350.30 FEET OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 6, TOWNSHIP 4 NORTH, RANGE 3 WEST,
SAN BERNARDINO MERIDIAN, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA



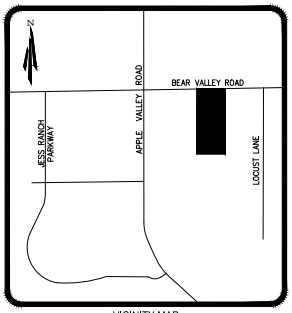
LEGEND

- R/W, ℄
- ℄
- EX. PARCEL LINE
- EX. EASEMENT
- PROP. PARCEL LINE
- FIRE HYDRANT
- GUY WIRE
- POWER POLE
- SIGN
- TREE

ABBREVIATION

C&G	CURB & GUTTER
ELEC	ELECTRICITY
MH	MANHOLE
OH	OVERHEAD
PROP.	PROPOSED
R/W	RIGHT-OF-WAY
SS	SEWER
UT	UTILITY

	AREA SF	AC
PARCEL 1	75,434	1.73
PARCEL 2	32,914	0.76
PARCEL 3	35,381	0.81
PARCEL 4	58,478	1.34
PARCEL 5	157,468	3.61
APPLE BEAR ROAD	22,658	0.52
TOTAL	382,328	8.78



VICINITY MAP
SCALE: 1"=800'

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FIGURE 5

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SOURCE: Tait Associates

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Apple Bear Commercial Project

Tentative Parcel Map No. 20473

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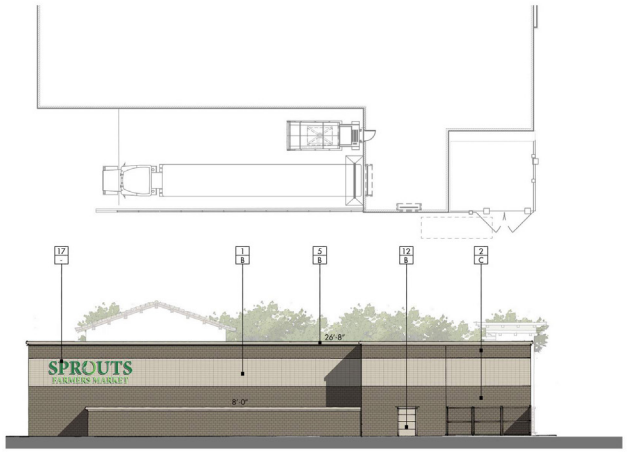
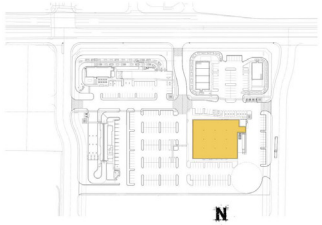
WEST ELEVATION

SOUTH ELEVATION



EAST ELEVATION

NORTH ELEVATION



KEY PLAN

FINISHES:

1	SMOOTH FACE C.M.U. BLOCK - STACKED BOND
2	SPLIT FACE C.M.U. BLOCK - RUNNING BOND
3	EXTERIOR CEMENT PLASTER
4	CLAY ROOF TILE
5	EIFS TRIM, CORNICE MOLDING
6	WOOD TRIM AND RAFTERS
7	CORONADO STONE VENEER , SILL
8	COLUMN
9	METAL CANOPY
10	CLAY TILE ACCENT
11	ALUMINUM STOREFRONT, SLIDING DOOR
12	METAL DOOR , SECTIONAL DOOR
13	LIGHT FIXTURE
14	SPANDREL GLAZING
15	ARTISAN SQUARE CHANNEL SIDING BY: JAMES HARDIE
16	GREEN SCREEN
17	SIGNAGE BY OTHERS

COLORS:

A	PPG-1006-1- GYPSUM
B	PPG-1024-4 - MOTH GRAY
C	PPG-1000-5 - BEAR CUB
D	PPG-1005-7 - DARK GRANITE
E	PPG-1142-6 - JERICHO JADE
F	FLOOD WOOD STAIN - SEMI-TRANSPARENT TOBACCO
G	CORONADO - OLD WORLD LEDGE MONARCH
H	CORONADO - 900 SERIES - GREY
J	DARK BRONZE ANODIZED
K	DALTILE: ESTA VILLA (12"x12")
L	ROOF TILE "BUCKSIN" BY: BORAL
M	PPG-1099-1 - ALWAYS ALMOND

LSA

FIGURE 6a

0 15 30
FEET

SOURCE: MCG Architecture

I:\WDN2201\G\Building_Elevations_A (6/16/2023)

Apple Bear Commercial Project

Conceptual Building Elevations – Sprouts Grocery Store

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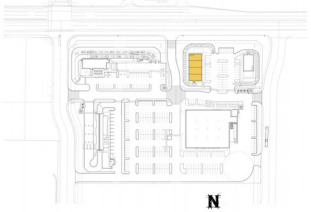
EAST ELEVATION

NORTH ELEVATION

WEST ELEVATION

SOUTH ELEVATION



KEY PLAN

FINISHES:

1. SMOOTH FACE C.M.U. BLOCK - STACKED BOND
2. SPLIT FACE C.M.U. BLOCK - RUNNING BOND
3. EXTERIOR CEMENT PLASTER
4. CLAY ROOF TILE
5. EIFS TRIM, CORNICE MOLDING
6. WOOD TRIM AND RAFTERS
7. CORONADO STONE VENEER , SILL
8. COLUMN
9. METAL CANOPY
10. CLAY TILE ACCENT
11. ALUMINUM STOREFRONT, SLIDING DOOR
12. METAL DOOR , SECTIONAL DOOR
13. LIGHT FIXTURE
14. SPANDREL GLAZING
15. ARTISAN SQUARE CHANNEL SIDING BY: JAMES HARDIE
16. TRELLIS
17. SIGNAGE BY OTHERS

COLORS:

- A PPG-1006-1- GYPSUM
- B PPG-1024-4 - MOTH GRAY
- C PPG-1000-5 - BEAR CUB
- D PPG-1005-7 - DARK GRANITE
- E PPG-1142-6 - JERICHO JADE
- F FLOOD WOOD STAIN - SEMI-TRANSPARENT TOBACCO
- G CORONADO - OLD WORLD LEDGE MONARCH
- H CORONADO - 900 SERIES - GREY
- J DARK BRONZE ANODIZED
- K DALTILE: ESTA VILLA (12"x12")
- L ROOF TILE "BUCKSIN" BY: BORAL
- M PPG-1099-1 - ALWAYS ALMOND

LSA

FIGURE 6b

0 15 30
FEET

SOURCE: MCG Architecture

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Apple Bear Commercial Project

Conceptual Building Elevations – Shops Building 1

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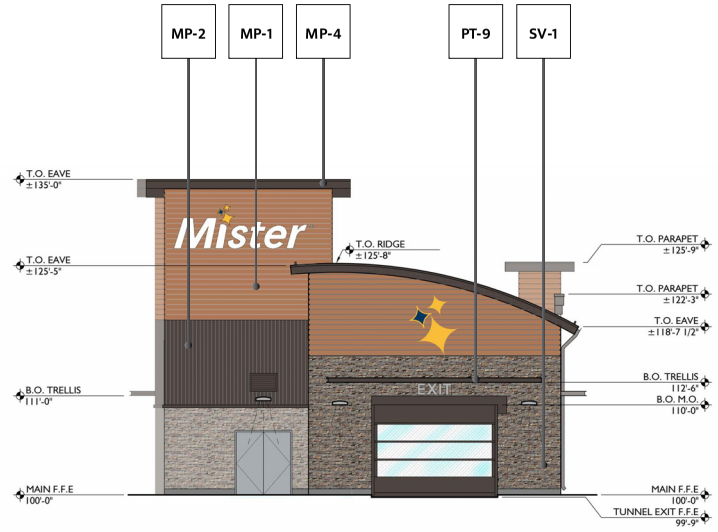


MATERIAL TAKE OFF

Exterior Building Finishes - 8,885 sqft - 100%

A. (SV-1) Natural Stone (Veneer) - 2,108 sqft - 24%

B. (ALU) Store Front and Glass - 511 sqft - 6%

C. (EIFS) EIFS - 1,609 sqft - 18%

D. (CU-1/2) CMU - 1,032 sqft - 12%

E. (MP-1) Alumaboard - 2,422 sqft - 27%

F. (MP-2) Metal Wall Panel - 798 sqft - 9%

G. Polycarbonate Overhead Doors - 312 sqft - 3%

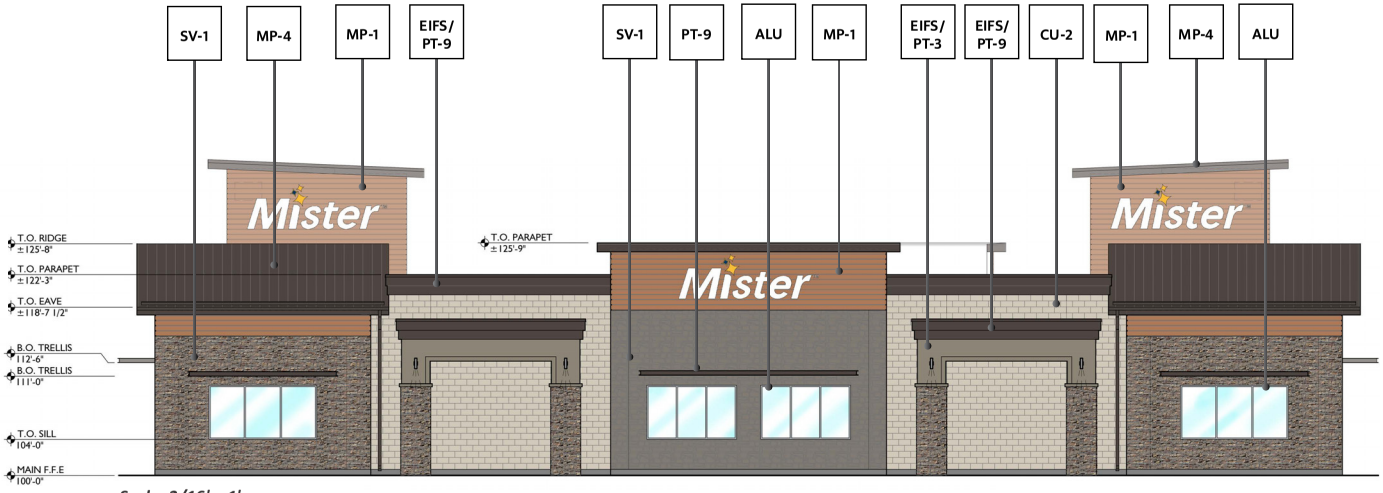
H. Painted Hollow Metal Doors - 93 sqft - 1%

FINISH LEGEND

MP-1	METAL PANEL - ALUMABOARD / PRE-FINISHED METAL SCREEN SYSTEM / HAZELNUT BROWN
MP-2	METAL PANEL - CTMRS / PRE-FINISHED R-PANEL / DARK GRANITE - PPG1005-7
MP-4	METAL PANEL - CTRMS / PRE-FINISHED STANDING SEAM METAL ROOF / 436B3488 FLUROPON DARK GRANITE
SV-1	STONE VENEER - CORONADO - OLD WORLD LEDGE MONARCH
EIFS	EXTERIOR INSULATION FINISHING SYSTEM
CU-2	CMU (TEXTURED) - COLOR TO BE CLOSE TO MORNING FOG SW6255
PT-3	EXTERIOR PAINT - PPG / BEAR CUB / PPG-1000-5
PT-6	EXTERIOR PAINT - PPG / MOTH GRAY / PPG-1024-4
PT-9	EXTERIOR PAINT - PPG / DARK GRANITE / PPG-1005-7
ALU	WINDOWS & DOORS - THERMALLY BROKEN ANODIZED ALUMINUM / CLEAR

NORTH - CAR WASH TUNNEL EXIT ELEVATION

3/16" = 1'



Scale: 3/16' = 1'

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FIGURE 6c

N

0 13 26

FEET

SOURCE: MCG Architecture

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Apple Bear Commercial Project

Conceptual Building Elevations – Mister Car Wash

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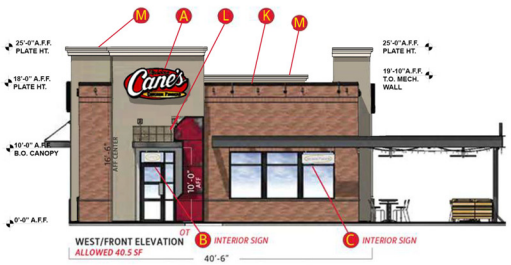

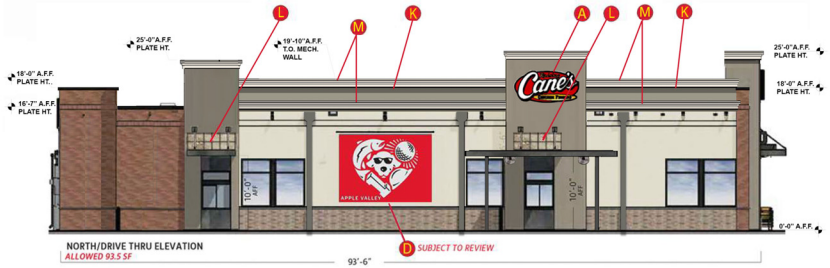

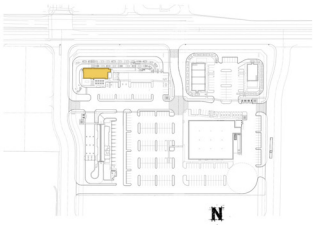

	QTY.	CODE	DESCRIPTION
A	4	WS-8FT	4x8 Wall Sign
B	1	ONS	Open Sign
C	1	CFNS	Chicken Fingers Neon Sign
D	1	OLH	One Love Heart
E	1	RD-1	Red Dog
F	1	CAN	One Love Canopy Letters
G	2	DTMB	DT Menuboard
H	1	DTPS	Pre Sell Board
I	2	DTSP	Speaker Post
J	1	MON	Monument
K	1	RTSCRN	Roof Top Equipment Screen (set back from roof edge) - EWF-5
L	2	TILE ACC.	Tile Accent: Daltile Esta Villa (12"x12")
M		CORNICE	Cornice at Mechanical Screen wall, Drive-thru, and Entry parapets

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FIGURE 6d

N

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SOURCE: MCG Architecture

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Apple Bear Commercial Project

Conceptual Building Elevations – Raising Cane's

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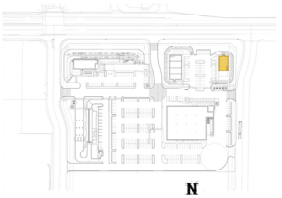
WEST ELEVATION

SOUTH ELEVATION

EAST ELEVATION

NORTH ELEVATION



KEY PLAN

N

FINISHES:

1. SMOOTH FACE C.M.U. BLOCK - STACKED BOND
2. SPLIT FACE C.M.U. BLOCK - RUNNING BOND
3. EXTERIOR CEMENT PLASTER
4. CLAY ROOF TILE
5. EIFS TRIM, CORNICE MOLDING
6. WOOD TRIM AND RAFTERS
7. CORONADO STONE VENEER , SILL
8. COLUMN
9. METAL CANOPY
10. CLAY TILE ACCENT
11. ALUMINUM STOREFRONT, SLIDING DOOR
12. METAL DOOR , SECTIONAL DOOR
13. LIGHT FIXTURE
14. SPANDREL GLAZING
15. ARTISAN SQUARE CHANNEL SIDING BY: JAMES HARDIE
16. TRELLIS
17. SIGNAGE BY OTHERS

COLORS:

A. PPG-1006-1- GYPSUM
B. PPG-1024-4 - MOTH GRAY
C. PPG-1000-5 - BEAR CUB
D. PPG-1005-7 - DARK GRANITE
E. PPG 1142 6 JERICHO JADE
F. FLOOD WOOD STAIN - SEMI-TRANSPARENT TOBACCO
G. CORONADO - OLD WORLD LEDGE MONARCH
H. CORONADO - 900 SERIES - GREY
J. DARK BRONZE ANODIZED
K. DALTILE: ESTA VILLA (12"x12")
L. ROOF TILE "BUCKSIN" BY: BORAL
M. PPG-1099-1 - ALWAYS ALMOND

LSA

FIGURE 6e

N

0 20 40

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SOURCE: MCG Architecture

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Apple Bear Commercial Project

Conceptual Building Elevations – Salad and Go

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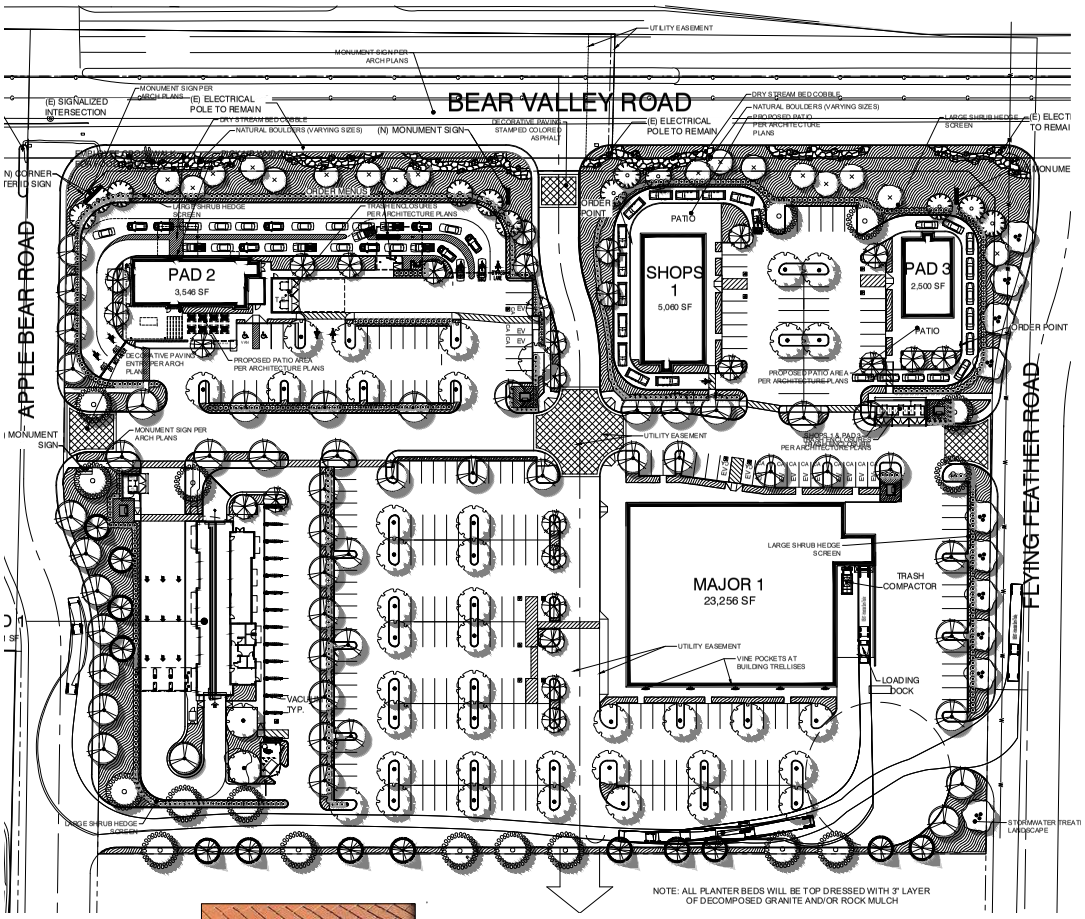

STAMPED COLORED ASPHALT PAVING

NOTE: ALL PLANTER BEDS WILL BE TOP DRESSED WITH 3" LAYER OF DECOMPOSED GRANITE AND/OR ROCK MULCH

NOTE: THIS LANDSCAPE PLAN WILL COMPLY WITH THE WATER EFFICIENT LANDSCAPE ORDINANCE and CITY STANDARDS

MAXIMUM APPLIED WATER ALLOWANCE

MAWA = (ETo) (.45) (LA) (.62)

74.6 X .45 X 80,723 X .62 = 1,680,120 GAL/YEAR

ESTIMATED TOTAL WATER USE

ETWU = (ETo) (.62) (PLANT FACTOR) (LA) / IF

SHRUB/GC	74.6 X .62 X .3 X 80,723 / .81	=1,382,815 GAL/YEAR
TREES	74.6 X .62 X .5 X 1,746 / .75	=53,837 GAL/YEAR
	TOTAL ETWU	=1,436,652 GAL/YEAR

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	PF	QTY
	Celtis sinensis / Chinese Hackberry	24" Box		M	10
	Lagerstroemia indica x fauriei 'Tuscarora' / Tuscarora Crape Myrtle	24" Box		M	27
	Parkinsonia x 'Desert Museum' / Desert Museum Palo Verde	36" Box		L	12
	Pinus halepensis / Allepo Pine	24" Box		M	13
	Pistacia chinensis / Chinese Pistache	24" Box		M	50
	Prosopis chilensis 'Thornless' / Thornless Chilean Mesquite	24" Box		L	43
	Quercus virginiana / Southern Live Oak	24" Box		L	17
	x Chitalpa tashkentensis 'Pink Dawn' / Pink Dawn Chitalpa	24" Box		L	17

VINE	BOTANICAL / COMMON NAME	CONT	PF	QTY
	Macfadyena unguis-cati / Yellow Trumpet Vine	5 Gal.	L	5

CONCEPT PLANT SCHEDULE

SCREEN HEDGE PLANT MATERIAL

Leucophyllum frutescens 'Green Cloud' TM / Green Cloud Texas Ranger	5 Gal., L
Salvia clevelandii / Cleveland Sage	5 Gal., L
Senna artemisioides / Silver Senna	5 Gal., L

SHRUBS AND GROUNDCOVERS

Agave americana 'Medio-picta Alba' / Striped Century Plant	5 Gal., L
Aristida purpurea / Purple Threeawn	1 Gal., L
Baccharis x 'Centennial' / Centennial Coyote Brush	1 Gal., L
Bouteloua gracilis / Blue Grama Grass	1 Gal., L
Bulbine frutescens / Stalked Bulbine	5 Gal., L
Caesalpinia pulcherrima / Red Bird Of Paradise	5 Gal., L
Calliandra eriophylla / Fairy Duster	5 Gal., L
Dalea greggii / Trailing Indigo Bush	1 Gal., L
Dasylirion wheeleri / Grey Desert Spoon	5 Gal., L
Hesperaloe parviflora / Red Yucca	1 Gal., L
Justicia spicigera / Mexican Honeysuckle	1 Gal., L
Pedilanthus macrocarpus / Slipper	5 Gal., L
Ruellia peninsularis / Desert Ruellia	1 Gal., L
Salvia apiana / White Sage	5 Gal., L
Salvia x 'Allen Chickering' / Allen Chickering Sage	5 Gal., L
Senna artemisioides / Silver Senna	5 Gal., L
Yucca gloriosa / Spanish Dagger	5 Gal., L

PLANTING STANDARDS

A. THE LANDSCAPE PLAN MEETS THE FOLLOWING APPLE VALLEY STANDARDS:

1. 30% OF PARKING LOTS TO BE SHADED AT TREE MATURITY
2. MINIMUM OF 1 15 GALLON TREE PER 7 PARKING SPACES
3. 36"-42" HIGH PLANTED HEDGE IS DESIGNED FOR TO SCREEN PARKING AND DRIVE-THRU'S
4. PLANTING BUFFERS - 1 TREE FOR EACH 200 S.F. OF LANDSCAPE AROUND PERIMETER (20% MINIMUM TO BE 24" BOX)
5. PLANTINGS WILL BE GROUPED SENSITIVE TO HYDROZONES AND SHRUB PLANTING WILL BE DESIGNED IN A LOOSE, UNEVEN MANNER, TO FOSTER A MORE NATURAL APPEARANCE.
6. LANDSCAPING IN FRONT BUILDING SETBACKS WILL BE PROVIDED AT A MINIMUM RATE OF 1 TREE AND 6 SHRUBS PER 30 L.F. WITH COMBINED PLANTING COVERAGE OF 50% OF THE TOTAL LANDSCAPE AREA
7. LANDSCAPING IN OTHER PERIMETER AREA WILL BE PROVIDED AT A MINIMUM RATE OF 1 TREE AND 6 SHRUBS PER 40 L.F. WITH SUFFICIENT PLANTING TO PROVIDE COVERAGE OF 40% OF THE TOTAL LANDSCAPE AREA.

B. ANY DISCREPANCY BETWEEN THESE CITY STANDARDS AND THE NUMBER OF PLANTS SHOWN ON THE PLAN SHALL RESULT IN THE CRITERIA SUPERCEDING ANY INFORMATION SHOWN ON THE PLAN.

C. ALL AREAS LANDSCAPED WITH DECORATIVE ROCK SHALL INCLUDE A PERMANENT WEED BARRIER. THE MINIMUM ROCK SIZE SHALL BE ¾".

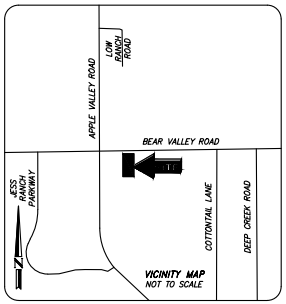

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FIGURE 7

0 65 130

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SOURCE: MCG Architecture

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Apple Bear Commercial Project

Conceptual Landscape Plan

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LEGEND

- Project Site Boundary
- ST-1 - Short-term Noise Monitoring Location
- LT-1 - Long-term Noise Monitoring Location

0 170 340

FEET

SOURCE: Google Earth 2023

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FIGURE 8

Apple Bear Commercial Project

Noise Monitoring Locations

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3.0 INITIAL STUDY CHECKLIST

1. **Project Title:**

   Apple Bear Commercial Project

2. **Lead Agency Name and Address:**

   Town of Apple Valley
   Community Development Department, Planning Division
   14955 Dale Evans Parkway
   Apple Valley, CA 92307

3. **Contact Person and Phone Number:**

   Daniel Alcayaga, AICP, Planning Manager
   (760) 240-7000 Ext. 7205
   dalcayaga@applevalley.org

4. **Project Location:**

   The project site is located in the southwest portion of the Town of Apple Valley, in southwestern San Bernardino County, California. The project site is located in Section 06 of Township 4 North, Range 3 West of the San Bernardino Baseline and Meridian, as depicted on the U.S. Geological Survey (USGS) 7.5-minute series Apple Valley South, California quadrangle.[10] Specifically, the center of the project site is at latitude 34°28'12.67" N and longitude -117°14’16.85" W at an elevation of approximately 2,878 feet above mean sea level and consists of three parcels (Assessor Parcel Numbers [APNs] 0434-021-10, -35, and -37). Figure 1: Project Location and Vicinity depicts the location of the project site on a regional scale (refer to Chapter 2.0 for figures).

5. **Project Sponsor’s Name and Address:**

   Wood Investments Company, Inc.
   2950 Airway Ave., Suite A-9
   Costa Mesa, CA 92307

6. **General Plan Designation:**

   (C-G) General Commercial

7. **Zoning:**

   (C-G) General Commercial

[10] U.S. Geological Survey. *Apple Valley South, California 7.5-Minute Series Topographic Quadrangle Map.* 1980.

8. Description of Project:

A Tentative Parcel Map is proposed to convert the 8.25-acre project site from three parcels (Assessor Parcel Numbers [APNs] 0434-021-10, -35, and -37) into five parcels, one for each of the proposed commercial buildings described below, plus an additional 0.52 acre for off-site improvements along Apple Bear Road. The project includes demolition of a vacant, one-story residential building with ancillary shed totaling approximately 3,346 square feet, located at 19439 Bear Valley Road in the northwestern portion of the project site. The project also includes development of an approximately 23,256-square-foot grocery store, an approximately 5,381-square-foot car wash with a 110-foot car wash tunnel, an approximately 3,546-square-foot restaurant with drive-through, an approximately 2,500-square-foot restaurant with drive-through, and an approximately 5,060-square-foot multiple tenant commercial/retail building with four attached suites, including at least one restaurant with drive-through, for a total building area of approximately 39,743 square feet. Additionally, the project would include parking, landscaping, and lighting. Finally, the project would also include 0.52 acre of off-site improvements along existing roadways adjacent to the site, including Bear Valley Road to the north and Flying Feather Road to the east, and along Apple Bear Road to the west, which would be constructed as part of the proposed project. The conceptual site plan is presented as Figure 4.

9. Surrounding Land Uses and Setting:

The project site is bounded by Bear Valley Road and commercial/retail uses to the north; undeveloped vacant land, commercial/retail uses, and Apple Valley Road to the west; undeveloped vacant land to the south; and Flying Feather Road and undeveloped vacant land to the east. A medical office building is located approximately 500 feet west of the site along Bear Valley Road. The nearest residential uses include single-family homes located approximately 560 feet east of the site and multi-family homes[11] located approximately 620 feet southwest of the site along Apple Valley Road. Figure 2: Existing Setting depicts the project site and surrounding development.

10. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.??

Yes. Please refer to Section 5.18, Tribal Cultural Resources.

[11] This residential use is the Victor Valley Post-Acute Center (congregate/convalescent care center) within the Jess Ranch Specific Plan.

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 5.0.

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

4.1 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

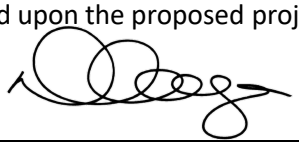
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Daniel Alcayaga, AICP, Planning Manager

07/06/23
Date

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5.0 CEQA ENVIRONMENTAL CHECKLIST

5.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
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 a 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?	☐	☐	☒	☐

5.1.1 Impact Analysis

a. Would the project have a substantial effect on a scenic vista?

Less than Significant Impact. The San Bernardino Mountains to the south, hillsides and knolls to the east and west, the Mojave River to the west and the natural desert environment surrounding the project site are considered scenic resources within the City.[12] The project's impact on viewsheds to scenic resources from public viewpoints (e.g. adjacent roadways) is discussed below.

Viewsheds of the natural desert environment and the San Bernardino Mountains are available as one looks south across the project site from Bear Valley Road. Distant and partially obstructed views of the hillsides and knolls are available looking west across the project site from Flying Feather Road. Views are partially obstructed by mature trees, existing development, and utility poles located west of the project site. Additionally, views of the natural desert environment are available looking west across the project site from Flying Feather Road.

The project site is mostly undeveloped and consists of desert scrub vegetation. There is an existing residential structure with ancillary shed located in the northwestern portion of the site. The proposed project would result in the complete demolition of the one-story (12-foot-tall) residential structure and ancillary shed. Five new buildings would be developed on the project site, ranging from 23 feet to 38 feet in height, and totaling approximately 39,743 square feet.

[12] Town of Apple Valley. *Terra Nova/Town of Apple Valley 2009 General Plan.* Page III-23.

The distant views of the hillsides and knolls to the west from Flying Feather Road are already obstructed by mature trees, existing development, and utility poles west of the project site. Therefore, development of 5 buildings ranging up to 38 feet in height would not substantially obstruct views of these hillsides and knolls beyond existing conditions.

Development of buildings ranging up to 38 feet in height would alter the existing views of the San Bernadino Mountains and natural desert environment south of the project site from Bear Valley Road. Additionally, views from Flying Feather Road of the natural desert environment immediately west of the project site would be obstructed by the development of the proposed buildings. However, the project site is planned for the development of commercial uses by the Apple Bear General Plan and Zoning Map and would be developed in accordance with the requirements of Chapters 9.35 (Commercial and Office Districts), Chapter 9.36.140 (Specific Use Regulations/Commercial and Office Districts- Drive in/Drive-Thru Restaurants), and Chapter 9.37 (Commercial and Office Districts Design Standards) of the Town Development Code. For example, as specified in Chapter 9.37.080(C)(1), the heights of the proposed structures "shall relate to adjacent open space and shall preserve views of the adjacent mountains, knolls, and other adjacent natural features from public roads and adjacent structures to the extent practical." Pursuant to Chapter 9.17 (Development Permits) of the Town Development Code, the project would be subject to the Town's Design Review process, which provides for the review of the physical improvements to the site, including the overall scale of the buildings, setbacks, massing, design, and landscape. The Design Review of the proposed project ensures compatibility and compliance with applicable Town standards and ordinances to ensure a high-quality development compatible with the General Plan land use designation, zoning district, and surrounding community. Since the proposed project would be consistent with the development and design standards set forth by the Town Development Code, the proposed project would preserve views of the scenic resources visible from Bear Valley Road and Flying Feather Road to the extent practical. In addition, intermittent views of these scenic features would continue to be available from other points along these roadways. Therefore, the proposed project would not have a substantial effect on a scenic vista, and impacts would be **less than significant**. Mitigation is not required.

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. The California Department of Transportation (Caltrans) Scenic Highway Program does not identify any State-designated scenic highways near the project site.[13] The nearest Scenic Highway is State Route 173, approximately 8.5 miles south of the project site.[14] The project site is not visible from this highway. Therefore, the project would not affect any scenic resources within view of a State scenic highway. **No impact** would occur, and no mitigation is required.

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13 California Department of Transportation. *California State Scenic Highway System Map.* https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed September 6, 2022).

14 *Ibid*.

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 a 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. As of July 1, 2021, the United States Census Bureau estimated the Town's population to be 76,224 persons and the Town's land area to be approximately 77.01 square miles, which is approximately 990 persons per square mile.[15] Therefore, the project is located in an area with less than 1,000 persons per square mile and meets the definition of a Non-Urbanized Area under Section 15387 of the CEQA Guidelines. Accordingly, the project's impacts on the existing visual character and quality of public views of the site and its surroundings are discussed below.

During construction, the presence of construction vehicles and equipment could temporarily degrade the visual quality of the project site due to the presence of visible construction activity. In the existing condition, there is a single-family residence with ancillary shed located in the northwestern portion of the project site. The remaining portions of the project site are undeveloped and consist of desert shrub. The presence of construction equipment and vehicles would be temporary and would cease once construction is complete. Additionally, construction equipment and vehicles would be primarily located on-site or within adjacent roadways, including Bear Valley Road and Flying Feather Road. Therefore, construction of the project would not substantially interfere with views or visual character of the surrounding area. Due to the temporary nature of construction activities, impacts to visual character of the site and its surroundings would be **less than significant** during construction.

The project site is located within the General Commercial (C-G) land use and zoning designation. As discussed in Section 5.1.1.a, the project site would be developed in accordance with the requirements of Chapters 9.35 (Commercial and Office Districts), Chapter 9.36.140 (Specific Use Regulations/Commercial and Office Districts- Drive in/Drive-Thru Restaurants), and Chapter 9.37 (Commercial and Office Districts Design Standards) of the Town Development Code. Development and design requirements contained in Chapters 9.35, 9.36.140, and 9.37 of the Town Development Code include standards for site design, building design, parking, landscaping, architecture, and lighting. For example, Chapter 9.37.080(D) of the Town Development Code identifies building scale standards, including the use of different colors, element arrangements, and materials to articulate the different parts of a building's façade. As shown in Figure 6a, the proposed grocery store building is designed to include different colors (e.g. Jericho Jade, Gypsum, Moth Gray, and Bear Cub) and materials (e.g. smooth face concrete masonry unit (CMU) block, split face CMU block, channel siding, metal canopy, and cornice molding) to articulate the different parts of the building's façade and provide varied massing (Figures 6a through 6e detail the building elevations for the five proposed buildings).

As shown in Table 2.3.A in Section 2.3 above, undeveloped properties immediately east, south, and west of the site are planned for commercial development by the Town's General Plan and

[15] United States Census Bureau. *QuickFacts, Apple Valley Town, California.* https://www.census.gov/quickfacts/fact/table/applevalleytowncalifornia,US/PST045221 (accessed September 6, 2022).

Development Code. Additionally, properties to the north and northwest (across Bear Valley Road) and west (approximately 500 feet from the western boundary of the site) are developed with commercial uses, including large home improvement stores, grocery stores, restaurants, and fast-food restaurants with drive-through operations. Therefore, development of the proposed project as a commercial center with grocery store, car wash, restaurants with drive-through operations, and a multi-tenant commercial building would be consistent with the existing visual character and quality of the surrounding community.

Finally, as discussed in Section 5.1.1.a above, the project would be subject to the Town's Design Review process, which ensures the project's compliance with applicable policies and standards of the Town's General Plan and Development Code to enhance the visual quality of the site and ensure compatibility with the visual quality of the surrounding community. Since the proposed project would be consistent with the development and design standards set forth by the Town Development Code, the proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts would be **less than significant,** and mitigation is not required.

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. The existing on-site residence produces light and glare on the project site. Sources of light and glare in the project area include street lighting and vehicle lighting on Bear Valley Road to the north, which is heavily lit and well-traveled by vehicles, and Flying Feather Road to the east. There are also commercial light sources adjacent to the north and northwest of the project site. Light-sensitive uses within proximity to the project site include medical office uses to the west and residential uses to the east and southwest.

The proposed project would introduce new sources of light into the project area through the development of the 5 buildings (totaling approximately 39,743 square feet) with security lighting on the building façades, installation of light poles throughout the surface parking area and along on-site pedestrian pathways, and installation of streetlights along the project frontages of Bear Valley Road, Apple Bear Road, and Flying Feather Road. Additionally, freight trucks accessing the grocery store would include head, tail, and auxiliary lights during nighttime operations. However, lighting within the loading dock area would be screened from the adjacent undeveloped land to the east via the grade separation built into the loading ramp, as well as perimeter landscaping and street trees proposed along Flying Feather Road pursuant to Section 9.37.060 of the Town Development Code.

Any street lighting associated with the proposed project would be consistent with Town standards. All lighting on the project site would comply with Section 9.37.090 (Lighting) of Chapter 9.37 (Commercial and Office District Design Standards) of the Town Development Code, which requires light shielding, functional and aesthetic design, and compatibility with surrounding uses. The purpose of these lighting standards is to minimize light pollution, glare, and spillover, conserve energy resources, and curtail the degradation of the nighttime visual environment. Additionally, the Town's Design Review process includes consideration of material composition and colors to reduce potential for substantial glare from the proposed commercial buildings. Therefore, through

compliance with Section 9.37.090 (Lighting) and Section 9.37.070 (Walls and Fences), project impacts from light and glare would be **less than significant.** Mitigation is not required.

5.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

5.2.1 Impact Analysis

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 non-agricultural use?

No Impact. The State's Farmland Mapping and Monitoring Program (FMMP)[16] designates the project site as "Other Land". Neither the site nor adjacent properties are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, **no impact** to farmland would occur, and no mitigation is required.

[16] California Department of Conservation. *California Important Farmland Finder.* https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed September 6, 2022).

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is zoned General Commercial (C-G) and is not zoned for agricultural use. The project site is located in "Non-Enrolled Land" (land not enrolled in a Williamson Act contract and not mapped by FMMP as Urban and Built-Up Land or Water) and therefore is not subject to a Williamson Act Conservation Contract.[17] Implementation of the proposed project would therefore not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract. **No impact** would occur, and no mitigation is required.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. As detailed in Table 2.3.A in Section 2.3 above, neither the project site nor adjacent lands are zoned for forest land or Timberland Production. Therefore, there is no potential for the project to conflict with existing zoning for forest land or land zoned for Timberland Production. **No impact** would occur, and no mitigation is required.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?

No Impact. The project site and adjacent land are not occupied by forest resources. Implementation of the proposed project would not result in the loss or conversion of forest land to non-forest land. **No impact** would occur to forest land, and no mitigation is required.

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?

No Impact. The project site is currently occupied by a single-family residence and ancillary shed in the northwestern portion of the site. The remaining portions of the site are undeveloped and consist of desert shrub. No farmland or forest land occur on-site or on adjacent land. Therefore, implementation of the proposed project would not involve other changes in the existing environment, which could result in the conversion of farmland to non-agricultural use, or conversion of forest land to non-forest use. **No impact** would occur, and no mitigation is required.

[17] State of California Department of Conservation, California Important Farmland Finder. *San Bernardino County Williamson Act FY 2015/2016 (Sheet 2 of 2*).

5.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

The project-specific information and analysis in this section is based on the Air Quality, Greenhouse Gas, and Energy Impact Analysis Memorandum provided in Appendix A of this Initial Study.[18]

The project site is within the Mojave Desert Air Basin (Basin). The Mojave Desert Air Quality Management District (MDAQMD) is the regional government agency that monitors and regulates air pollution within the Basin. The federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these acts, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards (AAQS) for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOX), particulate matter less than 10 microns in size (PM_{10}), sulfur dioxide (SO_2), and lead (Pb). Secondary criteria pollutants include ozone (O_3), and particulate matter less than 2.5 microns in size ($PM_{2.5}$). The AAQS for each criteria pollutant represents the level that is considered safe to the public and avoids specific adverse health effects associated with each criteria pollutant.

The Basin is in nonattainment for the federal and State standards for O_3 and PM_{10}, and nonattainment for the State $PM_{2.5}$ standard. In addition, the Basin is in attainment for the federal $PM_{2.5}$ and for the state and federal CO, SO_2, and nitrogen dioxide (NO_2) standards. The MDAQMD has established project-level thresholds for VOC, NO_X, CO, SO_x, PM_{10}, and $PM_{2.5}$ shown in Table 5.3.A. The MDAQMD considers any project in the Basin with construction- or operation-related emissions that exceed any of the emission thresholds below to have a potentially significant project-specific impact and potentially significant cumulative impact.

[18] LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. June 14, 2023. Appendix A.

Table 5.3.A: MDAQMD Construction and Operation Thresholds of Significance (lbs/day)

Emission Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Construction Thresholds	137	137	548	82	65	137
Operation Thresholds	137	137	548	82	65	137

Source: MDAQMD *California Environmental Quality Act (CEQA) And Federal Conformity Guidelines* (2020).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
MDAQMD = Mojave Desert Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

5.3.1 Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. An Air Quality Attainment Plan (AQAP) describes air pollution control strategies to be undertaken by a city or county in a region classified as a nonattainment area to meet the requirements of the federal Clean Air Act. The main purpose of an AQAP is to bring an area into compliance with the requirements of federal and State AAQS. The Basin is in nonattainment for the federal and State standards for O_3 and PM_{10} and State standards for $PM_{2.5}$. Therefore, the Basin is classified as a nonattainment area and an AQAP is required. The applicable air quality plan is the adopted 2017 MDAQMD Air Quality Attainment Plan (2017 AQAP).[19]

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review given that the air quality plan strategy is based on projections from local General Plans.

The 2017 AQAP is based on emissions predictions predicated on the aggregation of individual emissions predictions from jurisdictions throughout the MDAQMD. The Town provided emissions predictions based on the land use designations in its General Plan. The project is within the General Commercial (C-G) land use and zoning designation, which "allows a broad range of retail uses, as well as office and service land uses. Typical uses will serve the needs of the Town's residents and businesses, in a shopping center setting. General retail stores, including all types of consumer goods, furniture and appliance sales, auto repair and sales are permitted in this designation. Restaurants, both sit-down and fast food, gasoline service stations and general office (secondary to retail uses) are also permitted in this designation."[20] The project would require a Special Use Permit (SUP) to

[19] Mojave Desert Air Quality Management District. *2017 MDAQMD Federal 75 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)*. Adopted February 27, 2017.

[20] Town of Apple Valley. *General Plan, Community Development.* Page II-5. Adopted August 11, 2009, last Amended October 27, 2015.

allow for the development of the drive-through/drive up commercial uses to ensure that these uses would not result in adverse impacts (e.g. parking demand, traffic noise, light, and litter) on adjacent uses or the surrounding neighborhood; however, the project would not require a land use or zoning change. Since the project would be consistent with the land use designation used to generate the 2017 AQAP's emissions projections, the project would not conflict with or obstruct implementation of the 2017 AQAP. Impacts would be **less than significant**, and no mitigation is required.

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?

Less than Significant Impact. As identified above, the Basin is currently designated as nonattainment for the federal and State standards for O_3 and PM_{10} and State standards for $PM_{2.5}$. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, to result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the MDAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified MDAQMD significance thresholds identified above in Table 5.3.A, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by demolition, site preparation, and grading activities. Emissions from construction equipment are also anticipated and would include CO, NO_X, VOC, directly emitted $PM_{2.5}$ or PM_{10}, and toxic air contaminants such as diesel exhaust particulate matter.

Project construction activities would include demolition, site preparation, grading, building construction, architectural coating, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. MDAQMD has established Rule 403: Fugitive Dust, which would require the Project Applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_X), NO_X, VOCs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using the California Emissions Estimator Model version 2022.1 (CalEEMod). Construction of the proposed project would begin in the fall of 2023 and be completed in the fall of 2024, which was included in CalEEMod. In addition, the proposed project would include the demolition of the existing residential structure and ancillary shed and would balance the soil on-site (no import or export needed), which was also included in CalEEMod. This analysis assumes compliance with SCAQMD Rule 403 measures. All other construction details are not yet known; therefore, default assumptions (e.g., construction equipment, construction activities, off-road equipment, and on-road construction fleet mix and trip lengths) from CalEEMod were used. Construction emissions are summarized in Table 5.3.C below. Appendix A provides CalEEMod output sheets.

As shown in Table 5.3.C, construction emissions associated with the project would not exceed the MDAQMD's thresholds for VOC, NO_X, CO, SO_X, $PM_{2.5}$, and PM_{10}. Therefore, construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be **less than significant,** and mitigation is not required.

Table 5.3.C: Short-Term Regional Construction Emissions

Construction Phase	Total Daily Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Demolition	3	28	25	<1	<1	1	<1	1
Site Preparation	4	40	37	<1	8	2	4	2
Grading	2	20	21	<1	3	<1	1	<1
Building Construction	1	12	14	<1	<1	<1	<1	<1
Architectural Coating	2	<1	1	<1	<1	<1	<1	<1
Paving	2	8	11	<1	<1	<1	<1	<1
Peak Daily Emissions	**4**	**40**	**37**	**<1**	**10**		**6**	
MDAQMD Threshold	**137**	**137**	**548**	**137**	**82**		**65**	
Significant?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table I. June 14, 2023. Appendix A.

Note: It was assumed that the architectural coatings were applied during the building construction phase. PM10 and PM2.5 fugitive emissions are from the Mitigated results; the only "mitigation" measures applied in this modeling are required dust control measures per MDAQMD Rule 403.

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
MQAQMD = Mojave Desert Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Operational Emissions. The proposed project would generate emissions from daily operations and vehicle trips associated with project operations. The proposed project would include a Sprouts Grocery Store, Mister Car Wash, Raising Cane's restaurant with drive-through, Salad and Go drive-through, multiple tenant commercial/retail building with 4 attached suites and at least one restaurant with drive-through, parking, and landscaping. Long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources, and are discussed below.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings, the use of consumer products, and the use of landscape maintenance equipment.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. Major sources of energy demand include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as computers. Greater building or appliance efficiency reduces the amount of energy for a given activity, which lowers the resultant emissions. The emission factor is determined by the fuel source. Therefore, cleaner energy sources, such as renewable energy, produce fewer emissions than conventional sources.

Mobile source emissions are generated by the vehicle trips associated with project operations, including PM_{10} and exhaust. Trip generation rates used in CalEEMod for the project were based on the Traffic Impact Study prepared for the project (Appendix H),[21] which determined that the proposed project would generate 5,120 net daily trips. PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Additionally, gasoline-powered engines have small rates of particulate matter emissions compared to diesel-powered vehicles.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod and are summarized in Table 5.3.D below. Appendix A provides CalEEMod output sheets.

Table 5.3.D: Project Operational Emissions

Emission Type	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	1	<1	2	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	28	28	238	<1	16	3
Total Project Emissions	**30**	**29**	**240**	**1**	**16**	**3**
MDAQMD Threshold	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table J. June 14, 2023. Appendix A.

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
MDAQMD = Mojave Desert Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table 5.3.D, the proposed project would not exceed the significance criteria for daily VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be **less than significant**, and no mitigation is required.

Long Term Microscale (CO Hot Spot) Analysis. Although the Basin is designated as in attainment/maintenance for CO, localized CO concentrations are evaluated to determine whether project-related CO impacts would exceed State or national AAQS. This is because vehicular trips associated with the proposed project could contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses

[21] LSA Associates, Inc. *Traffic Impact Study, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino, California.* February 2023. Appendix H.

rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at Victorville station, the closest monitoring station to the project site, showed a highest recorded 1-hour concentration of 1.6 parts per million (ppm) (the State standard is 20 ppm and the federal standard is 35 ppm) and a highest recorded 8-hour concentration of 1.4 ppm (the State and federal standard is 9 ppm) during the past 3 years. The highest CO concentrations would normally occur during peak traffic hours; therefore, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

The proposed project would generate 388 net a.m. peak hour trips and 432 net p.m. peak-hour trips.[22] However, as discussed in Section 5.17, Transportation, the project would not adversely affect the surrounding transportation network or increase the congestion on roadways within the project vicinity from baseline conditions with implementation of recommended improvements. Therefore, it is assumed that the addition of the proposed project traffic would not create any significant adverse impacts to nearby intersections. Given the extremely low level of CO concentrations in the project area and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to CO concentrations or contribute to the result of CO concentrations exceeding the State or federal CO standards. Impacts would be **less than significant**, and mitigation is not required.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors are people who have an increased sensitivity to air pollution or environmental contaminants, including residences such as private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, in-home daycares, health facilities such as hospitals, long-term care facilities, retirement and nursing homes, community centers, places of worship, parks (excluding trails), prisons, and dormitories.

The nearest sensitive receptors in proximity to the project site are single-family residential units located approximately 640 feet to the east of the project's eastern boundary line and the Apple Valley Post Acute Center (congregate/convalescent care center) located approximately 730 feet southwest of the site along Apple Valley Road.

As shown in Tables 5.3.C and 5.3.E, the proposed project would not result in an exceedance of a MDAQMD emissions threshold during project construction or operation. Additionally, as discussed in Section 5.3.1.b above, project related vehicles would not contribute significantly to CO concentrations and therefore wouldn't expose sensitive receptors near the project site to

[22] *Ibid.* Page 1-1.

substantial CO concentrations. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be **less than significant**. Mitigation is not required.

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

Less than Significant Impact. The project includes construction and operation of commercial uses totaling approximately 39,743 square feet on 8.25 acres of undeveloped land where other emissions such as those leading to odors generally do not occur under baseline conditions.

Construction. Project construction would generate limited odors over the short term, primarily from equipment exhaust. The painting of buildings and structures or the installation of asphalt surfaces may also create odors. However, construction activity would be temporary and would cease after individual construction is completed. Additionally, construction activities that would generate odors are expected to be isolated to the immediate vicinity of the construction site. Therefore, odors from construction equipment exhaust, painting, and installation of asphalt surfaces would not adversely affect a substantial number of people.

Additionally, the Project Applicant would be required to implement standard control measures to limit fugitive dust and construction equipment emissions, which would reduce odor impacts, in accordance with the following regulations:

- **MDAQMD Rule 402:** 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.

- **MDAQMD Rule 403:** Requires that fugitive dust be controlled with best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Implementation of dust suppression techniques is also required to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques include the following:

    - Water active sites at least twice times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).

    - All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet (ft) of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).

    - Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour or less.

- **Title 13, Section 2449(d)(D) of the California Code of Regulations:** Requires operators of off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) to limit vehicle idling to five minutes or less.

The Project Applicant would also be required to comply with MDAQMD Rule 1113, which limits the volatile organic compound (VOC) content of architectural coatings (e.g. paint), to reduce emissions and objectionable odors impacts.

Adherence to the MDAQMD Rules identified above and Title 13, Section 2449(d)(D) of the California Code of Regulations would reduce odor impacts to people on or near the project site during construction. Additionally, as previously discussed, construction activities would be temporary and odors generated from construction activities would be isolated to the immediate vicinity of the construction site. Therefore, project construction activities would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be **less than significant**, and no mitigation is required.

Operation. Land uses generally associated with long-term objectionable odors include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project is a commercial/retail center project that would not include uses that would generate long-term objectionable odors. Therefore, operation of the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be **less than significant**, and no mitigation is required.

5.4 BIOLOGICAL RESOURCES

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

5.4.1 Impact Analysis

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?

Less than Significant with Mitigation Incorporated. The project site is bounded by Bear Valley and commercial/retail uses to the north, undeveloped vacant land, commercial/retail uses, and Apple Valley Road to the west; undeveloped vacant land to the south; and Flying Feather Road and undeveloped vacant land to the east. Figure 2: Existing Setting depicts the project site and surrounding area. As discussed in Section 2.2, the project site is mostly undeveloped and contains one residential structure with associated structures. Figures 3a through 3e include photographs of the project site and surrounding land uses.

A Biological Report for the project site was prepared to evaluate the biological resources on the project site (Appendix B).[23] Specifically, the Biological Report included a desktop review of the California Natural Diversity Database (CNDDB) and focused field surveys for burrowing owl (*Athene cunicularia*), desert tortoise (*Gopherus agassizii*), and Mohave Ground Squirrel (*Xerospermophilus mohavensis*) to determine the existence or potential occurrence of threatened, endangered, or candidate plant and animal species and critical habitats on or in the vicinity of the project site.

The project site is comprised of desert scrub habitat with sparse patches of rubber rabbit brush vegetation (*Ericameria nauseosa*).[24] Numerous small burrows were observed during the focused surveys; however, these burrows are occupied by Antelope ground squirrels (*Ammospermophilus leucurus*) and California ground squirrels (*Spermophilus beecheyi*) based on the results of small mammal trapping and camera bait reconnaissance conducted during the spring and summer of 2022.[25] These species are common, non-listed species. Additionally, the results of the focused surveys indicate that burrowing owls,[26] desert tortoise,[27] or Mohave ground squirrel are not likely present on the project site.[28] Therefore, the project site does not contain threatened, endangered, or candidate plant and animal species.

Although burrowing owl were not determined to be present on the project site when the focused survey was conducted during the spring and summer of 2022, the presence of ground squirrel burrows indicates there is potential for this species to emigrate onto the site to nest. Therefore, the project would have the potential to adversely affect burrowing owl during construction and mitigation is required.

Accordingly, **Mitigation Measure BIO-1** is prescribed to ensure a qualified biologist conducts a pre-construction survey for burrowing owl to ensure that burrowing owl is not present on the project site during project construction. If the pre-construction survey reveals that burrowing owl is present on the project site, **Mitigation Measure BIO-2** is prescribed to ensure that appropriate actions are implemented to protect burrowing owl during project construction activities. With implementation of **Mitigation Measures BIO-1** and **BIO-2,** burrowing owl would be protected during project construction. Therefore, impacts to candidate, sensitive, or special status species, including burrowing owl, would be reduced to **less than significant with mitigation incorporated.**

Mitigation Measures. The following mitigation measure is required to reduce potentially significant impacts to burrowing owl to less-than-significant levels.

Mitigation Measure BIO-1: Prior to the issuance of a grading permit, a pre-construction burrowing owl clearance survey must be conducted by a qualified biologist within 14 days prior to the beginning of project

[23] Phoenix Biological Consulting. *Focused Burrowing Owl, Mohave Ground Squirrel, and Desert Tortoise Surveys for Apple Bear Retail Site*. January 4, 2023. Appendix B.
[24] *Ibid.* Page 4.
[25] *Ibid.* Pages 9 and 10.
[26] *Ibid.* Page 6.
[27] *Ibid.* Page 8.
[28] *Ibid.* Page 10.

construction to determine if the project site contains suitable burrowing owl habitat and to avoid any potential impacts to the species. The survey shall include 100 percent coverage of the project site, plus 150-meter buffer to ensure no owls have emigrated onto the site. If the burrowing owl survey reveals no burrowing owls are present, no additional actions related to this measure are required. If occupied burrows are found within the development footprint during the pre-construction clearance survey, **Mitigation Measure BIO-2** shall apply.

Mitigation Measure BIO-2: If occupied burrows are found within the development footprint during the pre-construction burrowing owl survey, site-specific buffer zones shall be established by the qualified biologist through consultation with the California Department of Fish and Wildlife (CDFW). The buffer zones may vary depending on burrow location and burrowing owl sensitivity to human activity, and no construction activity shall occur within a buffer zone(s) until appropriate avoidance and minimization measures are determined through consultation with the CDFW

As part of the consultation process, the CDFW may require some or all of the following avoidance and minimization measures:

- Preparation of a burrowing owl relocation/translocation plan describing the methodology for passive and active relocation of burrowing owls from the project site, a monitoring strategy, and long-term conservation of relocated owls for submittal to the CDFW for approval prior to ground-disturbing activities.
- Replacement of burrowing owl habitat acreage in accordance with the guidelines provided in Appendix A of the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012.
- Establishment of permanent conservation lands comprised of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area. Such conservation lands must be of sufficiently large acreage and be occupied by fossorial mammals. Conservation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors as determined by the CDFW. If the conservation lands are located adjacent to the impacted burrow site, the nearest neighbor artificial or

natural burrow clusters must be at least within 210 meters of the impacted burrow site.

- Development and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls.
- Funding of maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
- Restoration of any temporarily disturbed areas to the pre-project condition, including decompacting soil and revegetating.

This measure shall be implemented to the satisfaction of the Town of Apple Valley Planning Division and the CDFW.

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 U.S. Fish and Wildlife Service?

No Impact. As stated previously, the project site consists of desert scrub with sparse patches of rubber rabbit brush. Additionally, there are no riparian or other sensitive natural communities located within the project site.[29] Therefore, **no impact** to riparian habitat or other sensitive natural community would occur, and no mitigation is required.

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

No Impact. The project site does not include any federally protected wetlands or any drainage features, ponded areas, wetlands, or riparian habitat subject to jurisdiction by the California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (USACE), and/or Regional Water Quality Control Board (RWQCB).[30] Therefore, neither Clean Water Act (CWA) Sections 404 and 401 permits nor a CDFW streambed alteration agreement are required for the project. **No impact** on federally protected wetlands would occur, and no mitigation is required.

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?

Less than Significant with Mitigation Incorporated. Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates two or more new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one

[29] *Ibid.* Pages 4 through 11.
[30] *Ibid.*

portion of the habitat to another or to/from one habitat type to another. Habitat fragmentation may occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Examples of migration corridors may include areas of unobstructed open space for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

As previously discussed, the project site is located adjacent to commercial/retail uses to the northwest (across Bear Valley Road), partially undeveloped land to the north (across Bear Valley Road), and undeveloped land immediately adjacent to the west, south, and east (across Flying Feather Road). Additionally, the project site is located approximately 0.7 mile east of the Mojave River, and is separated from this natural wildlife corridor by commercial development.

The project site is devoid of mature trees, but desert shrubs and burrows that provide suitable nesting habitat for common bird species and burrowing owl, respectively, are located on the project site and adjacent to the north (across Bear Valley Road), west, south, and east (across Flying Feather Road). Therefore, the project would have the potential to impact wildlife movement or nursery sites for burrowing owl and nesting birds, and mitigation is required. As discussed in Section 5.4.1.a, potential impacts to burrowing owl during project construction would be mitigated to less-than-significant levels through implementation of **Mitigation Measures BIO-1** and **BIO-2**. Additionally, **Mitigation Measure BIO-3** is prescribed to ensure a qualified biologist conducts a pre-construction survey for nesting birds and that impacts to nesting birds are avoided if construction activities occur during nesting bird season, in accordance with Sections 3503–3801 of the California Fish and Game Code. With implementation of **Mitigation Measure BIO-3,** nesting birds would be protected during project construction activities. Therefore, impacts to wildlife movement opportunities, including burrowing owl and nesting birds, would be reduced to **less than significant with mitigation incorporated.**

Mitigation Measures. **Mitigation Measures BIO-1** and **BIO-2** above are required to reduce potentially significant impacts to burrowing owl to less-than-significant levels. Additionally, the following mitigation measure is required to reduce potentially significant impacts to nesting birds to less-than-significant levels.

Mitigation Measure BIO-3: If grubbing and/or ground disturbance is proposed during nesting bird season (February through August), a pre-construction nesting survey shall be conducted by a qualified biologist (Project Biologist) within 14 days prior to start of work. If the survey indicates nesting birds are present, an appropriate buffer to be established by the Project Biologist shall be marked off around the nest(s), and no grubbing or ground disturbance shall occur in that area during nesting activities. Grubbing and/or ground disturbance may resume within the established buffer when the Project Biologist determines the nest is no longer occupied and all juveniles have left the nest. This measure shall be implemented to the satisfaction of the Apple Valley Planning Division or designee.

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

No Impact. Chapter 9.76 (Plant Protection and Management) of the Town Development Code provides for the management of plant resources within Apple Valley. As discussed above, the project site consists of sparse patches of rubber rabbit brush and does not contain mature trees, riparian habitat, or sensitive natural communities. None of the regulated desert native plants listed under Section 9.76.020(E)(1)(a) of the Town Development Code or the California Desert Native Plant Act (Food and Agricultural Code 80001, et. seq.) are present on the project site. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **No impact** would occur, and no mitigation is required.

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. The project site does not lie within an area covered by any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Although the Town is in the process of developing the Apple Valley Multiple Species Habitat Conservation Plan (MSHCP), the MSHCP has yet to be adopted.[31] Therefore, the project would not conflict with a conservation plan and **no impact** would occur. Mitigation is not required.

[31] Town of Apple Valley. *Services, Planning, Multi-Specific Habitat Conservation Plan*. https://www.applevalley.org/services/planning-division/multi-species-habitat-conservation-plan (accessed February 20, 2023).

5.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource 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?	☐	☒	☐	☐

5.5.1 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. Cultural resources are broadly defined as any physical manifestations of human activity that are at least 50 years of age and may include archaeological resources as well as historic-era buildings and structures.

Archaeological resources include both precontact remains and remains dating to the historical period. Precontact (or Native American) archaeological resources are physical manifestations of human activities that predate written records and may include village sites, temporary camps, lithic (stone tool) scatters, rock art, roasting pits/hearths, milling features, rock features, and burials. Historic archaeological resources can include refuse heaps, bottle dumps, ceramic scatters, privies, foundations, and burials and are generally associated in California with the Spanish Mission Period (1769 through 1833) through the mid-late 20th century (1970).

Archaeological resources that are eligible for listing in the National Register of Historic Places (National Register), California Register of Historical Resources (California Register), or a local register are considered historical resources pursuant to CEQA Guidelines Section 15064.5. CEQA Guidelines Section 15064.5 defines the term "historical resource" as:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4850 et seq.).

2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, Section 5024.1, Title 14 CCR, Section 4852) including the following:

    a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

    b. Is associated with the lives of persons important in our past.

    c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

    d. Has yielded, or may be likely to yield, information important in prehistory or history.

A "substantial adverse change" to a historical resource, according to Public Resources Code (PRC) Section 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

An Archaeological Resources Assessment was prepared for the project area and included a records search, an intensive pedestrian survey, and additional research (Appendix C1).[32] The project area consists of the project site and a 50-foot buffer on the east and west sides of the site and a 100-foot buffer on the south side of the site.

The records search of the project site was conducted at the South Central Coastal Information Center (SCCIC) and included a 1-mile search index. The records search identified 25 previously conducted cultural resources studies within 1 mile of the site, none of which included any portion of the project area.[33] The records search did not identify any historic or precontact archaeological resources within the project area. However, 5 precontact resources (isolated artifacts) and 7 historic resources (foundations, water conveyance features, refuse deposits, and trail) were documented within 1 mile of the project area.

The pedestrian survey conducted on October 16, 2022, resulted in the identification of 10 historic period features (slabs and water management/conveyance features, documented as resource number LSA-WDN2201-S-1) within the project area.[34] The pedestrian survey did not result in the identification of any precontact archaeological resources within the project area. Additionally, the

[32] LSA Associates, Inc. *Archeological Resources Assessment for the Apple Bear Commercial Project on Bear Valley Road, Apple Valley, San Bernardino County, California (LSA Project No. WDN2201).* January 16, 2023. Appendix C1.

[33] *Ibid.* Page 1.

[34] *Ibid.* Page 2.

survey results determined that the project area was disturbed from off-highway vehicle activities and modern refuse was noted throughout the site.

Additional research was also conducted and included a review of online historic period maps, aerial photographs, real estate websites, and Apple Bear's historical website. The research determined that the project area consisted of an agricultural complex constructed in 1920, which is concurrent with early agricultural activities associated with the establishment of the community. Additionally, the research revealed that the closest historic resource in proximity to the site was a 1930s to 1970s historic period ranch (Jess Ranch) located adjacent to the west side of the project area, which was not identified during the records search. LSA also contacted Apple Bear inquiring about the history of the features documented in the project area. Apple Bear was not able to provide any historical information regarding the history of the existing building slabs/foundations and water management remnants identified on the project site.[35]

Since the historic features identified in the project area are more than 50 years of age, these features are required to be documented and evaluated for historical significance in accordance with CEQA Guidelines Section 15064.5. Accordingly, LSA completed Department of Parks and Recreation (DPR) forms to document the historic period features identified within the project area, which included a description, photograph, and related maps of the features. Due to the lack of historical information available, the Archaeological Resources Assessment determined that additional data would be required to evaluate the historical significance of the on-site historic features, including property-specific research and Phase II archaeological testing. Accordingly, a Phase II Archaeological Testing report (Phase II report) was prepared for the project area and included property-specific research and Phase II testing (Appendix C2).[36]

Property-specific research was conducted to determine if there is any potential relationship between the on-site historic features and the adjacent historic period Jess Ranch. The research determined that the parcels within the project area were not owned by any of the individuals associated with Jess Ranch. Therefore, the Phase II report concluded that the historic features on the project site are not related to Jess Ranch.

Phase II testing was conducted on March 30, 2023, and consisted of mechanical excavations around the historic features to determine if any subsurface historic period materials are present. As discussed in Section 5.4, Biological Resources, burrowing owl has the potential to occupy the project site. Therefore, excavation activities on the project site have the potential to impact burrowing owl and **Mitigation Measures BIO-1 and BIO-2** are prescribed to ensure burrowing owl is protected during on-site excavation activities related to the proposed project. In accordance with **Mitigation Measure BIO-1,** an LSA Biologist conducted a pre-construction survey to determine if burrowing owl was present on the project site prior to the commencement of Phase II testing excavation activities

35 *Ibid.* Pages 1 and 2.

36 LSA Associates, Inc. *Phase II Archeological Testing, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino County, California.* April 2023. Appendix C2.

(Appendix C3).[37] No burrowing owls were observed during the pre-construction survey and therefore, **Mitigation Measure BIO-2** did not apply during the Phase II testing excavations.

The testing yielded predominantly negative results, with some temporally ambiguous refuse (sanitary food cans).[38] Additionally, observations of the historic features documented on-site determined that the former on-site agricultural complex consisted of residential structures and buildings that had burned down, large equipment or poultry sheds, and a cluster of water conveyance structures.[39]

As previously discussed, CEQA Guidelines 15064.5 defines a "historical resource" as being a resource listed or determined to be eligible for listing in the CRHR, a resource included in a local register of historical resources, or a resource that is determined by a lead agency to be historically significant, which is determined by the four criteria listed above.

The Phase II report determined that historic resource number LSA-WDN2201-S-1, comprising of 10 historic features, is an unremarkable example of a common resource type (foundation/feature remnants of at least one agricultural complex that likely dates from before World War II to at least the end of the historic period [1970s]). Additionally, the Phase II report determined that collectively, these features do not meet any of the four criteria (criterions a) through d) listed above). Therefore, the Phase II report concluded that historic resource number LSA-WDN2201-S-1 is not considered a "historic resource" under CEQA Guidelines 15064.5 and is not eligible for listing in the CRHR.[40]

Although the on-site historic features are not considered historically significant under CEQA, project construction activities have the potential to uncover subsurface deposits or artifacts that may be of significance pursuant to Criterion d (Has yielded, or may be likely to yield, information important in prehistory or history). Therefore, project construction activities have the potential to impact subsurface historic or precontact archaeological resources. Accordingly, **Mitigation Measures CUL-1 through CUL-3** are prescribed to ensure that historic or precontact archaeological resources are protected if discovered during project construction. With implementation of **Mitigation Measures CUL-1 through CUL-3**, historic resources would be protected during project construction and impacts to historic resources would be reduced to **less than significant with mitigation incorporated.**

Mitigation Measures. The following mitigation measures are required to reduce potentially significant impacts to historic and precontact archeological resources to less-than-significant levels.

Mitigation Measure CUL-1 Prior to the start of earth moving activities, the Project Applicant shall retain an archaeologist to conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall

[37] LSA Associates, Inc. *Biological Monitoring for Cultural Resource Investigation Associated with the Apple Bear Commercial Project, Apple Valley, California.* Page 1. April 13, 2023. Appendix C3.
[38] LSA Associates, Inc. *Phase II Archeological Testing, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino County, California.* Pages 7 and 8. April 2023. Appendix C2.
[39] *Ibid.* Pages 8 and 9.
[40] *Ibid.* Page 11.

be informed of the types of archaeological resources that may be encountered, and of the proper procedures be to enacted in the event of an inadvertent discovery of precontact or historic archaeological resources or human remains. The Project Applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. This measure shall be implemented to the satisfaction of the Director of the Town of Apple Valley Community Development Department, Planning Division.

Mitigation Measure CUL-2 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 a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation (YSMN) Cultural Resources Department (YSMN) shall be contacted, as detailed within **Mitigation Measure TCR-1**, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide tribal input with regards to significance and treatment.

Mitigation Measure CUL-3 If significant pre-contact and/or historic-era 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, the drafts of which shall be provided to YSMN for review and comment, as detailed within **Mitigation Measure TCR-1**. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. As previously discussed, archeological resources include both precontact remains and remains dating to the historical period. The project's impacts to historical period resources are discussed in Section 5.5.1.a above. The project's impacts to precontact archaeological resources is discussed below.

As discussed in Section 5.5.1.a above, the records search, pedestrian survey, and additional research conducted as part of the Archaeological Resources Assessment prepared for the project (Appendix C1) did not identify any precontact archeological resources as defined under CEQA Guidelines Section 15064.5 on the project site. The records search indicates there are 5 precontact archeological resources (isolated artifacts) recorded within 1 mile of the project site, none of which were documented within the properties adjacent to the site. Although there are no known

precontact archeological resources on the project site or adjacent to the site, there is the potential for subsurface precontact archeological resources to be encountered during project construction. Therefore, project construction activities have the potential to impact archaeological resources. As discussed in Section 5.5.1.a, **Mitigation Measures CUL-1 through CUL-3** are prescribed to ensure that historic or precontact archaeological resources are protected if discovered during project construction. With implementation of **Mitigation Measures CUL-1 through CUL-3**, precontact archaeological resources would be protected during project construction and impacts to precontact archaeological resources would be reduced to **less than significant with mitigation incorporated.**

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

Less than Significant with Mitigation Incorporated. As discussed in Section 5.5.1.a above, the project site is highly disturbed due to off-road vehicle activities and past development. Considering the ground disturbances that have occurred on the project site, the likelihood of encountering human remains is low.

However, Section 7050.5 of the California Health and Safety Code requires that excavation be stopped in the vicinity of the discovered human remains while the coroner determines whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Project Applicant shall comply with the State relating to the disposition of Native American burials that fall within the jurisdiction of the Native American Heritage Commission (NAHC) (PRC Section 5097). Additionally, Section 7052 of the California Health and Safety Code states that disturbance of Native American cemeteries is a felony.

Accordingly, **Mitigation Measure CUL-4** is prescribed to ensure that human remains, including Native American human remains, are protected if human remains (or remains that may be human) are discovered during project construction. With implementation of **Mitigation Measure CUL-4**, human remains would be protected during project construction and impacts would be reduced to **less than significant with mitigation incorporated**.

Mitigation Measures. The following mitigation measure is required to reduce potentially significant impacts to human remains to less-than-significant levels.

Mitigation Measure CUL-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 County Coroner shall be contacted pursuant to State Health and Safety Code Section 7050.5 and that code enforced for the duration of the project.

5.6 ENERGY

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

The project-specific information and analysis in this section is based on the Air Quality, Greenhouse Gas, and Energy Impact Analysis Memorandum provided in Appendix A of this Initial Study.[41]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile area of Central, Coastal, and Southern California.[42] According to the California Energy Commission (CEC), total electricity consumption in San Bernardino County in 2021 was 16,180.8 GWh (16,180,811,158 kilowatt-hours [kWh]).[43]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000-square-mile service area throughout Central and Southern California, from Visalia to the Mexican border.[44] According to the CEC, total natural gas consumption in San Bernardino County in 2021 was more than 561 million therms (561,360,617 therms).[45]

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, total gasoline consumption in California was 289,918 thousand barrels or 1,464.7 trillion British Thermal Units (BTU) in 2020.[46] Of the total gasoline consumption, 273,289 thousand

41 LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. June 14, 2023. Appendix A.

42 Southern California Edison (SCE). 2020. *Who We Are.* Website: https://www.sce.com/about-us/who-we-are (accessed April 2023).

43 California Energy Commission. *Electricity Consumption by County.* Websites: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed April 2023).

44 Southern California Gas Company (SoCalGas). n.d. *Company Profile.* Website: www.socalgas.com/about-us/company-profile (accessed April 2023).

45 California Energy Commission. *Gas Consumption by County.* Websites: ecdms.energy.ca.gov/gasbycounty.aspx (accessed April 2023).

46 A British thermal unit is defined as the amount of heat required to raise the temperature of 1 pound of liquid water by 1°F.

barrels or 1,380.7 trillion BTU were consumed for transportation.[47] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 907.3 million gallons of gasoline and approximately 325.0 million gallons of diesel will be consumed from vehicle trips in San Bernardino County in 2023.

5.6.1 Impact Analysis

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

Less than Significant Impact. The proposed project would increase the demand for electricity, natural gas, and gasoline when compared to existing site conditions. The discussion and analysis provided below is based on the data included in the CalEEMod output, which is included in Appendix A.

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over approximately 12 months. The proposed project would require demolition, site preparation, grading, building construction, paving, and architectural coating during construction.

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be **less than significant**, and no mitigation would be required.

Operational Energy Use. Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating, while indirect sources include electricity generated by off-site power plants. Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBTU) per year; however, this analysis converts the results to natural gas in units of therms. Electricity use in CalEEMod is measured in kWh per year.

CalEEMod divides building electricity use and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 (e.g., space heating, space cooling, water heating, and ventilation). Non-Title 24 uses include all other end uses (e.g., appliances,

[47] California Energy Commission. *California Gasoline Data, Facts, and Statistics.* Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed April 2023).

electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category. For natural gas, uses are likewise categorized as Title 24 or non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table 5.6.A shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed project. The electricity rates and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis (see Appendix H) in conjunction with United States Department of Transportation (DOT) fuel efficiency data.

Table 5.6.A: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh/yr)	Natural Gas Use (kBTU/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
Commercial	1,507,865	1,662,111	732,861	513,941

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table O. June 14, 2023. Appendix A.
gal/yr = gallons per year
kBTU/yr = thousand British thermal units per year
kWh/yr = kilowatt-hours

As shown in Table 5.6.A, the estimated potential increase in electricity demand associated with the proposed project is 1,507,865 kWh per year. As discussed above, total electricity consumption in San Bernardino County in 2021 was 16,180.8 GWh or 16,180,811,158 kWh. Therefore, electricity demand associated with the proposed project would be approximately 0.01 percent of San Bernardino County's total electricity demand.

As shown in Table 5.6.A, the estimated potential increased natural gas demand associated with the proposed project is 1,662,111 kBTU per year or 16,621 therms. In 2021, San Bernardino County consumed 561,360,617 therms.[48] Therefore, natural gas demand associated with the proposed project would be 0.003 percent of San Bernardino County's total natural gas demand.

Although there would be an overall increase in energy demand resulting from the proposed project, the CALGreen Code (California Code of Regulations, Title 24, Part 11), sets performance standards for nonresidential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, materials conservation, planning and design, and overall environmental quality. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards, effective January 1, 2023.

The project would be required to adhere to all federal, State, and local requirements for energy efficiency, including current Title 24 and CALGreen standards which establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. In addition, proposed new development would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for commercial uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings.

[48] California Energy Commission. n.d. *Gas Consumption by County*. Website: ecdms.energy.ca.gov/gasbycounty.aspx (accessed April 2023).

As discussed above, SCE is the private utility that would supply the proposed project's electricity services. SCE is positioned to meet the State's 60 percent by 2030 renewable energy and 100 percent carbon neutrality by 2045 mandate set forth in Senate Bill (SB) 100. In addition, SCE plans to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

The proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and sport utility vehicles) in the United States has steadily increased, from about 14.9 mpg in 1980 to 22.9 mpg in 2020.[49] The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021.[50]

Using the USEPA gasoline fuel economy estimates for 2019, the California diesel fuel economy estimates for 2022, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of 732,861 gallons of gasoline and 513,941 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel.[51] Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in San Bernardino County.

In addition, vehicles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

Given the analysis above, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment uses, and transportation. Impacts would be **less than significant**, and no mitigation measures would be necessary.

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

Less than Significant Impact. As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total

[49] United States Department of Transportation (DOT). 2021. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed April 2023).

[50] California Energy Commission. 2015. *Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026.* Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed April 2023).

[51] California Energy Commission. n.d. *California Gasoline Data, Facts, and Statistics.* Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed January 2023).

impacts to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's 2021 Integrated Energy Policy Report and 2022 Integrated Energy Policy Report Update. In addition, the proposed project would comply with Title 24 and CALGreen standards. Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Impacts would be **less than significant**, and no mitigation measures would be necessary.

5.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	☐	☐	☐	☒
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?	☐	☒	☐	☐

5.7.1 Impact Analysis

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.

No Impact. The project site is not located within an Earthquake Fault Zone as defined by the State of California in the Alquist-Priolo Earthquake Fault Zone Act of 1972. In addition, there is no evidence of any faults or faulting activity on the project site.[52] The risk of ground rupture due to fault displacement beneath the site is low. **No impact** related to fault rupture would result from the implementation of the project. Mitigation is not required.

[52] Krazan & Associates, Inc. *Geotechnical Engineering Investigation, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* Page 3. September 9, 2021. Appendix D1.

ii. Strong seismic ground shaking?

Less Than Significant with Mitigation Incorporated. The project site is located within a seismically active region, with a number of faults traversing or in proximity to the region. The nearest active faults in proximity to the project site are the North Frontal Fault approximately 8.5 miles to the southwest, the Helendale-So Lockhart Fault approximately 17.8 miles to the north, and the San Andreas Fault approximately 29.5 miles to the west.[53]

Due to the presence of active and inferred faults in proximity to the project site, the project site could be subject to occasional moderate to severe ground-shaking, as well as some background shaking from other seismically active areas of the Southern California region. The extent of ground-shaking associated with an earthquake is dependent upon the size of the earthquake and the geologic material of the underlying area. Therefore, the project would have the potential to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death from seismic ground-shaking, due to the introduction of new structures and daytime population on the site.

However, construction and development of the project would be required to comply with applicable provisions of the California Building Code (CBC). State law requires the design and construction of new structures comply with current CBC requirements, which address general geologic, seismic (including ground shaking), and soil constraints for new buildings. Additionally, the geotechnical reports[54,55] prepared for the proposed project (Appendices D1 and D2) provide recommendations for the project's design and construction in conformance with the CBC requirements as codified in Chapter 8.12 (California Building Code) of the Town Development Code. The project-specific geotechnical reports determined that implementation of the report's recommendations would ensure that post-construction differential movements of shallow foundations would be less than 0.25 inch over a horizontal distance of 100 feet.[56]

Mitigation Measure GEO-1 is prescribed to ensure that the project is constructed in conformance with the current CBC, applicable Town standards, and recommendations identified in the project-specific geotechnical report to ensure that project development would be safeguarded against the effects of seismic-related activity that may occur on-site. Therefore, impacts from seismic ground-shaking would be reduced to **less than significant with mitigation incorporated.**

Mitigation Measures. The following mitigation measure is required to reduce potentially significant impacts from seismic ground-shaking to less than significant levels.

Mitigation Measure GEO-1: Prior to issuance of grading and/or building permits, the Project Applicant shall provide evidence to the Town of Apple Valley (Town)

53 *Ibid.*
54 *Ibid.* Pages 14-15.
55 Krazan & Associates, Inc. *Addendum No. 1 - Geotechnical Engineering Report, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* Pages 1-3. October 6, 2021. Appendix D2.
56 Krazan & Associates, Inc. *Geotechnical Engineering Investigation, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* Page 13. September 9, 2021. Appendix D1.

for review and approval that proposed structures, features, and facilities have been designed and would be constructed in conformance with applicable provisions of the 2022 edition of the California Building Code (CBC) or the most current edition of the CBC in effect at the time the Project Applicant's development application is deemed complete by the Town.

Additionally, the Project Applicant shall prepare a site-specific geotechnical report for the project and provide evidence to the Town that the recommendations cited in the geotechnical report are incorporated into project plans and/or implemented as deemed appropriate by the Town. Geotechnical recommendations may include, but are not limited to, removal of existing vegetation, structural foundations, floor slabs, utilities, septic systems, and any other surface and subsurface improvements that would not remain in place for use with the new development. Remedial earthwork, overexcavation, and ground improvement shall occur to depths specified in the geotechnical report to provide a sufficient layer of engineered fill or densified soil beneath the structural footings/foundations, as well as proper surface drainage devices and erosion control. Fill soils shall consist of very low expansive soils. Construction of concrete structures in contact with subgrade soils determined to be corrosive shall include measures to protect concrete, steel, and other metals, including the use of Type V cement. Verification testing must be performed upon completion of ground improvements to confirm that the compressible soils have been sufficiently densified. The structural engineer must determine the ultimate thickness and reinforcement of the building floor slabs based on the imposed slab loading.

As necessary, the Town may require additional studies and/or engineering protocols to meet its requirements. This measure shall be implemented to the satisfaction of the Director of Building and Safety or designee.

iii. Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction occurs when loose, unconsolidated, water-laden soils are subject to shaking, causing the soils to lose cohesion. The primary factors that influence the potential for liquefaction include groundwater table elevation, soil type and plasticity 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.

The project site is not located within an area identified by the United States Geological Survey (USGS) as having a potential for liquefication.[57] Additionally, groundwater was not encountered during the subsurface field exploration conducted on the project site, which drilled to a maximum depth of 50 feet below ground surface (bgs).[58] Based on the substantial groundwater depth near the project site, the site is not located in an area susceptible to liquefaction. Therefore, the likelihood of liquefaction occurring on the project site is low and there would be **no impact** associated with liquefaction. Mitigation is not required.

iv. Landslides?

No Impact. Factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures.[59] The project site is characterized by flat to gently sloping topography and is not within an area potentially subject to earthquake-induced landslides.[60] Therefore, the likelihood of a landslide on the project site is low and there would be **no impact** associated with landslides. Mitigation is not required.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The majority of the project site is undeveloped and consists of pervious surface area. Development of the proposed project would increase the impervious surface on the site by approximately 7.52 acres and therefore would substantially increase the impervious surface area that currently exists on the site (0.08-acre). Therefore, the potential for soil erosion from the site is low during project operation when compared to existing conditions. However, earthwork activities as part of the construction process would expose soils to the potential for soil erosion or loss of topsoil.

Potential erosion impacts from project construction would be reduced through the implementation of a Stormwater Pollution Prevention Plan (SWPPP) and incorporation of best management practices (BMPs) intended to reduce soil erosion pursuant to **Standard Condition HYD-1**, as identified in Section 5.10, Hydrology and Water Quality.[61] As discussed above, the potential for soil erosion from the site would be low once the proposed project is developed. Additionally, potential erosion impacts from project operation would be reduced through preparation of a Final Hydrology Report and implementation of the project-specific Water Quality Management Plan (WQMP), which incorporates measures to capture and infiltrate excess stormwater runoff and prevent soil erosion to downstream water courses from new development pursuant to **Standard Conditions HYD-2** and **HYD-3**. Refer to Section 5.10, Hydrology and Water Quality for additional information regarding the

57 *Ibid.* Page 3.
58 *Ibid.* Page 5.
59 Pore water pressure is the pressure of groundwater held between soil or rocks in the gaps, or pores, between particles.
60 *Ibid*.
61 Pursuant to the National Pollutant Discharge Elimination System (NPDES) program.

project's compliance with regulations to reduce potential erosion impacts during project construction and operation.

The SWPPP and WQMP would identify BMP measures to treat and/or limit the entry of contaminants into the storm drain system during project construction and operation. Adherence to the BMPs contained in the SWPPP and WQMP would ensure appropriate measures are taken to prevent the substantial loss of topsoil and erosion from occurring during project construction and operation. Therefore, impacts related to soil erosion would be **less than significant** and no mitigation is required.

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 with Mitigation Incorporated. The project site is mostly flat and urban development occurs to the northwest and southwest. There is no evidence of landslides and/or slope instabilities on the project site. As detailed in Section 5.7.1.a(iii) and (iv) above, the project site is not located in an area considered susceptible to liquefaction or landslides. Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Since liquefaction would not occur on the project site, lateral spreading would also not occur. Therefore, there would be no impact associated with on- or off-site liquefaction, lateral spreading, or landslides.

The soils underlying the project site vary in strength and may be susceptible to subsidence, consolidation, and/or hydrocollapse when additional loads are imposed on those soils by construction equipment and proposed on-site structures.[62] Shrinkage, bulking, and subsidence are primarily dependent upon the degree of soil compaction achieved during construction. Variations in the in-situ density of existing soils and the degree to which fill soils are compacted would influence earth volume changes.

As discussed in Section 5.7.1.a, the project would be required to comply with all applicable CBC, Town standards, and recommendations of the project-specific geotechnical report pursuant to **Mitigation Measure GEO-1**. Specifically, implementation of **Mitigation Measure GEO-1** would ensure overexcavation and establishment of a sufficient layer of engineered fill or densified soil is prepared beneath any proposed structural footings/foundations and pavement and verification testing be performed upon completion of ground improvements to confirm that compressible soils have been sufficiently densified. With implementation of **Mitigation Measure GEO-1**, soils would be sufficiently compacted and densified during construction to bear the weight of proposed on-site structures, which would stabilize soils and prevent subsidence and/or collapse from occurring on-site. Therefore, impacts from subsidence and/or collapse would be reduced to **less than significant with mitigation incorporated.**

62 Krazan & Associates, Inc. *Geotechnical Engineering Investigation, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* Page 4. September 9, 2021. Appendix D1.

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 with Mitigation Incorporated. Expansive soils generally have a substantial amount of clay particles, which can give up water (shrink) or absorb water (swell). The change in the volume exerts stress on buildings and other loads placed on these soils. The amount and types of clay present in the soil influence the extent or range of the shrink/swell. The occurrence of clayey soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed, and they can occur along hillside areas as well as low-lying alluvial basins.

The upper soils on the project site consist of approximately 6 to 12 inches of very loose silty sand or sand, which are underlain by approximately 3 to 4 feet of medium dense to very dense silty sand or sand.[63] Soils below 4 to 5 feet consist of medium dense to very dense silty sand, silty sand/sand, sand, and sandy silt.[64]Therefore, the project-specific geotechnical report determined that the upper 12 inches of loose sub-surface soils are highly compressible when saturated.[65]

As discussed in Section 5.7.1.a, the project would be required to comply with all applicable CBC, Town standards, and recommendations of the project-specific geotechnical report pursuant to **Mitigation Measure GEO-1**. Specifically, implementation of **Mitigation Measure GEO-1** would ensure that fill soils used during project construction would consist of very low expansive soils.[66] Additionally, **Mitigation Measure GEO-1** would ensure overexcavation and establishment of a sufficient layer of engineered fill or densified soil is prepared beneath any proposed structural footings/foundations and pavement and verification testing be performed upon completion of ground improvements to confirm that compressible soils have been sufficiently densified. Therefore, implementation of **Mitigation Measure GEO-1** would ensure that impacts from expansive soils would not occur, and the project would not create substantial direct or indirect risks to life or property. As such, impacts would be **less than significant with mitigation incorporated**.

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. The project would connect to the municipal wastewater collection system along Bear Valley Road, and no septic systems are proposed. Therefore, **no impact** related to the septic system or alternative wastewater disposal systems would occur. Mitigation is not required.

63 *Ibid.* Pages 4 and 5.
64 *Ibid.*
65 *Ibid.* Pages 7 and 8.
66 *Ibid.* Page 11.

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

Less than Significant with Mitigation Incorporated. The project site is underlain by older alluvium sediments of the Mojave River.[67] Generally, older alluvium sediments with the potential to contain significant paleontological resources are known to occur beneath the project site.[68]

As discussed in Section 2.2, the majority of the project site is undeveloped. Excavations during construction would extend to approximately 4 feet below existing site grade or 2 feet below the bottom of proposed foundations, whichever is deeper.[69] As discussed above, native soils on the project site have the potential to yield paleontological resources. Therefore, there is the potential to encounter paleontological resources during project construction.

Accordingly, **Mitigation Measures GEO-2** and **GEO-3** are prescribed to ensure project compliance with applicable provisions protecting paleontological resources, including California *Administrative Code, Title 14, Section 4307*, which states that no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value. Implementation of **Mitigation Measures GEO-2** and **GEO-3** would ensure that paleontological resources, if encountered during project construction, would be protected. Therefore, impacts to paleontological resources would be reduced to **less than significant with mitigation incorporated**.

Mitigation Measures. The following mitigation measures are required to reduce potentially significant impacts to paleontological resources to less-than-significant levels.

Mitigation Measures GEO-2: Prior to issuance of a grading permit, the Project Applicant must retain a qualified paleontologist (defined as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year) to prepare a Paleontological Resource Impact Mitigation Plan (PRIMP) and monitor mass grading activities on the site. Implementation of the PRIMP shall include (but not be limited to) the following:

- Review of Project-specific geotechnical report data, with particular regard to location and depth of earthmoving and the rock unit(s) encountered;
- Development of a formal agreement between the Project Applicant and the San Bernardino County Museum, Natural History Museum of Los Angeles County, Western Science Center, San Diego Natural History Museum, Riverside Municipal

67 *Ibid.* Figure No. 3.

68 Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002*. Pages III-76 and III-79 and Exhibit III-5. Certified August 11, 2009.

69 *Ibid.* Page 10.

Museum, or other accredited museum repository for the final disposition, permanent storage, and maintenance of any fossil collections and associated data;

- The construction schedule, term/schedule of on-site paleontological monitor(s) and the extent of areas and activities to be monitored;
- Authority of paleontological monitor(s) to temporarily redirect construction activity in the vicinity of any paleontological discovery;
- Procedures for the evaluation and option to recover large fossil specimens and for the evaluation, recovery, and processing of small fossil specimens;
- Fossil specimen preparation, identification to the lowest taxonomic level possible, curation, and cataloging; and
- A report of findings.

Monitoring shall occur from the outset of grading activities since the depth of older alluvium sediments on-site is unknown. However, the qualified paleontologist shall have the discretion of scaling back monitoring to a schedule approved by the Apple Valley Planning Division if, at the discretion of the paleontologist, grading is unlikely to reach depths of older alluvium sediments or if the sediments encountered on the site have little to no potential to yield paleontological resources.

If paleontological resources are encountered during the course of ground disturbance, work within 60 feet of the find shall be halted, and an exclusionary buffer shall be established. The qualified paleontologist shall assess the find for scientific significance. Construction personnel shall not collect or move any suspected paleontological materials or further disturb any soils within the exclusionary buffer without the consent of the paleontologist and the Apple Valley Planning Division, but construction activity may continue unimpeded on other portions of the Project site. If the paleontologist determines the find is not a paleontological resource, no further evaluation shall be required within the exclusionary buffer, and construction activity shall be allowed to resume therein. However, if the paleontologist determines the find is a paleontological resource, construction activity shall not resume within the exclusionary buffer, and **Mitigation Measure GEO-3** shall apply. This measure shall be implemented to the satisfaction of the Apple Valley Planning Division.

Mitigation Measure GEO-3: If the qualified paleontologist determines paleontological resources are encountered on the project site, the paleontologist shall address the resource(s) pursuant to the Paleontological Resource Impact Mitigation Plan (PRIMP) to be implemented during the balance of ground-disturbing activities. The paleontologist shall be equipped to record and salvage fossil resources that may be unearthed during construction and shall temporarily halt or divert construction equipment to allow recording and removal of the unearthed resources. Significant fossils shall be offered for curation at an accredited museum repository in accordance with the PRIMP. A report of findings, including, when appropriate, an itemized inventory of recovered specimens and a discussion of their significance, shall be prepared at the conclusion of paleontological monitoring. The report and inventory, when submitted to and approved by the Apple Valley Planning Division, would signify completion of the program. This measure shall be implemented to the satisfaction of the Apple Valley Planning Division.

5.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The project-specific information and analysis in this section is based on the Air Quality, Greenhouse Gas, and Energy Impact Analysis Memorandum provided in Appendix A of this Initial Study.[70]

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric

[70] LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. June 14, 2023. Appendix A.

lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

5.8.1 Impact Analysis

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. State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Appendix G of the State CEQA Guidelines includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would do either of the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Currently, there is no Statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are currently developed and revised by air districts in California.

This analysis will consider whether the project is compliant with the Apple Valley 2019 CAP Update, which is a qualified GHG emissions reduction plan in accordance with *State CEQA Guidelines* Section 15183.5. The Apple Valley 2019 CAP Update supports the achievement of individual GHG reduction measures as well as the Town's overall GHG reduction goals. In addition, it furthers the Town's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others. If the project is determined to be compliant with the Apple Valley 2019 CAP Update, then impacts related to the GHG emissions resulting from that project will be considered less than significant.

This section discusses the project's impacts related to the release of GHG emissions for the construction and operational phases of the project. Construction and operational GHG emissions were estimated using CalEEMod using the same methodology for the criteria pollutants described in Section 5.3, Air Quality.

Construction Activities. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through

the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. As shown in Table 5.8.A, project construction emissions would total 343 MT CO_2e (See the CalEEMod output in Appendix A for details).

Neither the Apple Valley 2019 CAP Update nor the MDAQMD provide a separate GHG significance threshold for construction emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. In addition, other air districts recommend amortizing GHG emissions over the life of the project based on the total GHG emissions for construction activities divided by the project life (i.e., 30 years), then adding that number to the annual operational phase GHG emissions. Table 5.8.A presents the estimated GHG emissions by construction phase and amortized emissions for the proposed project. Since there is no separate GHG significance threshold for construction emissions, project-level and cumulative GHG emissions during construction activities alone would be **less than significant**, and no mitigation is required.

Table 5.8.A: Construction Greenhouse Gas Emissions

Construction Phase	Total Emissions per Phase (MT)			Total Emissions per Phase (MT CO_2e)
	CO_2	CH_4	N_2O	
Demolition	17	<1	<1	18
Site Preparation	13	<1	<1	13
Grading	14	<1	<1	14
Building Construction	284	<1	<1	286
Architectural Coating	10	<1	<1	10
Paving	19	<1	<1	20
Total Emissions for the Entire Construction Process				**343**
Construction Emissions Amortized over 30 years				**11**

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table K. June 14, 2023. Appendix A.

CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT CO_2e = metric tons of carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle and truck trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. As shown in Table 5.8.B, the project would generate 9,429 MT CO_2e/yr.

Table 5.8.B: Long-Term Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT per year)					
	Bio-CO_2	nBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Area	0	<1	<1	<1	<1	<1
Energy	0	452	452	<1	<1	454
Mobile	0	7,869	7,869	<1	<1	8,007
Water	6	29.4	36	<1	<1	57
Waste	28	<1	28	2.8	<1	98
Refrigerant						801
Total Operational Emissions	**35**	**8,351**	**8,385**	**4**	**<1**	**9,418**
Amortized Construction Emissions						**11**
Total Annual Emissions						**9,429**

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table L. June 14, 2023. Appendix A.

MT = metric tons
Bio-CO_2 = biologically generated CO_2
N_2O = nitrous oxide
CH_4 = methane
nBio-CO_2 = non-biologically generated CO_2
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent

As described in the Town's General Plan Housing Element, 16.6 percent of the Town's population works in Apple Valley. The remaining 83 percent work elsewhere, which could suggest a jobs-housing imbalance within the Town limits. As such, it is expected that the jobs created by the project would be sourced from the local workforce and would not require people to relocate from surrounding communities. Given the existing demand for jobs in the Town, it is likely that all of the jobs created by the project would be filled by existing residents of Apple Valley. It is therefore assumed that the Town's 2030 population would be 84,535 as analyzed in the 2019 CAP Update.

Based on a population of 84,535, Table 5.8.C shows that in order for the Town to meet the 2030 emissions reduction target, the GHG emissions would have to be no more than 5.32 $MTCO_2e$ per capita. The table also shows that with implementation of the 2019 CAP Update reduction measures, the Town expects to go beyond the established emissions target, reducing forecasted emissions to 410,922 MT CO_2e per year or 4.86 $MTCO_2e$ per capita. The 2030 emissions forecast with 2019 CAP Update measures accounts for community emissions, including commercial projects. It is therefore likely that the project's estimated annual emissions of 9,429 MT CO_2e would already be covered by the 2030 emissions forecast. However, assuming a commercial development like the proposed project was not accounted for in the 2019 CAP Update 2030 forecast, and to ensure a conservative analysis, the project's emissions were added to the existing forecast. As shown in Table 5.8.C, the total annual emissions from the project and existing 2030 forecast would be 420,340.00 $MTCO_2e$, or 4.97 $MTCO_2e$ per capita. Both the total and per capita emissions meet the 2019 CAP Update target for 2030 of 40 percent below the 2005 baseline. Therefore, the Town-wide emissions in 2030, including the project, would meet the 2019 CAP Update GHG emissions reduction target. Impacts would be **less than significant,** and no mitigation is required.

Table 5.8.C: Project Emissions and 2019 CAP Update Reduction Target

Target/Scenario	Forecast ($MTCO_2e$)	Population	$MTCO_2e$ Per Capita
CAP 2030 forecast w/CAP measures	410,922	84,535	4.86
Project emissions (per year)	9,429	84,535	--
Total	**420,351**	**84,535**	**4.97**
CAP 2030 target (40% below baseline)	449,347	84,535	5.32
Would GHG Emissions Exceed the CAP 2030 Target?			**No**

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table M. June 14, 2023. Appendix A

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. The applicable plan adopted by the Town for the purpose of reducing greenhouse gas emissions is the Apple Valley 2019 CAP Update. To ensure the project's GHG emissions are reduced consistent with the goals of the 2019 CAP Update, the project would be subject to applicable reduction measures from the 2019 CAP Update. The reduction measures in Apple Valley's 2019 CAP Update are divided into three broad categories: Town Municipal Operational Measures, Community Operational Measures, and New Development Measures. Since the project is a "New Development", it is measured against the applicable new development. The project's consistency with applicable reduction measures is shown in Table 5.9.C below.

Table 5.9.C: Project Consistency with Town of Apple Valley Climate Action Plan

Measures	Consistency Determination
ND-9. During project construction, encourage on-site and off-road construction equipment to utilize biodiesel fuel (a minimum of B20), except for equipment where use of biodiesel fuel would void the equipment warranty. As a conservative measure, no reduction in GHG emissions was taken for the implementation of this measure as it is unknown if biodiesel can be readily applied to the various pieces of construction equipment that will be necessary for the project.	**Consistent**. The Alternative Diesel Fuels (ADF) regulation has made more readily available low carbon, and often times lower polluting, diesel fuel substitutes to enter the commercial market in California. The MDAQMD, through the construction permit process, requires information be provided on the use of such fuel. The availability of biodiesel to various construction contractors would depend on the local biodiesel distribution system. Accordingly, no reduction in GHG emissions was taken for the implementation of this measure, as it is unknown if biodiesel can be readily applied to the various pieces of construction equipment that will be necessary for the project. Nevertheless, implementation of the proposed project would not conflict or otherwise obstruct progress toward implementing ADFs to this project or future projects in the air basin.

Table 5.9.C: Project Consistency with Town of Apple Valley Climate Action Plan

Measures	Consistency Determination
ND-11. Install pedestrian, bicycle and/or equestrian trails connecting project to school(s), commercial project(s) or transit.	**Consistent**. Sidewalks connecting to Bear Valley Road would be constructed.
ND-12. Building and site plan designs shall ensure that the project energy efficiencies meet applicable California Title 24 Energy Efficiency Standards. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the applicant and reviewed and approved by the Town prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this measure provided that- the total increase in efficiency meets or exceeds Title 24 standards: ● Buildings shall meet or exceed California Title 24 Energy Efficiency performance standards for water heating and space heating and cooling. ● Increase in insulation such that heat transfer and thermal bridging is minimized. ● Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption. ● Incorporate dual-paned or other energy efficient windows. ● Incorporate energy efficient space heating and cooling equipment. ● Incorporate the use of tankless water heaters in all residential units and community buildings. ● Promote building design that will incorporate solar control in an effort to minimize direct sunlight upon windows. A combination of design features including roof eaves, recessed windows, “eyebrow” shades and shade trees shall be considered. ● Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by Town. Automatic devices to turn off lights when they are not needed shall be implemented. ● To the extent that they are compatible with landscaping guidelines established by the Town, shade producing trees, particularly those that shade paved surfaces such as streets and parking lots and buildings shall be planted at the Project site. ● Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings. ● All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, and wind energy systems on properties greater than 2 acres, appropriate to their architectural design. ● Consideration shall be given to using LED lighting for all outdoor uses (i.e., buildings, pathways, landscaping, carports).	**Consistent**. Buildings would be designed and constructed to meet California Title 24 energy requirements. Requirements would be met using a combination of the building envelopes, HVAC systems and electrical systems.
ND-16. Install Energy Star appliances and energy efficient fixtures.	**Consistent**. Energy star appliances would be installed as applicable.
ND-17. Install all CFL or LED light bulbs.	**Consistent**. LED light bulbs would be installed throughout the project.
ND-18. Install common area electric vehicle charging station(s) and secure bicycle racks.	**Consistent**. Electrical vehicle charging and secure bicycle racks would be installed as required per city ordinances/California title 24 energy code.
ND-24. Recycle and/or salvage non-hazardous construction and demolition waste and develop and implement a construction waste management plan quantifying the reduction in the waste stream.	**Consistent**. The project shall comply with Section 5.408 of the 2019 California Green Building Code Standards, which requires

Table 5.9.C: Project Consistency with Town of Apple Valley Climate Action Plan

Measures	Consistency Determination
	new development projects to submit and implement a construction waste management plan in order to reduce the amount of construction waste transported to landfills
ND-25. Reuse construction waste in project features (e.g., shattered concrete or asphalt can be ground and used in walkways and parking lots).	**Consistent**. CALGreen requires covered projects to recycle and/or salvage for reuse a minimum 65 percent of the nonhazardous construction and demolition waste or meet a local construction and demolition waste management ordinance, whichever is more stringent**.**
ND-26. Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that serve each building and are dedicated to the collection and storage of paper, cardboard, glass, plastics, and metals.	**Consistent**. Trash enclosures would be provided and easily accessible from the buildings. Recycling collection containers would also be provided.

Source: LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. Table N. June 14, 2023. Appendix A
MDAQMD = Mojave Desert Air Quality Management District

As shown in Table 5.9.C, the proposed project would be consistent with the Apple Valley 2019 CAP Update reduction measures for new development. Additionally, as discussed in Section 5.8.1.a above, the Town's CO_2e emissions, including the proposed project's CO_2e emissions, would meet the 2030 reduction target prescribed in the 2019 CAP Update. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be **less than significant**, and no mitigation is required.

5.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and 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 2 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?	☐	☐	☒	☐

5.9.1 Impact Analysis

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 with Mitigation Incorporated. The project has the potential to create a hazard to the public or environment through the routine transportation, use, and disposal of hazardous materials such as fuels, oils, solvents, and other materials. Additionally, demolition of existing structures may involve disposal of lead-based materials (LBM) and asbestos-containing materials (ACM), as indicated in the project-specific Phase I Environmental Site Assessment (ESA) (Appendix E),[71] which must be disposed of in accordance with the federal, State, and local (San Bernardino County Department of Public Health and SCAQMD) regulations to safeguard the public from significant hazards during the disposal of hazardous materials.

Construction. The transport, use, and disposal of hazardous materials during construction would be regulated by the San Bernardino County Fire Department, the Apple Valley Fire Protection District, and

[71] AEI Consultants. *Phase I Environmental Site Assessment*. Page 6. February 1, 2021. Appendix E.

the California Occupational Safety and Health Administration. The Code Enforcement Division of the Town of Apple Valley Police Department is responsible for weed and rubbish abatement in coordination with other Town and County departments. Additionally, the United States Department of Transportation Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials by truck and rail on State highways and rail lines, as described in Title 49 of the Code of Federal Regulations and implemented by Title 13 of the CCR.

Potential hazardous materials such as fuel, paint products, lubricants, solvents, and cleaning products may be used and/or stored on site during construction of the proposed project. These materials are typical of materials delivered to construction sites. Due to the relatively small scale of proposed development (approximately 39,743 square feet of new construction on 8.25 acres), only limited quantities of these materials are expected to be used during construction, so they are not considered hazardous to the public at large**.**

The project would result in the demolition of the existing residential structure and associated structures located adjacent to the northwestern boundary of the site. Structures constructed prior to 1978 may contain LBM as well as ACM incorporated into various construction components including paint, roof tiles, and thermal insulation. According to the Phase 1 ESA prepared for the project site, the existing residential structure proposed for demolition was constructed around 1965 and may contain ACM and LBP at levels that may require abatement.[72]

The San Bernardino County Department of Public Health requires that all workers be properly protected when working with materials containing lead levels at or above 0.6 milligram per square centimeter (mg/cm^2) or 600 parts per million (ppm) in accordance with Title 8, CCR Section 1532.1 (Cal/OSHA Construction Safety Orders, Lead). The Federal Environmental Protection Agency defines ACM as a material containing more than one percent asbestos as determined by polarized light microscopy, while Title 8, CCR Section 1529 (Asbestos) defines asbestos-containing materials as any manufactured construction material that contains more than one-tenth of one percent asbestos by weight. The SCAQMD (Rule 1403) and San Bernardino County Department of Public Works-Solid Waste Management Division require Asbestos Notification for proposed abatement activities and disposal tickets from an SCAQMD-approved disposal facility prior to demolition.

The Phase 1 ESA did not include an ACM and LBP survey of the on-site structures. Therefore, the ACM and LBP levels within the building materials of the existing structures proposed for demolition are unknown. Additionally, the Phase I ESA indicated there are currently multiple unmarked 55-gallon drums stored south of the residential structure and the contents of these drums is unknown. As such, demolition activities may create a significant hazard to the public or the environment through the routine disposal of hazardous materials, and mitigation is required.

Accordingly, **Mitigation Measures HAZ-1** through **HAZ-4** are prescribed to require the Project Applicant to conduct an ACM survey and LBP survey of the structures proposed for demolition prior to demolition activities. Additionally, **Mitigation Measure HAZ-5** is prescribed to require the Project Applicant to identify the contents of the drums located on-site and implement appropriate disposal methods prior to construction activities. Implementation of **Mitigation Measures HAZ-1** through

[72] *Ibid*.

HAZ-5 would ensure that the project would comply with applicable regulations for the treatment and disposal of hazardous materials, including ACM, LBP materials, and the contents of the drums. Therefore, impacts from the routine transport, use, or disposal of hazardous materials during construction would be reduced to **less than significant with mitigation**.

Operation. Similar to project construction, the transport, use, and disposal of hazardous materials during project operation would be regulated by the San Bernardino County Fire Department, the Apple Valley Fire Protection District, and the California Occupational Safety and Health Administration. The Code Enforcement Division of the Town of Apple Valley Police Department is responsible for weed and rubbish abatement in coordination with other Town and County departments. Additionally, transport of hazardous materials by truck and rail on State highways and rail lines would be regulated by the United States Department of Transportation Office of Hazardous Materials Safety as described above.

These regulations inherently safeguard life and property from the hazards of fire/explosion arising from the storage, handling, and disposal of hazardous substances, materials, and devices, as well as hazardous conditions due to the use or occupancy of buildings. Therefore, impacts from the routine transport, use, or disposal of hazardous materials during project operation would be **less than significant** and no mitigation is required.

Mitigation Measures. The following mitigation measures are required to reduce potentially significant impacts related to the transport, use, or disposal of hazardous materials during project construction, including ACM, LBP materials, and the contents of the on-site drums to less than significant levels.

Mitigation Measure HAZ-1 An asbestos-containing materials (ACM) survey shall be completed for all structures proposed for demolition. A Certified Asbestos Consultant shall conduct the ACM survey. If the ACM survey reveals no detectable asbestos levels pursuant to Title 8, California Code of Regulations Section 1529, no further ACM survey or remedial work is required. However, if a detectable level of asbestos is identified within structures proposed for demolition, **Mitigation Measure HAZ-2** shall apply. This measure shall be implemented to the satisfaction of the Apple Valley Community Development Director or designee, and/or Building and Safety Division, or designee.

Mitigation Measure HAZ-2: Prior to the demolition of any structure identified to contain asbestos-containing materials (ACM), the Project Applicant shall retain a Certified Asbestos Consultant to abate ACM from the demolition site pursuant to South Coast Air Quality Management District (SCAQMD) Rule 1403. An Asbestos Notification shall be prepared and submitted to the SCAQMD for approval if abatement of at least 100 square feet or 160 linear feet of ACM above one percent asbestos is required. The Certified Asbestos Consultant shall provide a construction and demolition plan with disposal tickets from a San Bernardino County Department of Public Works-Solid

Waste Management Division-approved disposal facility and SCAQMD air clearances prior to any asbestos removal activity, and an asbestos report shall be provided to the County prior to the issuance of a demolition permit. This measure shall be implemented to the satisfaction of the Apple Valley Community Development Director or designee, and/or Building and Safety Division, or designee.

Mitigation Measure HAZ-3 A lead-based materials (LBM) survey shall be completed for all structures proposed for demolition. A qualified California Department of Public Health Lead Inspector Assessor shall conduct the LBM survey. If the LBM survey reveals no detectable lead levels pursuant to Code of Federal Regulations Chapter 29, Section 1926.62 and Title 8, California Code of Regulations Section 1532.1, no further LBM survey or remedial work is required. However, if a detectable level of lead is identified within structures proposed for demolition, **Mitigation Measure HAZ-4** shall apply. This measure shall be implemented to the satisfaction of the Apple Valley Community Development Director or designee, and/or Building and Safety Division, or designee.

Mitigation Measure HAZ-4: Prior to the demolition of any structure identified to contain lead-based materials (LBM), the Project Applicant shall retain a California Department of Public Health Lead Inspector Assessor to abate LBM from the demolition site. The Lead Inspector Assessor shall provide a construction and demolition plan with disposal tickets from a San Bernardino County Department of Public Works-Solid Waste Management Division-approved disposal facility and South Coast Air Quality Management District air clearances prior to any lead removal activity, and a lead report shall be provided to the Town prior to the issuance of a demolition permit. This measure shall be implemented to the satisfaction of Apple Valley Community Development Director or designee, and/or Building and Safety Division, or designee.

Mitigation Measure HAZ-5: Prior to the issuance of grading permits, the Project Applicant shall retain a qualified professional to assess the contents of the on-site drums and determine the appropriate disposal of the drums. This measure shall be implemented to the satisfaction of Apple Valley Community Development Director or designee, and/or Building and Safety Division, or designee.

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 with Mitigation Incorporated. A project-specific Phase I Environmental Site Assessment (ESA) was prepared in accordance with the American Society for Testing and Materials (ASTM) International Standard E1527-13 for the purposes of identifying recognized environmental conditions (REC), controlled recognized environmental conditions (CREC), historical recognized environmental conditions (HREC), and other environmental considerations (OEC) on the project site (Appendix E).

An REC means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs. A CREC is defined as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. An HREC means an environmental condition that in the past would have been considered an REC, but which may or may not be considered an REC currently. If a past release of any hazardous substances or petroleum products has occurred in connection with the property, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a case closed letter or equivalent), this condition shall be considered an HREC. In addition to these environmental conditions, the Phase I ESA considered OEC, which are defined as conditions that do not meet the ASTM definition of an REC, but that warrant consideration for disclosure in the context of acquiring and/or redeveloping the site.

The Phase I ESA includes federal, State, and local records reviews (up to a one-mile radius), interviews with persons occupying (and adjacent to) the project site, and an on-site inspection of the properties comprising the project site. According to the Phase I ESA, no RECs, CRECs, or HRECs occur on the project site, nor do any such environmental conditions within one mile of the project site pose a substantial environmental hazard to the project site or its occupants. However, the Phase I ESA identified the residential structure on the project site proposed for demolition that may contain LBM and ACM as an OEC on the project site. Additionally, the multiple on-site drums containing contents unknown at this time were identified as an OEC on the project site.

Pursuant to California Health and Safety Code Section 25507, a business shall establish and implement a Hazardous Materials Business Emergency Plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503 if the business handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time above the thresholds described in Section 25507(a) (1) through (8).

As stated above, the project-specific Phase I ESA (Appendix E) did not identify any RECs, CRECs, or HRECs on the project site. Nevertheless, as discussed in Section 5.9.a above, demolition and construction activities as part of the proposed project could release hazardous materials into the environment. However, **Mitigation Measures HAZ-1** through **HAZ-5** would require the project to comply with applicable regulations for the treatment and disposal of hazardous materials, including ACM, LBM, and the contents of the on-site drums, to ensure that the project does not create a significant hazard to the public or the environment. Therefore, impacts from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be reduced to **less than significant with mitigation incorporated**.

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?

Less than Significant Impact. There are no existing or planned schools within a 0.25-mile radius of the project site.[73] The nearest school in proximity to the project site is Mirus Secondary School at 18985 Bear Valley Road, approximately 0.58 mile west of the project site. Furthermore, any transport of hazardous materials associated with construction of the proposed project would be in accordance with the United States Department of Transportation (USDOT), which regulates the transport of hazardous materials and waste and requires carriers to register with the DTSC. Only Cal/OSHA licensed Hazardous Materials Substances Removal contractors, and/or California State Registered Asbestos Abatement Contractors registered by the Division of Occupational Health and Safety in accordance with the California Administrative Code, Title 8, and article 2.5 and the SCAQMD Asbestos Hazard Emergency Response Act pursuant to Code of Federal Regulations Chapter 40, Part 763, subpart E would transport hazardous materials off site, as detailed in Section 5.9.1.a above.

Since no schools are located or proposed within a 0.25-mile of the project site, and any transport of hazardous materials associated with construction of the proposed project would be in accordance with applicable regulatory policy, impacts related to an accidental release of hazardous materials or emissions of hazardous substances within one-quarter mile of an existing or proposed school would be **less than significant.** No mitigation is required.

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. Hazardous materials sites compiled pursuant to Government Code Section 65962.5 are listed on the "Cortese List" (named after the Legislator who authored the legislation that enacted it), which is maintained by the California DTSC.[74] The project site is not on any list of hazardous material

[73] Apple Valley Unified School District. *School Directory.* https://www.avusd.org/schools (accessed February 20, 2023).

[74] California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese).* https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM,COLUR&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+(CORTESE) (accessed February 20, 2023).

sites compiled pursuant to Government Code Section 65962.5. Therefore, **no impact** related to the Cortese List or other governmental databases compiled pursuant to Government Code Section 65962.5 would occur, and no mitigation is required.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The project site is located approximately 7.4 miles southwest of the Apple Valley Airport and 7.3 miles northeast of the Hesperia Airport. The project site is not within an Airport Safety Review Area of any airport or private airstrip.[75] Therefore, **no impact** related to airport hazards for people visiting or working on the project site would occur and no mitigation is required.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The project could result in temporary restrictions to vehicle traffic along the adjacent Bear Valley Road during construction and also would increase the number of vehicles operating near the site, which would result in an increase in the amount and volume of traffic on local and regional roadways.

Construction. Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Typical requirements include prior notification of any lane or road closures with sufficient signage before and during any closures, flag crews with radio communication when necessary to coordinate traffic flow, etc. The Project Applicant would be required to comply with these requirements, which would maintain emergency access and allow for evacuation if needed during construction activities. Compliance with these requirements would ensure that short-term impacts related to this issue are **less than significant.** Mitigation is not required.

Operation. Implementation of the proposed project would increase the number of vehicles operating near the site and would generate an increase in the amount and volume of traffic on local and regional roadway networks. In accordance with the California Fire Code, the Project Applicant is required to design, construct, and maintain structures, roadways, and facilities to maintain appropriate emergency/evacuation access to and from the project site.

Access to and from the project site would be provided by three ingress/egress driveways, including one along Bear Valley Road to the north, one along Apple Bear Road to the west, and one along Flying Feather Road to the east. One loading dock parking space would be provided on the east side of the proposed grocery store building. Additionally, one ingress driveway would be constructed in the southernmost portion of the site along the eastern frontage of the site off Flying Feather Road and one egress driveway would be constructed in the southernmost portion of the site along the western frontage of the site off Apple Bear Road to provide access to the site for freight delivery

[75] San Bernardino County. *Countywide Plan Policy Plan*. Policy Map HZ-9 Airport Safety & Planning. July 6, 2020.

trucks, trash trucks, and emergency response vehicles. Finally, on-site drive aisles connecting all perimeter driveways would facilitate internal access to parking areas and the proposed buildings and ensure adequate access throughout the site for first responders to an emergency.

Entrances and exits to and from parking and loading facilities would be marked with appropriate directional signage. All site access points and driveway aprons are designed and would be constructed to adequate widths for public safety pursuant to Chapter 9.72 (Off-Street Parking and Loading Regulations) of the Town Development Code.

These improvements would be reviewed by the Apple Valley Fire Protection District and San Bernardino County Sheriff's Department through the Town's general development review process. Proper site design and compliance with standard and emergency access requirements would allow for evacuation if necessary during ongoing project operations. Therefore, project operation would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be **less than significant.** Mitigation is not required.

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. As discussed in Section 5.20, Wildfire, the project site is not located within a wildfire State Responsibility Area, nor is the site classified as a Very High Fire Hazard Severity Zone (VHFHSZ).[76] The nearest VHFHSZ is located approximately 10 miles south of the site; therefore, the project site is not located near a wildland area susceptible to fires. The project would also be required to comply with 2022 CBC requirements for ignition-resistant construction and applicable policies of the Town's General Plan Police and Fire Protection Element, including Policy 1.E, which requires development review and conducting inspections to strictly enforce fire regulations.

Given the discussion above, it is not expected that the project would expose people or structures to significant loss or injury from wildland fires. Impacts would be **less than significant,** and mitigation is not required.

[76] California Department of Forestry and Fire Protection. *Fire and Resource Assessment Program (FRAP).* https://egis.fire.ca.gov/FHSZ/ (accessed September 7, 2022).

5.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial 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?	☐	☐	☒	☐

5.10.1 Impact Analysis

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. Construction and operation of the proposed project would result in an increase of impermeable surfaces on the project site, which could result in the degradation of surface or groundwater quality.

Construction. Pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During demolition and construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. Any of these pollutants have the potential to be transported via stormwater runoff into receiving waters, which includes the

Mojave River (Mojave Forks Reservoir outlet to Upper Narrows),[77] located approximately 0.7-mile west of the project site.

A majority of the 8.25-acre project site is undeveloped and consists of desert scrub vegetation. There is an existing residential structure and ancillary shed, which constitute 0.08-acre of impervious surface on the project site. Because project construction would disturb greater than 1 acre of soil, the project would be subject to the requirements of the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) permit Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002) (Construction General Permit). As specified in **Standard Condition HYD-1** and as required by the Construction General Permit, the Construction Contractor would be required to prepare an SWPPP and implement construction BMPs detailed in the SWPPP during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment control, designed to minimize erosion and retain sediment on site, and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

According to the Geotechnical Engineering Investigation (Geotechnical Report) prepared for the proposed project, no groundwater was encountered within the maximum depth of 50 feet explored.[78] Based on information obtained from the Department of Water Resources, monitoring data of water wells within the project site vicinity reported historic groundwater elevations of 12 feet below the ground surface.[79] Groundwater elevations may fluctuate with seasonal precipitation, irrigation, land use, climatic conditions, and other factors. Excavations during construction would extend to approximately 4 feet below existing site grade or 2 feet below the bottom of proposed foundations, whichever is deeper.[80] Therefore, it is unlikely excavation activities would have the potential to encounter groundwater and groundwater dewatering is not anticipated to be required during construction activities.

Implementation of **Standard Condition HYD-1**, which requires compliance with the Construction General Permit requirements, including implementation of construction BMPs, impacts associated with a violation of water quality standards or waste discharge requirements during project construction would be **less than significant**, and no mitigation is required.

Operation. During operation, anticipated pollutants of concern associated with the proposed project include pathogens (bacterial/virus), nutrients (phosphorous and nitrogen), noxious aquatic plants, sediments, metals, oil and grease, trash and debris, pesticides and herbicides, and organic compounds.

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77 Tait & Associates. *Preliminary Water Quality Management Plan for Apple Bear Retail Site.* Page 3-3. September 12, 2022. Appendix F1.

78 Krazan & Associates, Inc. *Geotechnical Engineering Investigation, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* Page 5. September 9, 2021. Appendix D1.

79 *Ibid*.

80 *Ibid.* Page 10.

The project site is located in the Mojave River Watershed, which is within the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB). The Phase II Small Municipal Storm Sewer System Permit (Order No. 2013-0001-DWQ, as amended by Orders WQ 2015-0133-EXEC, WQ 2016-0069-EXEC, WQ 2018-0001-EXEC, and WQ-2018-007-EXEC; NPDES No. CAS000004) (Phase II MS4 Permit), adopted by the State of California Water Resources Control Board (SWRCB), and issued statewide requires all new development projects covered by this Order to incorporate Low Impact Development (LID) BMPs to the maximum extent practicable (MEP) to protect water quality in the region. In Apple Valley, the Phase II MS4 Permit is the applicable permit for new development projects within the Mojave River Watershed.[81]

The Phase II MS4 Permit requires the preparation of project-specific WQMPs for new development projects that involve the creation of 5,000 square feet or more of impervious surface collectively over the entire site. The proposed project includes the development of more than 5,000 square feet of impervious surface and therefore is required to prepare a WQMP. As specified in **Standard Condition HYD-2** and as required by the Phase II MS4 Permit, the proposed project would prepare a Final WQMP. The Final WQMP would specify the Site Design, Source Control, Low Impact Development (LID), and Treatment Control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff.

Site Design BMPs are stormwater management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a site. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. Treatment Control BMPs are structural BMPs designed to treat and reduce pollutants in stormwater runoff prior to releasing it to receiving waters.

A Preliminary WQMP has been prepared for the proposed project, which details the following operational BMPs that would be implemented to reduce impacts to water quality and address hydromodification during operation of the proposed project:

1. Site Design BMPs include minimizing impervious surface areas; maximizing natural infiltration capacity; disconnecting impervious surface areas; minimizing unnecessary compaction in stormwater retention/infiltration areas; and staking off areas to be used for landscaping to minimize compaction during construction.

2. Non-Structural Source Control BMPs include education for property owners, tenants, and occupants on stormwater BMPs; activity restrictions; landscape management BMPs; BMP (hydrodynamic separator and underground infiltration system) maintenance; compliance with local water quality ordinances; spill contingency plan; underground storage tank compliance; hazardous materials disclosure compliance; uniform fire code implementation;

81 The County of San Bernardino. *Mojave River Watershed Technical Guidance Document for Water Quality Management Plans*. Pages 1-2. April 4. 2016.

litter and debris control program; employee training on stormwater BMPs; housekeeping of loading docks; catch basin inspection program; and vacuum sweeping of parking lots.

3. Structural Source Control BMPs include storm drain signage and stenciling; outdoor material and waste storage areas that are designed and constructed to reduce pollution introduction; efficient irrigation systems and landscape design; finished grade of landscaped areas to be a minimum of 1-2 inches below top of curb, sidewalk, or pavement; protection of slopes and channels; covered dock areas; covered maintenance bays; spill containment plans for maintenance bay areas, vehicle wash areas, and equipment wash areas; covered outdoor processing areas; hillside landscaping; water wash control for food preparation areas; and community car wash racks.

4. LID BMPs include catch basins; hydrodynamic separator to provide full capture of trash; and one underground infiltration system.

The project site includes one Drainage Management Area (DMA) (DMA A) to manage stormwater runoff from the entire project site. Stormwater runoff from impervious areas on the project site (e.g. concrete, asphalt, and roofs) would be directed to multiple on-site catch basins, which would drain into a storm drain pipe system and move through a hydrodynamic separator to remove trash and treat pollutants of concern before entering the underground infiltration system and infiltrating into the soil.

The proposed underground infiltration system would store and infiltrate the Design Capture Volume (DCV) for DMA A in accordance with the County of San Bernardino's technical guidance for WQMPs. The DCV is the volume of stormwater runoff that must be captured and treated by stormwater BMPs. According to the Hydrology Report[82] prepared for the proposed project, the underground infiltration system has been designed to store and infiltrate 100 percent of the 100-year storm, and stormwater runoff would not be discharged off-site.[83]

Additionally, the proposed project would be required to comply with Chapter 9.37.030(B) of the Town Development Code (Drainage Facilities and Storm Water Runoff), which requires the proposed project to incorporate stormwater BMPs to capture, retain, and infiltrate 100 percent of a 100-year storm. As discussed above, the proposed underground infiltration system has been designed to store and infiltrate 100 percent of the 100-year storm on-site, and therefore would comply with the requirements of Chapter 9.37.030(B) of the Town Development Code.

As specified in **Standard Condition HYD-3,** a Final Hydrology Report would be prepared to ensure that the proposed project includes LID BMPs (e.g. underground infiltration system) that are sized to retain and infiltrate the required DCV on the project site in accordance with the Phase II MS4 Permit and the requirements of the Town Development Code. With implementation of **Standard Conditions HYD 2** and **HYD-3,** the proposed project would store and infiltrate the required DCV on

82 Tait & Associates. *Preliminary Hydrology Study, Apple Bear Retail Site.* September 12, 2022. Appendix F2.
83 *Ibid.* Page 2.

the project site in accordance with the Phase II MS4 Permit and the requirements of the Town Development Code.

Infiltration of stormwater could have the potential to affect groundwater quality. As discussed above, to reduce pollutants of concern in stormwater runoff, stormwater within the project site would be treated before entering the underground infiltration system and infiltrating into the soil. Furthermore, when stormwater is infiltrated, soil and plants absorb and filter pollutants and reduce the potential for pollutants of concern to reach groundwater. As specified in **Standard Conditions HYD-2**, a Final WQMP would be prepared prior to or during final design, which would ensure that the project design would adequately target pollutants of concern in stormwater runoff before infiltrating into the soil.

With implementation of **Standard Conditions HYD-2** and **HYD-3**, requiring the preparation of a Final WQMP and Final Hydrology Report in compliance with the Phase II MS4 Permit and Town Development Code, impacts associated with a violation of water quality standards or waste discharge requirements or a substantial degradation of surface or groundwater quality would be **less than significant,** and no mitigation is required.

***Standard Conditions*.** No mitigation is required; however, the following Standard Conditions are regulatory requirements that would be implemented to ensure impacts related to water quality standards or waste discharge requirements remain less than significant.

Standard Condition HYD-1: Prior to issuance of a grading permit, the Project Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, National Pollutant Discharge Elimination System No. CAS000002) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTs). The Project Applicant shall provide the Waste Discharge Identification Number (WDID) to the Town of Apple Valley (Town), or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the Town, or designee. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented for the proposed project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction best management practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities.

Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.

Standard Condition HYD-2: Prior to issuance of a grading permit, the Project Applicant shall submit a Final Water Quality Management Plan (Final WQMP) to the Town of Apple Valley (Town) for review and approval in compliance with the requirements of the Lahontan RWQCB's NPDES Permit Waste Discharge Requirements for the 2013 Phase II Small Municipal Storm Sewer System Permit (Order No. 2013-0001-DWQ, as amended by Orders WQ 2015-0133-EXEC, WQ 2016-0069-EXEC, WQ 2018-0001-EXEC, and WQ-2018-007-EXEC, NPDES No. CAS000004) (Phase II MS4 Permit). The Final WQMP shall specify the Best Management Practices (BMPs) to be incorporated into the project design to target pollutants of concern in stormwater runoff captured on the project site and the necessary operation and maintenance activity for each BMP. The Town shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design. The proposed BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the Town for review and approval. Project occupancy and operation shall be in accordance with the schedule outlined in the WQMP.

Standard Condition HYD-3: Prior to the issuance of a grading permit, the Project Applicant shall submit a Final Hydrology Report to the Town of Apple Valley (Town) for review and approval to demonstrate that the proposed project includes LID BMPs appropriately sized to retain and infiltrate the required Design Capture Volume (DCV) on the project site in accordance with the requirements of the Phase II MS4 Permit. The Final Hydrology Report shall also demonstrate that the proposed project includes LID BMPs to capture, retain, and infiltrate 100 percent of the 100-year one hour storm event on-site in accordance with the requirements of Chapter 9.37.030(B) of the Town Development Code.

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. Construction and operation of the proposed project would result in an increase of impermeable surfaces on the project site, which could decrease groundwater supplies or interfere groundwater recharge.

Construction. According to the Geotechnical Report prepared for the project, no groundwater was encountered to an exploration depth of 50 feet below ground surface (bgs).[84] During construction, the depth of excavation would not exceed approximately 4 feet bgs or 2 feet below the bottom of proposed foundations, whichever is greater.[85] Based on depth to groundwater and depth of excavation, groundwater dewatering activities are not anticipated during project construction. Furthermore, according to the project-specific WQMP, soil compaction would be minimized during construction, which would promote natural infiltration during construction activities.[86] Therefore, construction impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be **less than significant**, and no mitigation is required.

Operation. Once developed, the project site would be 85 pervious impervious for a total impervious surface area of 7.6 acres. There is currently 0.08 acre of impervious surface on the project site. Therefore, development of the proposed project would increase impervious surface on the project site, which would decrease on-site infiltration. As described above in Section 5.10.1.a, the project includes BMPs to collect and infiltrate stormwater at the project site in accordance with the Phase II MS4 Permit and Town Development Code. Therefore, development of the proposed project would not substantially decrease the amount of stormwater that infiltrates as compared to the existing conditions.

The project site is located within the Upper Mojave River Valley-Mojave River Groundwater Basin. As discussed in Section 5.10.1.e below, the Mojave River Groundwater Basin is identified by the Department of Water Resources as a very low priority basin[87] and therefore is not required to prepare a Groundwater Sustainability Plan (GSP). The Apple Valley Ranchos Water Company (AVRWC) would supply water to the project site, which includes local groundwater from the Mojave River Groundwater Basin. As discussed in Section 5.19.1.b, the AVRWC anticipates that sufficient water supplies would be available to serve the proposed project. Therefore, the proposed project's water demand would not substantially decrease groundwater supplies. Impacts related to depletion of groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be **less than significant**, and no mitigation is required.

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84 Krazan & Associates, Inc. *Geotechnical Engineering Investigation, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* Page 5. September 9, 2021. Appendix D1.

85 *Ibid.* Page 10.

86 Tait & Associates. *Preliminary Water Quality Management Plan for Apple Bear Retail Site.* Page 4-6. September 12, 2022. Appendix F1.

87 Sustainable Groundwater Management Act (SGMA) Basin Prioritization Dashboard. *Basin Priority Details, Upper Mojave River Valley (6-042)*. Website: https://gis.water.ca.gov/app/bp-dashboard/final/ (accessed February 16, 2023).

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:

i. Result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. Construction and operation of the proposed project would reduce the amount of permeable, earthen surface on the project site and replace it with impermeable surfaces that would be less prone to erosion and siltation.

Construction. During grading and construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above in response to Section 5.10.1.a and as specified in **Standard Condition HYD-1**, the Project Applicant would be required to obtain coverage under the Construction General Permit, which requires preparation of a SWPPP. The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during construction to minimize erosion and retain sediment on-site. Compliance with the requirements of the Construction General Permit and implementation of the construction BMPs would ensure that construction impacts related to on- and off-site erosion or siltation would be **less than significant**, and no mitigation is required.

Operation. Currently, a majority of the project site is undeveloped. Development of the project would result in a total impervious surface area of 7.6 aces (85 percent) of the project site. An increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. The 7.6 acres of impervious surface areas on the project site would not be prone to on-site erosion or siltation because there would be no exposed soil. The remaining 1.34 acres (15 percent) of pervious surfaces on the project site would be landscaped with vegetation that would stabilize the soil and promote infiltration, thereby minimizing on-site erosion and siltation. Furthermore, the project would be required to implement **Standard Conditions HYD-2** and **HYD-3**, which require the preparation of a Final WQMP and Final Hydrology Report, in compliance with the Phase II MS4 permit and Town Development Code, and the implementation of Site Design, Source Control, and LID BMPs that capture and infiltrate stormwater runoff on-site and prevent stormwater from entering receiving waters. With implementation of **Standard Conditions HYD-2** and **HYD-3**, operational impacts related to on- or off-site erosion or siltation would be **less than significant** and no mitigation is required.

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

iv. Impede or redirect flood flows?

Less than Significant Impact. In the existing condition, stormwater sheet flows across the project site to the northwest and drains onto Bear Valley Road where it is ultimately discharged into the Mojave River. The proposed project would change the existing drainage pattern on the project site. Upon development of the proposed project, stormwater runoff would be captured on-site via catch basins and directed to an underground infiltration facility and infiltrate into the soil. Although

development of the proposed project would alter the existing drainage pattern on the project site, the proposed project would not result in on-or off-site erosion or flooding, exceed the capacity of existing or planned drainage systems, or provide substantial additional sources of polluted runoff because 100 percent of stormwater would be captured and infiltrated on-site.

Construction. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C6505J the project site is located in Zone X.[88] Zone X areas are defined by FEMA as areas of minimal flood hazard, which are the areas outside of the Special Flood Hazard Area and higher than the elevation of the 0.2 percent annual chance flood. As discussed above under Section 5.10.1.a, project construction would comply with the requirements of the Construction General Permit and would include the preparation and implementation of a SWPPP (**Standard Condition HYD-1**). The SWPPP would specify construction BMPs to control and direct on-site surface runoff to ensure that project construction does not increase the rate or amount of surface runoff or impede or redirect flood flows in manner that would result in on- or off-site flooding. With implementation of a SWPPP and associated BMPs (**Standard Condition HYD-1**), construction activities would not result in a substantial increase in the rate or amount of surface runoff or impeding or redirecting flood flows in a manner that would result in on- or off-site flooding and impacts would be **less than significant** No mitigation is required.

Operation. As stated above, development of the proposed project would result in a total impervious surface area of 7.6 acres (85 percent), which would increase stormwater runoff and could potentially result in flooding. However, as discussed above, the project site is not within a 100-year floodplain and therefore would not impede or redirect flood flows. Additionally, the proposed underground infiltration system, which has been designed to be consistent with the requirements of the Phase II MS4 Permit and Town Development Code (**Standard Conditions HYD-2** and **HYD-3**), would capture and infiltrate 100 percent of the stormwater runoff, which would reduce the potential for on- or-off-site flooding. Compliance with the Phase II MS4 Permit and Town Development Code (**Standard Conditions HYD-2** and **HYD-3**) would ensure that operational activities would not result in a substantial increase in the rate or amount of surface runoff or impeding or redirecting flood flows in a manner that would result in on- or off-site flooding and impacts would be **less than significant**. No mitigation is required.

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

Less than Significant Impact. The proposed project would be designed to include on-site Best Management Practices (BMPs) to target pollutants of concern in stormwater runoff captured on the project site at levels that do not exceed the existing condition.

Construction. As discussed above, project construction would comply with the requirements of the Construction General Permit and would include the preparation and implementation of a SWPPP (**Standard Condition HYD-1**). The SWPPP would specify construction BMPs to control and direct on-site surface runoff to ensure that stormwater runoff from the construction site does not exceed the

[88] Federal Emergency Management Agency. *Flood Insurance Rate Map No. 06071C6505J*. https://msc.fema.gov/portal/search?AddressQuery=highland%2C%20california?AddressQuery=highland%2C%20california#searchresultsanchor (extracted February 16, 2023).

capacity of the stormwater drainage system and does not discharge polluted runoff during construction activities. With implementation **Standard Condition HYD-1**, construction impacts related to exceeding the capacity of the stormwater drainage system or additional polluted runoff would be **less than significant**, and no mitigation is required.

Operation. As discussed above, the proposed project would retain and infiltrate 100 percent of stormwater runoff on-site in accordance with the requirements of the Phase II MS4 Permit and the Town Development Code (**Standard Conditions HYD-2** and **HYD-3**). Therefore, the stormwater runoff on the project site would not enter the existing storm water drainage system. Additionally, as discussed in Section 5.10.1.a above, the proposed project would adequately treat pollutants of concern in stormwater runoff before infiltrating into the soil in accordance with the Phase II MS4 Permit (**Standard Condition HYD-2**). Therefore, implementation of **Standard Conditions HYD-2** and **HYD-3** would ensure the proposed project would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be **less than significant**, and no mitigation is required.

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

Less than Significant Impact. As discussed above, the project site is not located within a 100-year flood zone; therefore, there is no risk of a release of pollutants from the project site due to inundation from a flood.

The project site is approximately 80 miles east of the Pacific Ocean and the Santa Ana Mountains and San Bernardino Mountains are between the project site and the Pacific Ocean. Based on the distance from the Pacific Ocean and the presence of an intervening mountain range, there is no risk of a release of pollutants from the project site due to inundation from a tsunami.

Seiches are oscillations in enclosed bodies of water that are caused by a number of factors, most often wind or seismic activity. The nearest major water feature is Spring Valley Lake located approximately 1.95 miles northwest of the project site. Given the distance of large standing bodies of water from the project site, there is no risk of a release of pollutants from the project site due to seiche-related flooding. Given that the project site is not located within a flood hazard zone and the distance from the Pacific Ocean and from closed bodies of water, implementation of the proposed project would not result in a flood hazard, tsunami, or seiche, risking release of pollutants due to project site inundation. Impacts would be **less than significant**, and no mitigation is required.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The project site is within the jurisdiction of the Lahontan RWQCB. The Lahontan RWQCB adopted a Water Quality Control Plan (i.e., Basin Plan) (March 1995, Updated September 2021) that designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. The proposed project would comply with the Construction General Permit and the existing Phase II MS4 Permit, which require the preparation of an SWPPP, preparation of a Final

WQMP and Final Hydrology Report, and implementation of construction and operational BMPs to reduce pollutants of concern in stormwater runoff. Therefore, the proposed project would not result in water quality impacts that would conflict with the Lahontan RWQCB Water Quality Control Plan (Basin Plan). Impacts related to a conflict with the Basin Plan would be **less than significant,** and no mitigation is required.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. SGMA requires the formation of local Groundwater Sustainability Agencies, which are required to adopt Groundwater Sustainability Plans (GSPs) to manage the sustainability of the groundwater basins. The project site is located within the Upper Mojave River Valley-Mojave River Groundwater Basin. The Upper Mojave River Valley-Mojave River Groundwater Basin is identified by the Department of Water Resources as a very low priority basin,[89] therefore, development of a GSP or an approved GSP alternative is not required.

As discussed previously, due to the depth to groundwater, it is not expected that any stormwater that may infiltrate during construction would affect groundwater quality because the groundwater table is deep, and pollutants would be pre-treated with a hydrodynamic separator before entering the underground infiltration system after the project site is developed. In addition, pollutants in storm water are generally removed by soil through absorption as water infiltrates. Therefore, in areas of deep groundwater, there is more absorption potential and, as a result, less potential for pollutants to reach groundwater. Therefore, due to the depth to groundwater, it is not expected that any storm water that may infiltrate during construction or operation would affect groundwater quality because there is not a direct path for pollutants to reach groundwater.

As discussed in Section 5.10.1.b above, the majority of the project site is undeveloped and implementation of the proposed project would increase impervious surface area on the project site. Although development of the proposed project would increase the impervious surface area on the project site and decrease on-site infiltration, the proposed project would collect and infiltrate 100 percent of stormwater from the project site. Therefore, the proposed project would not substantially impact groundwater supplies. Furthermore, the project site is located within a very low priority basin and therefore the SGMA provisions do not apply. Impacts related to a conflict with or obstruction of a water quality control plan or sustainable groundwater management plan would be **less than significant**, and no mitigation is required.

[89] Sustainable Groundwater Management Act (SGMA) Basin Prioritization Dashboard. *Basin Priority Details, Upper Mojave River Valley (6-042)*. Website: https://gis.water.ca.gov/app/bp-dashboard/final/ (accessed February 16, 2023).

5.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	☐	☐	☒	☐

5.11.1 Impact Analysis

a. Would the project physically divide an established community?

Less than Significant Impact. The physical division of an established community typically refers to the construction of a physical feature (such as an interstate or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying area. For instance, the construction of an interstate highway or railroad track through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The project site is bounded by Bear Valley Road and commercial uses (across Bear Valley Road) to the north and northwest, undeveloped properties to the west, south, and east, and Flying Feather Road to the east. The project site is separated by the residential uses to the northwest and southwest by existing roadways (e.g. Bear Valley Road and Apple Valley Road) and commercial development within the project vicinity. The project does not include the installation of infrastructure or roadways that would further divide existing residential communities to the northwest and southwest beyond existing conditions.

As discussed in Section 2.2, the majority of the project site is undeveloped and consists of one single-family residence with ancillary shed in the northwestern portion of the site. The proposed project would demolish the existing structures and develop the site with commercial uses, which would be similar to the existing commercial development to the north, northwest, and west. Therefore, impacts from the physical division of an established community would be **less than significant** and mitigation is not required.

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. As shown in Table 2.3.A, the project site is located within the General Commercial (C-G) General Plan Land Use and Zoning designations.

As discussed in Section 2.3, the Town's General Plan Community Development Element indicates the C-G land use category "allows a broad range of retail uses, as well as office and service land uses.

Typical uses will serve the needs of the Town's residents and businesses, in a shopping center setting. General retail stores, including all types of consumer goods, furniture and appliance sales, auto repair and sales are permitted in this designation. Restaurants, both sit-down and fast food, gasoline service stations and general office (secondary to retail uses) are also permitted in this designation."[90] Pursuant to Section 9.35.020 of the Town's Development Code, the C-G District "is intended for the development of a full range of retail stores, offices and personal and business services, including shopping centers along major roadways, consistent with the General Commercial (C-G) land use designation of the General Plan."[91] Table 9.35.030-A (Permitted Uses) of the Town Development Code identifies drive-thru/drive up commercial uses as uses that would require a Special Use Permit (SUP) in the C-G District to ensure that development of the proposed drive-thru/drive up commercial use would not result in adverse impacts (e.g. parking demand, traffic noise, light, and litter) on adjacent uses or the surrounding neighborhood.

Accordingly, the proposed project would be required to comply with the applicable provisions of the Town Development Code governing development of projects within Commercial Districts (Chapters 9.35 and 9.37), including development requirements for drive-through commercial uses within the C-G District (Chapter 9.36.140) of the Town Development Code. Additionally, the proposed project would be subject to the Town's review process, including design review, which identifies the applicable provisions of the Town Development Code the project would be required to comply with.

Since the proposed project would be developed in accordance with all applicable provisions of the Town Development Code, which is confirmed during the Town's review process; the project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and impacts would be **less than significant.** No mitigation is required.

90 Town of Apple Valley. *General Plan, Community Development.* Page II-5. Adopted August 11, 2009, last Amended October 27, 2015.

91 Town of Apple Valley. *Development Code 2010.* Chapter 9.35, Commercial and Office Districts. 2010.

5.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

5.12.1 Impact Analysis

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?

Less than Significant Impact. Mineral resources occur predominantly near the Mojave River as sand, gravel, and stone deposits. The project site is located within the Mineral Resource Zone 3a (MRZ-3a). According to California Department of Mines and Geology, MRZ-3a is an "area containing known mineral occurrences of undetermined mineral resource significance."[92] The project site comprises 8.25 acres of land located immediately south of Bear Valley Road and approximately 850 feet east of Apple Valley Road with commercial/retail businesses located immediately north and northwest of Bear Valley Road, and undeveloped vacant land located immediately adjacent to the west, south, and east.

As discussed in Section 2.3, the project site has a land use and zoning designation of General Commercial (C-G). Mineral resources mining is not a use compatible with existing or the proposed on-site and surrounding land uses, and the project site has minimal potential to be mined in the future because of its small size and location surrounded by urban development.

Additionally, the project site and vicinity are not considered a State-designated mineral resource extraction zone. Mineral resources extraction would conflict with the purpose and scope of the existing General Plan land use designation and Zoning District in this part of the Town. Therefore, impacts from the loss of available mineral resources would be **less than significant**. Mitigation is not required.

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?

Please refer to Section 5.12.1.a, above. This impact would be **less than significant**.

[92] Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002.* Page III-186 and Figure III-17. Certified August 11, 2009.

5.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project 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 groundborne vibration or groundborne 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 2 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?	☐	☐	☐	☒

5.13.1 Impact Analysis

a. Would the project result in 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?

Less than Significant Impact. Construction and operation of the proposed project would include use of heavy equipment during construction and introduce motor vehicle traffic and drive-through speaker noise during operation that would increase the ambient noise levels in the vicinity of the project site.

Noise Standards. The Town's General Plan Noise Element[93] lists policies and implementation measures to meet the Town's noise-related goals and has established land use/noise compatibility guidelines. Based on the Town's land use/noise compatibility guidelines, noise levels up to 70 a-weighted decibels (dBA) community noise equivalent level (CNEL) are normally acceptable and between 65 dBA CNEL and 75 dBA CNEL are conditionally acceptable for commercial land uses. The following are the applicable goals, policies, and implementation measures for the proposed project.

Goal: Noise levels that are consistent with the Town's rural character and high quality of life.

> **Policy 1.A:** The Town shall adhere to the standards of "Land Use Compatibility for Community Environments."
>
> > **Program 1.A.3:** The mechanical equipment associated with commercial and industrial development, including compactors, trash disposal areas, heating and air conditioning systems shall be located as far as practicable from adjacent sensitive receptors, or from lands designated on the Land Use map for noise sensitive uses.
> >
> > **Program 1.A.6:** Commercial and industrial projects proposed adjacent to sensitive receptors, or lands designated for sensitive receptors, including residential, school

[93] Town of Apple Valley. *General Plan, Environmental Hazards.* Adopted August 11, 2009.

or hospital sites, shall be required to submit a noise analysis in conjunction with entitlement applications.

Section 9.73.050 of the Town's Development Code has established daytime and nighttime exterior noise limits various land uses shown in Table 5.13.A.

Table 5.13.A: Exterior Noise Limits

Receiving Land Use Category	Time Period	Noise Level (dBA)				
		(L_{30})[1]	(L_{25})[2]	(L_8)[3]	(L_2)[4]	(L_{MAX})[5]
Single Family Residential	10:00 p.m. – 7:00 a.m.	40	45	50	55	60
	7:00 a.m. – 10:00 p.m.	50	55	60	65	70
Multiple Dwelling Residential, Public Space	10:00 p.m. – 7:00 a.m.	45	50	55	60	65
	7:00 a.m. – 10:00 p.m.	50	55	60	65	70
Limited Commercial & Office	10:00 p.m. – 7:00 a.m.	55	60	65	70	75
	7:00 a.m. – 10:00 p.m.	60	65	70	75	80
General Commercial	10:00 p.m. – 7:00 a.m.	60	65	70	75	80
	7:00 a.m. – 10:00 p.m.	65	70	75	80	85
Light Industrial Heavy Industrial	10:00 p.m. – 7:00 a.m.	70	75	80	85	90
	7:00 a.m. - 10:00 p.m.	75	80	85	90	95

Source: Town of Apple Valley. 2023. Development Code Section 9.73.050. January.
Note 1: If the measured ambient level differs from that permissible within any of the first four noise limit categories above, the allowable noise exposure standard shall be adjusted in 5 dBA increments in each category as appropriate to encompass or reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.
Note 2: If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus 5 dBA shall apply.
[1] The noise standard for a cumulative period of more than 30 minutes in any hour.
[2] The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
[3] The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
[4] The noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour.
[5] The noise standard plus twenty (20) dBA or the maximum measured ambient level, for any period of time.

Section 9.73.060(E) of the Town's Development Code prohibits loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance across a residential real property line or at any time to violate the provisions shown in Table 5.13.A.

Section 9.73.060(F) of the Town's Development Code prohibits the operation or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on weekends or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the Town. Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum noise levels at affected properties will not exceed those listed in

Table 5.13.B. In addition, all mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air intake silencers in proper working order.

Section 9.73.060(F) of the Town's Development Code exempts the emission of sound in the performance of emergency work.

Table 5.13.B: Maximum Construction Noise Levels

Allowable Work (Dates and Times)	At Residential Properties						At Business Properties	
	Single-Family		Multifamily		Semi-Residential/ Commercial		Mobile Equipment[1]	Stationary Equipment[2]
	Mobile Equipment[1]	Stationary Equipment[2]	Mobile Equipment[1]	Stationary Equipment[2]	Mobile Equipment[1]	Stationary Equipment[2]		
Daily,[3] 7:00 a.m.–7:00 p.m.	75 dBA	60 dBA	80 dBA	65 dBA	85 dBA	70 dBA	–	–
Daily,[4] 7:00 p.m.–7:00 a.m.	60 dBA	50 dBA	64 dBA	55 dBA	70 dBA	60 dBA	–	–
Daily, Anytime	–	–	–	–	–	–	85 dBA	75 dBA

Source: Town of Apple Valley Development Code (2022).
Note: Maximum noise levels were interpreted to be the equivalent continuous sound level (L_{eq}). The hours between 7:00 a.m. and 7:00 p.m. are referred to as daytime hours and the hours between 7:00 p.m. and 7:00 a.m. are referred to as nighttime hours.
[1] Represents maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment.
[2] Represents maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment.
[3] Daily except for Sundays and legal holidays.
[4] Daily and all day on Sundays and legal holidays.
dBA = A-weighted decibels

Finally, based on the Town's General Plan Noise Element, a noise increase of 3 dB would be barely perceptible to most people, and in many cases, an increase of 5 dB must occur for the listener to consider it readily perceptible. Therefore, an increase of 5 A-weighted decibels (dBA) or more in excess of standards established in the local general plan or noise ordinance is considered potentially significant.

Two short-term (20-minute) noise level measurements were conducted on September 28, 2022. Table 5.13.C shows the results of the short-term noise level measurement along with a description of the measurement locations and noise sources that occurred during the measurement. As shown in Table 5.13.C, the measured average noise level at ST-1 was 52.6 dBA L_{eq} and the instantaneous maximum noise level was 65.6 dBA L_{max}. Additionally, the measured average noise level at ST-2 was 48.0 dBA L_{eq} and the instantaneous maximum noise level was 58.2 dBA L_{max}. The short-term noise level measurement survey sheet is provided in Appendix G. Figure 8 shows the short-term monitoring location.

Table 5.13.C: Short-Term Ambient Noise Level Measurements

Monitor No.	Location	Start Time	Noise Level (dBA)			Noise Source(s)
			L_{eq}	L_{max}	L_{min}	
ST-1	Located at the northeast corner of the Apple Valley Post Acute Care Center on 11959 Apple Valley Road near a light pole.	1:13 PM	52.6	65.6	41.2	Faint traffic noise from Bear Valley Road.
ST-1	Located at the northwest corner of a residential home on 12006 Locust Lane near the western property line.	1:50 PM	48.0	58.2	44.2	Traffic on Apple Valley Road. Rooftop HVAC noise from the operational long term health care facility.

Source: Compiled by LSA, Appendix G (2023).

dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum measured sound level
L_{min} = minimum measured sound level

Four long-term (24-hour) noise level measurements were conducted from September 28, 2022, to September 29, 2022. Table 5.13.D summarizes the results of the long-term noise level measurements along with a description of the measurement locations and noise sources that occurred during the measurements. As shown in Table 5.13.D, the daytime noise levels ranged from 46.7 to 76.8 dBA L_{eq}, and nighttime noise levels ranged from 46.3 to 76.2 dBA L_{eq}. Also, the daytime maximum instantaneous noise level ranged from 59.1 to 91.2 dBA and the nighttime instantaneous noise level ranged from 58.7 to 91.8 dBA. Also, the calculated CNEL levels at LT-1, LT-2, LT-3 and LT-4 were 74.9, 80.0, 57.6 and 62.9 dBA, respectively. Long-term noise level measurement survey sheets along with the detailed hourly L_{eq}, L_{max}, and minimum measured sound level (L_{min}) results are provided in Appendix G. Figure 8 shows the long-term monitoring locations.

Table 5.13.D: Long-Term Ambient Noise Monitoring Results

Monitor No.	Location	Noise Level (dBA)					Noise Sources
		Daytime		Nighttime		CNEL	
		L_{eq}	L_{max}	L_{eq}	L_{max}		
LT-1	North of the project site across Bear Valley Road near the drive through exit of 19380 Bear Valley Road on a light pole.	68.2-71.8	80.4-88.0	47.3-54.8	78.2-84.5	74.9	Traffic on Bear Valley Road. Parking lot noise from the nearby El Pollo Loco.
LT-2	Located east of the project site on a power line pole in front of the residence at 19675 Bear Valley Road. Just south of Apple Bear Valley Road.	74.3-76.8	85.2-91.2	68.0-76.2	85.7-91.8	80.0	Traffic on Bear Valley Road.
LT-3	Located west of a pet grooming business on the nearest powerline pole.	46.7-57.7	59.1-73.0	46.3-56.0	58.7-67.4	57.6	Faint barking noise from the nearby pet grooming business southeast of the project site.
LT-4	Located at 19341 Bear Valley Road Suite 101, Apple Valley, CA 92308 On a tree west of the project site near the retaining wall.	54.8-59.4	68.0-74.0	52.1-59.9	65.6-72.8	62.9	Parking lot noise such as passing by and cars idling with the air conditioner on. Traffic on Apple Valley Road and Bear Valley Road.

Source: Compiled by LSA, Appendix G (2023).
Note: Long-term (24-hour) noise level measurements were conducted from September 28, 2022, to September 29, 2022.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level

Construction Noise: Noise increases from the proposed project would be generated on a short-term basis during temporary construction activities. Noise impacts associated with construction activity are a function of the noise generated by the type of equipment used, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Two types of short-term noise impacts would occur during project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site and would incrementally raise noise levels on roadways leading to the project site. The pieces of construction equipment for construction activities would move on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the project vicinity. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 84 dBA), the effect on longer-term ambient noise levels would be small because the number of daily construction-related vehicle trips is small compared to existing daily traffic volume on the Bear Valley Road, Apple Valley Road, Deep Creek Road, and Kiowa Road. Project construction would generate a maximum of 68 trips per day based on the California Emissions Estimator Model (CalEEMod) (Version 2022.1) results contained in Attachment A. Bear Valley Road, Apple Valley Road, Deep Creek Road, and Kiowa Road would be used to access the project site. Table 5.13.I shows that the existing average daily traffic (ADT) volumes on Bear Valley Road, Apple Valley Road, Kiowa Road, and Deep Creek Road near the project site are 25,390, 17,000, 8,300, and 4,180, respectively. Based on the information above, construction-related traffic would increase noise by up to 0.3 dBA. A noise level increase of less than 5 dBA would not be considered readily perceptible. Therefore, short-term construction-related impacts associated with worker commutes and transport

of construction equipment and material to the project site would be **less than significant**. Mitigation is not required.

The second type of short-term noise impact is related to noise generated from construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. The proposed project anticipates site preparation, grading, building construction, paving, and architectural coating phases of construction. These various sequential phases change the character of the noise generated on a project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 5.13.E lists the maximum instantaneous noise level (L_{max}) recommended for noise impact assessments for typical construction equipment included in the FHWA Highway Construction Noise Handbook,[94] based on a distance of 50 feet between the equipment and a noise receptor.

Table 5.13.F lists the anticipated construction equipment for each construction phase based on the CalEEMod (Version 2022.1) results contained in Appendix G. Table 5.13.F shows the combined noise level at 50 feet from all mobile and stationary equipment in each phase as well as the L_{eq} noise level for each equipment at 50 feet based on the quantity, reference L_{max} noise level at 50 feet, and the acoustical usage factor. As shown in Table 5.13.F, construction noise levels would reach up to 88.0 L_{eq} at a distance of 50 feet from mobile construction equipment and 83.0 dBA L_{eq} at a distance of 50 feet from stationary construction equipment.

Table 5.13.G shows the noise levels generated from mobile construction activities from the center of the project site during the noisiest construction phase at the closest off-site property lines surrounding the project site. As shown in Table 5.13.G, the closest residential and commercial property lines to the east and north would be exposed to mobile construction noise levels of 62.4 dBA L_{eq} and 69.8 dBA L_{eq}, respectively. These noise levels would not exceed the Town's mobile construction noise standard of 75 and 85 dBA L_{eq} for single-family residences and business properties, respectively.

94 Federal Highway Administration. *Highway Construction Noise Handbook. Roadway Construction Noise Model, FHWA-HEP-06-015. DOT-VNTSC-FHWA-06-02.* NTIS No. PB2006-109012. August 2006.

Table 5.13.E: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor[1] (%)	Maximum Noise Level (L_{max}) at 50 ft[2]
Backhoe	40	80
Compactor (ground)	20	80
Compressor	40	80
Crane	16	85
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flatbed Truck	40	84
Forklift	20	85
Front-End Loader	40	80
Grader	40	85
Impact Pile Driver	20	95
Jackhammer	20	85
Pavement Scarifier	20	85
Paver	50	85
Pickup Truck	40	55
Pneumatic Tools	50	85
Pump	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Welder	40	73

Source: FHWA. 2006. *Highway Construction Noise Handbook. Roadway Construction Noise Model, FHWA-HEP-06-015*. DOT-VNTSC-FHWA-06-02. NTIS No. PB2006-109012. August.

Note: The noise levels reported in this table are rounded to the nearest whole number.

[1] Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.

[2] Maximum noise levels were developed based on Specification 721.560 from the CA/T program to be consistent with the City of Boston, Massachusetts, Noise Code for the "Big Dig" project.

CA/T = Central Artery/Tunnel
FHWA = Federal Highway Administration
ft – foot/feet
L_{max} = maximum instantaneous noise level

Table 5.13.F: Summary of Construction Phase, Equipment, and Noise Levels

Construction Phase	Construction Equipment	Equipment Type	Quantity	Reference Noise Level at 50 ft (dBA L_{max})	Acoustical Usage Factor[1] (%)	Noise Level at 50 ft (dBA)			
						L_{max}	L_{eq}	Combined Noise Level (L_{eq})	
								Mobile	Stationary
Demolition	Concrete Saw	Stationary	1	90	20	90.0	83.0	88.0	83.0
	Dozer	Mobile	2	85	40	88.0	84.0		
	Excavator	Mobile	3	85	40	89.8	85.8		
Site Preparation	Front End Loader	Mobile	4	80	40	86.0	82.0	87.3	--
	Dozer	Mobile	3	85	40	89.8	85.8		
Grading	Grader	Mobile	1	85	40	85.0	81.0	87.0	--
	Dozer	Mobile	1	85	40	85.0	81.0		
	Front End Loader	Mobile	3	80	40	84.8	80.8		
	Excavator	Mobile	1	85	40	85.0	81.0		
Building Construction	Crane	Stationary	1	85	16	85.0	77.0	84.9	81.4
	Forklift	Mobile	3	85	20	89.8	82.8		
	Front End Loader	Mobile	3	80	40	84.8	80.8		
	Generator	Stationary	1	82	50	82.0	79.0		
	Welder / Torch	Stationary	1	73	40	73.0	69.0		
Paving	Paver	Mobile	2	85	50	88.0	85.0	87.6	--
	Roller	Mobile	2	85	20	88.0	81.0		
	Pavement Scarafier	Mobile	2	85	20	88.0	81.0		
Architectural Coating	Air Compressors	Stationary	1	80	40	80.0	76.0	--	76.0

Source: Compiled by LSA, Appendix G (2023).

[1] The acoustical usage factor is the percentage of time during a construction noise operation that a piece of construction equipment operates at full power.

dBA = A-weighted decibels

ft = foot/feet

L_{eq} = equivalent continuous sound level

L_{max} = maximum instantaneous noise level

Table 5.13.G: Mobile Construction Noise Levels

Land Use	Direction	Reference Noise Level at 50 ft (dBA)	Distance[1] (ft)	Distance Attenuation (dBA)	Noise Level without Mitigation (dBA L_{eq})	Construction Noise Standard (dBA)	Exceeds Noise Standard?
Commercial	North	88.0	405	18.2	69.8	85	No
Residential	East	88.0	905	25.6	62.4	75	No
Commercial	Southeast	88.0	1,040	26.4	61.6	85	No
Commercial	South	88.0	990	25.9	62.1	85	No
Congregate Care	Southwest	88.0	1,100	26.8	61.2	75	No
Medical Office	West	88.0	900	25.1	62.9	85	No

Source: Compiled by LSA, Appendix G (2023).
[1] Distance from the center of the project site to the property line of the affected land use.
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level

Table 5.13.H: Stationary Construction Noise Levels

Land Use	Direction	Reference Noise Level at 50 ft (dBA)	Distance[1] (ft)	Distance Attenuation (dBA)	Noise Level without Mitigation (dBA L_{eq})	Construction Noise Standard (dBA)	Exceeds Noise Standard?
Commercial	North	83.0	405	18.2	64.8	75	No
Residential	East	83.0	905	25.6	57.4	60	No
Commercial	Southeast	83.0	1,040	26.4	56.6	75	No
Commercial	South	83.0	990	25.9	57.1	75	No
Congregate Care	Southwest	83.0	1,100	26.8	56.2	60	No
Medical Office	West	83.0	900	25.1	57.9	75	No

Source: Compiled by LSA, Appendix G (2023).
[1] Distance from the center of the project site to the property line of the affected land use.
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level

In addition, Table 5.13.H shows the noise levels generated from stationary construction activities from the center of the project site during the noisiest construction phase at the closest off-site property lines surrounding the project site. As shown in Table 5.13.H, the closest residential and commercial property lines to the east and north would be exposed to stationary construction noise level of 57.4 dBA L_{eq} and 64.8 dBA L_{eq}, respectively. These noise levels would not exceed the Town's stationary construction noise standard of 60 dBA L_{eq} and 75 dBA L_{eq} for single-family residences and business properties, respectively. Compliance with the Town's permitted hours of construction, equipping all mobile and stationary internal combustion engine powered equipment or machinery with suitable exhaust and air intake silencers in proper working order, and maintaining construction noise levels pursuant to Section 9.73.060(F) of the Town's Development Code would be required where technically and economically feasible. Accordingly, the Project Applicant and Contractor shall implement the following regulatory conditions to ensure compliance with Section 9.73.060(F) of the Town's Development Code. Therefore, noise generated from project construction activities would **be less than significant**. No mitigation is required.

Standard Conditions: No mitigation is required; however, compliance with the provisions of Section 9.73.060(F) of the Town's Development Code are regulatory requirements that apply to all development projects. These requirements are detailed below as **Standard Conditions NOI-1** and **NOI-2** to be included in the conditions of approval for this Project.

Standard Condition NOI-1	**Construction Hours.** The construction contractor shall limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays (Monday through Friday) pursuant to Section 9.73.060(F) of the Town's Development Code. Construction activities are prohibited outside of these hours, and on weekends and holidays.
Standard Condition NOI-2	**Mufflers.** The construction contractor shall ensure that all mobile or stationary construction-related internal combustion engine powered equipment or machinery be equipped with suitable exhaust and air intake silencers in proper working order consistent with manufacturers' specifications.

***Operational Noise*.** Long-term operations of the project would generate mobile and stationary noise that would potentially impact off-site noise-sensitive land uses. Mobile noise would be generated on roadways within the project area and stationary noise would be generated on the project site from the car wash with vacuum stations, delivery trucks/truck unloading activities, speakerphone(s), trash compactor, parking lot activities, and heating ventilation air conditioning (HVAC) equipment. These mobile and stationary operational noise sources are analyzed separately in relation to the ambient noise environment because the Town's applicable noise standards are different for mobile versus stationary noise sources. Mobile noise sources such as vehicular traffic are described using the Community Noise Equivalent Level (CNEL) level and stationary noise sources such as truck loading/unloading activities and HVAC are described using the L_{eq} level. Additionally, anticipating the timing of noise events (continuous versus intermittent) would be speculative, as they differ for the

various stationary noise sources. However, reasonable assumptions are made as specified for each noise source described below in order to combine the stationary noise levels anticipated to be generated by the proposed project and compare them to the ambient noise environment in terms of L_{eq}.

Mobile Noise. The FHWA Highway Traffic Noise Prediction Model[95] was used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The existing (2022), opening year (2024), and cumulative year (2045) with and without project ADT volumes were obtained from the Traffic Impact Study prepared for the proposed project (Appendix H).[96] The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. Tables 5.13.I, 5.13.J, and 5.13.K shows the existing, opening year (2024), and cumulative year (2045) traffic noise levels without and with the project within the project vicinity, respectively. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. Appendix G provides the specific assumptions used in developing these noise levels and model printouts.

Tables 5.13.I, 5.13.J and 5.13.K show that the project-related traffic would increase noise by up to 0.4 dBA. Noise level increases less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, traffic noise impacts from project-related traffic on off-site sensitive receptors would be **less than significant**. Mitigation is not required.

95 Federal Highway Administration (FHWA). *Highway Traffic Noise Prediction Model, FHWA RD-77-108*. 1977.

96 LSA Associates, Inc. *Traffic Impact Study, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino County, California.* February 2023. Appendix H.

Table 5.13.I: Existing Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Without Project Conditions (dBA)
Bear Valley Road West of Jacaranda Avenue	35,370	70	144	306	69.6	35,810	71	145	309	69.6	0.0
Bear Valley Road Between Jacaranda Avenue and Mojave Fish Hatchery Road	40,880	126	267	573	73.7	41,535	127	270	579	73.8	0.1
Bear Valley Road Between Mojave Fish Hatchery Road and Jess Ranch Parkway	40,485	125	265	570	73.7	41,350	127	269	578	73.7	0.0
Bear Valley Road Between Jess Ranch Parkway and Reata Road	35,380	115	243	521	73.1	36,460	117	248	531	73.2	0.1
Bear Valley Road Between Reata Road and Apple Valley Road	29,800	103	217	464	72.3	31,100	106	223	478	72.5	0.2
Bear Valley Road Between Apple Valley Road and Flying Feather Road	26,625	96	201	431	71.8	28,280	99	209	449	72.1	0.3
Bear Valley Road Between Flying Feather Road and Deep Creek Road	26,960	97	203	435	71.9	28,685	100	211	453	72.2	0.3
Bear Valley Road Between Deep Creek Road and Kiowa Road	25,390	93	195	418	71.6	26,480	95	200	429	71.8	0.2
Pimlico Road West of Apple Valley Road	7,260	< 50	< 50	107	64.0	7,480	< 50	51	109	64.1	0.1
Reata Road North of Bear Valley Road	8,020	< 50	64	138	65.9	8,240	< 50	66	141	66.0	0.1
Apple Valley Road North of Pimlico Road	21,890	85	177	378	71.0	22,330	86	179	383	71.1	0.1
Apple Valley Road Between Pimlico Road and Bear Valley Road	17,000	< 50	110	229	67.4	17,655	58	112	235	67.5	0.1
Apple Valley Road South of Bear Valley Road	10,670	< 50	83	169	65.3	11,320	< 50	86	176	65.6	0.3

Table 5.13.I: Existing Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Without Project Conditions (dBA)
Deep Creek Road South of Bear Valley Road	4,180	< 50	59	126	65.3	4,620	< 50	63	134	65.7	0.4
Kiowa Road North of Bear Valley Road	8,300	< 50	66	142	65.7	8,520	< 50	68	144	65.8	0.1
Kiowa Road South of Bear Valley Road	10,900	< 50	79	170	66.9	11,120	< 50	80	172	66.9	0.0

Source: Compiled by LSA, Appendix G (2023).
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Table 5.13.J: Opening Year (2024) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Without Project Conditions (dBA)
Bear Valley Road West of Jacaranda Avenue	40,190	76	156	333	70.2	40,630	76	157	336	70.2	0.0
Bear Valley Road Between Jacaranda Avenue and Mojave Fish Hatchery Road	46,105	136	289	621	74.2	46,760	137	292	627	74.3	0.1
Bear Valley Road Between Mojave Fish Hatchery Road and Jess Ranch Parkway	45,655	135	287	617	74.2	46,520	137	291	625	74.3	0.1
Bear Valley Road Between Jess Ranch Parkway and Reata Road	40,280	125	264	568	73.6	41,360	127	269	578	73.7	0.1
Bear Valley Road Between Reata Road and Apple Valley Road	34,370	113	238	511	72.9	35,670	115	244	523	73.1	0.2
Bear Valley Road Between Apple Valley Road and Flying Feather Road	31,415	106	224	481	72.6	33,070	110	232	498	72.8	0.2
Bear Valley Road Between Flying Feather Road and Deep Creek Road	31,335	106	224	480	72.5	33,060	110	232	498	72.8	0.3
Bear Valley Road Between Deep Creek Road and Kiowa Road	29,045	101	213	457	72.2	30,135	104	218	468	72.4	0.2
Pimlico Road West of Apple Valley Road	7,560	< 50	51	110	64.2	7,780	< 50	52	112	64.3	0.1
Reata Road North of Bear Valley Road	8,340	< 50	66	142	66.1	8,560	< 50	67	144	66.2	0.1
Apple Valley Road North of Pimlico Road	24,430	91	190	407	71.5	24,870	92	192	412	71.5	0.0
Apple Valley Road Between Pimlico Road and Bear Valley Road	19,355	61	119	250	67.9	20,010	62	121	255	68.1	0.2
Apple Valley Road South of Bear Valley Road	11,540	< 50	87	178	65.7	12,190	< 50	89	185	65.9	0.2

Table 5.13.J: Opening Year (2024) Traffic Noise Levels Without and With Project

	Without Project Traffic Conditions					With Project Traffic Conditions					
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Without Project Conditions (dBA)
Deep Creek Road South of Bear Valley Road	5,280	< 50	68	147	66.3	5,720	< 50	72	155	66.7	0.4
Kiowa Road North of Bear Valley Road	9,610	< 50	73	156	66.3	9,830	< 50	74	159	66.4	0.1
Kiowa Road South of Bear Valley Road	12,050	< 50	85	181	67.3	12,270	< 50	86	184	67.4	0.1

Source: Compiled by LSA, Appendix G (2023).
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Table 5.13.K: Cumulative Year (2045) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Without Project Conditions (dBA)
Bear Valley Road West of Jacaranda Avenue	42,210	78	161	344	70.4	42,650	78	162	347	70.4	0.0
Bear Valley Road Between Jacaranda Avenue and Mojave Fish Hatchery Road	48,410	140	299	641	74.4	49,065	141	301	647	74.5	0.1
Bear Valley Road Between Mojave Fish Hatchery Road and Jess Ranch Parkway	47,920	139	297	637	74.4	48,785	141	300	645	74.5	0.1
Bear Valley Road Between Jess Ranch Parkway and Reata Road	42,300	129	273	586	73.8	43,380	131	278	596	74.0	0.2
Bear Valley Road Between Reata Road and Apple Valley Road	35,965	116	245	526	73.1	37,265	119	251	539	73.3	0.2
Bear Valley Road Between Apple Valley Road and Flying Feather Road	32,525	109	230	492	72.7	34,180	112	237	509	72.9	0.2
Bear Valley Road Between Flying Feather Road and Deep Creek Road	32,955	110	232	497	72.8	34,680	113	239	514	73.0	0.2
Bear Valley Road Between Deep Creek Road and Kiowa Road	31,285	106	224	480	72.5	32,375	108	229	491	72.7	0.2
Pimlico Road West of Apple Valley Road	7,880	< 50	53	113	64.4	8,100	< 50	54	115	64.5	0.1
Reata Road North of Bear Valley Road	8,750	< 50	68	147	66.3	8,970	< 50	69	149	66.4	0.1
Apple Valley Road North of Pimlico Road	25,690	94	197	421	71.7	26,130	95	199	426	71.8	0.1
Apple Valley Road Between Pimlico Road and Bear Valley Road	20,405	63	123	259	68.2	21,060	64	125	264	68.3	0.1
Apple Valley Road South of Bear Valley Road	12,350	< 50	90	186	66.0	13,000	< 50	93	192	66.2	0.2

Table 5.13.K: Cumulative Year (2045) Traffic Noise Levels Without and With Project

	Without Project Traffic Conditions					With Project Traffic Conditions					
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Without Project Conditions (dBA)
Deep Creek Road South of Bear Valley Road	6,900	< 50	82	175	67.5	7,340	< 50	85	183	67.7	0.2
Kiowa Road North of Bear Valley Road	10,100	< 50	75	161	66.5	10,320	< 50	77	164	66.6	0.1
Kiowa Road South of Bear Valley Road	12,910	< 50	89	190	67.6	13,130	< 50	90	192	67.7	0.1

Source: Compiled by LSA, Appendix G (2023).
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Stationary Noise. Car wash with vacuum stations, delivery trucks/truck unloading activities, speakerphone(s), trash compactor, parking lot activities, and (HVAC) equipment associated with the project would potentially affect the existing off-site land uses. The following provides a detailed noise analysis and discussion of each stationary noise source. The proposed commercial uses are shown in Figure 4.

Car Wash: The proposed project would include a drive-through car wash tunnel (Pad 1) in the southwest portion of the project site. The car wash would operate daily from 7:00 a.m. to 9:00 p.m. Measured reference noise levels conducted by LSA[97] at the car wash tunnel exit and entrance were 78.7 dBA L_{eq} and 75.8 dBA L_{eq}, respectively, at a distance of 25 feet.

Vacuum Stations: The project would include a central vacuum system and a total of 13 vacuum stations located east of the car wash tunnel that would operate daily from 7:00 a.m. to 9:00 p.m. Measured reference noise levels conducted by LSA[98] at the central vacuum system was 74.9 dBA L_{eq} at 10 feet and each vacuum station was 74.3 dBA L_{eq} at a distance of 2 feet.

Truck Delivery and Truck Unloading Activities: Truck delivery and truck unloading activities for the proposed project would occur at the Sprouts grocery store loading dock (Major) and near Raising Canes (Pad 2), Salad and Go (Pad 3), and the multiple tenant building (Shops) on the project site. These activities would take place during the hours of operations for each commercial building. The hours of operation for the Sprouts grocery store (Major) is 7:00 a.m. to 10:00 pm., Raising Canes (Pad 2) is 10:30 a.m. to 10:00 p.m., the multiple tenant building (Shops) is 11:00 a.m. to 9:00 p.m., and Salad And Go (Pad 3) is 6:30 a.m. to 9:00 p.m. It should be noted that the hours of operation for all the uses mentioned above are during daytime hours (7:00 a.m. to 10:00 p.m.) except for the Salad And Go (Pad 3), which includes both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours since this business would open at 6:30 a.m.. Noise levels generated from these activities include truck movement, docking at loading dock doors, backup alarms, air brakes, idling, and loading and unloading activities. These activities would be similar to noise readings from truck loading and unloading activities, which generate a noise level of 75 dBA L_{eq} at 20 feet based on measurements conducted by LSA.[99]

Speakerphones: The project would include three fast-food restaurants, one with two drive-through lane speakerphones and two with one speakerphone, all of which are part of their menu boards. The speakerphone would operate during the hours of operation for each commercial building. The hours of operation for Raising Canes (Pad 2) is 10:30 a.m. to 10:00 p.m., the multiple tenant building (Shops) is 11:00 a.m. to 9:00 p.m., and Salad And Go (Pad 3) is 6:30 a.m. to 9:00 p.m. It should be noted that the hours of operation for all the uses mentioned above are during daytime hours (7:00 a.m. to 10:00 p.m.) except for the Salad And Go (Pad 3), which includes both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours since this business would open at 6:30

97 LSA Associates, Inc. *Noise Impact Analysis for Mister Car Wash*. March 2023.
98 *Ibid.*
99 LSA Associates, Inc. *Operational Noise Impact Analysis for Richmond Wholesale Meat Distribution Center*. May 2016.

a.m.. Noise generated from each speakerphone is approximately 84 dBA at 1 feet. The speakerphone reference noise level is provided in Appendix G.

Trash Compactor: The project would include a trash compactor at the loading dock of the Sprouts grocery store (Major) building on the project site. The trash compactor would operate during the hours of operation for the Sprouts grocery store, which would be daily from 7:00 a.m. to 10:00 p.m. (daytime hours only). Noise generated from the trash compactor would be 70.4 dBA L_{eq} at a distance of 10 feet[100].

Parking Lot Activity: The proposed project would include surface parking for automobiles on the project site. Noise generated from parking lot activities would include noise generated by vehicles traveling at slow speeds, engine start-up noise, car door slams, car horns, car alarms, and tire squeals. Parking activities would occur during the hours of operation for each commercial building. The SoundPLAN model has a sound power level of 98.05 from car door slams and this noise level would be equivalent to 66.4 dBA L_{eq} at a distance of 50 feet. Noise levels generated from car door slams would be representative of parking activities.

HVAC Equipment: The proposed project would include rooftop HVAC units. The Sprouts grocery store (Major) would have a total of 4 rooftop HVAC units with each of the two units generating a noise level of 54.4 dBA L_{eq} at a distance of 50 feet and each of the other two units generating a noise level of 56.4 dBA L_{eq} at a distance of 50 feet. The multiple tenant building (Shops) would have 4 rooftop HVAC units with each of the four units generating a noise level of 54.4 dBA L_{eq} at a distance of 50 feet. The Raising Canes (Pad 2) and Salad And Go (Pad 3) building would each have 2 rooftop HVAC units with each of the two units generating a noise level of 54.4 dBA L_{eq} at a distance of 50 feet. The HVAC equipment could operate 24 hours per day. The specifications of the HVAC equipment, including the reference noise level, are provided in Appendix G.

Stationary Noise Impacts Summary: Table 5.13.L shows the combined calculated daytime and nighttime average (L_{eq}) and maximum (L_{max}) noise levels at the closest property lines surrounding the project site using SoundPLAN from the individual stationary noise sources discussed above, which include the car wash with vacuum stations, delivery trucks/truck unloading activities, speakerphone, trash compactor, parking lot activities, and HVAC equipment. The SoundPLAN printouts are provided in Appendix G.

As shown in Table L, noise levels would not exceed the Town's daytime and nighttime noise standards for the corresponding land uses that surround the project site. Therefore, noise impacts from project operations at off-site land uses that surround the project would be **less than significant**. Mitigation is not required.

[100] Michael Brandman Associates. *Final Environmental Impact Report – Foxglove Shopping Center Project. SCH No. 2011051031. City of Madera*. February 1, 2013.

Table 5.13.L: Stationary-Source Noise Levels

Receptor No.	Land Use	Direction	Daytime Noise Level (dBA)		Daytime Noise Standard (dBA)		Exceed?	Nighttime Noise Level (dBA)		Nighttime Noise Standard (dBA)		Exceed?
			L_{eq}	L_{max}	L_{eq}	L_{max}		L_{eq}	L_{max}	L_{eq}	L_{max}	
R-1	Commercial	North	51.8	57.5	65	85	No	42.7	49.4	60	80	No
R-2	Residence	East	40.3	48.7	50	70	No	34.6	40.5	40	60	No
R-3	Residence	East	40.8	49.4	50	70	No	34.8	41.3	40	60	No
R-4	Commercial	Southeast	41.0	48.0	65	85	No	33.0	39.8	60	80	No
R-5	Commercial	South	42.2	47.8	65	85	No	31.4	34.9	60	80	No
R-6	Congregate Care	Southwest	35.7	41.2	50	70	No	27.8	34.3	45	60	No
R-7	Medical Office	West	41.9	46.2	60	80	No	31.9	35.3	55	75	No

Source: Compiled by LSA, Appendix G (2023).

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. Construction and operation of the proposed project would include use of heavy equipment during construction and introduce motor vehicle traffic during operation that would generate vibration that could emanate from the project site.

Vibration Standards. Section 9.73.060(G) of the Town's Development Code prohibits the operation or permitting the operation of any device that creates a vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet from the source if on a public space or public right-of-way. The vibration perception threshold in the Town's Development Code is a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz. This vibration criterion was used to evaluate community annoyance from construction vibration and vibration impacts from project operations. In addition, the vibration criteria in the *FTA Transit Noise and Vibration Impact Assessment Manual*[101] were used in this analysis because the Town of Apple Valley does not have construction vibration damage criteria. Based on the *FTA Transit Noise and Vibration Impact Assessment Manual*[102], buildings constructed of non-engineered timber and masonry have a potential vibration damage threshold of 0.2 peak particle velocity [PPV] inches per second [in/sec]).

Groundborne noise is typically assessed at locations where there is no airborne noise path, or for buildings with substantial sound insulation such as a recording studio. For typical buildings, the interior airborne noise levels are often higher than the groundborne noise levels. Therefore, the main focus of the discussion/analysis is groundborne vibration.

Construction Vibration. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and assesses the potential for building damage using

[101] Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123*. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

[102] *Ibid.*

vibration levels in PPV (in/sec). Vibration levels calculated in RMS velocity are best for characterizing human response to building vibration, whereas vibration levels in PPV are best for characterizing damage potential.

Table 5.13.M shows the reference vibration levels at a distance of 25 feet for each type of standard construction equipment from the *Transit Noise and Vibration Impact Assessment Manual.*[103] Project construction is expected to require the use of large bulldozers and loaded trucks, which would generate ground-borne vibration levels of up to 87 VdB (0.089 PPV [in/sec]) and 86 VdB (0.076 PPV [in/sec]), respectively, when measured at 25 feet.

The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary), because vibration impacts normally occur within the buildings.

Table 5.13.M: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks[2]	**0.076**	**86**
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123.* September 2018.

[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.

[2] The equipment shown in **bold** is expected to be used on site.

µin/sec = microinches per second
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
L_V = vibration velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

The formula for vibration transmission is provided below:

$$L_vdB\ (D) = L_vdB\ (25\ ft) - 30\ Log\ (D/25)$$
$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

Table 5.13.N lists the projected vibration levels from various construction equipment expected to be used on the project site at the project construction boundary to the nearest buildings in the project vicinity. As shown in Table 5.13.N, the closest residential and commercial property line to the north is approximately 950 feet and 370 feet from the center of the project site and would experience vibration levels of up to 0.0003 PPV (in/sec) and 0.0011 PPV (in/sec), respectively. Vibration levels at

[103] *Ibid.*

the closest residential and commercial buildings would not result in community annoyance because they would not exceed the Town's vibration perception threshold of 0.01 PPV (in/sec). Other building structures that surround the project site would experience lower vibration levels because they are farther away.

Table 5.13.O lists the projected vibration levels from various construction equipment expected to be used on the project site at the project construction boundary to the nearest buildings in the project vicinity. As shown in Table 5.13.O, the closest residential and commercial building to the north is approximately 640 feet and 140 feet from the project construction boundary and would experience vibration levels of up to 0.0007 PPV (in/sec) and 0.0067 PPV (in/sec), respectively. Vibration levels at the closest residential and commercial buildings would not result in building damage because residential and commercial buildings would be constructed equivalent to non-engineered timber and masonry, and vibration levels would not exceed the FTA vibration damage threshold of 0.20 PPV (in/sec). Other building structures that surround the project site would experience lower vibration levels because they are farther away. Therefore, construction vibration impacts would be **less than significant**. Mitigation is not required.

Table 5.13.N: Potential Construction Vibration Annoyance

Land Use	Direction	Equipment/ Activity	Reference Vibration Level at 25 ft	Distance to Structure (ft)[1]	Vibration Level
			PPV (in/sec)		RMS (in/sec)[2]
Commercial	North	Large bulldozers	0.089	370	0.0011
		Loaded trucks	0.076	370	0.0009
Residences	East	Large bulldozers	0.089	950	0.0003
		Loaded trucks	0.076	950	0.0002
Commercial	Southeast	Large bulldozers	0.089	1,040	0.0002
		Loaded trucks	0.076	1,040	0.0002
Congregate Care	Southwest	Large bulldozers	0.089	1,100	0.0002
		Loaded trucks	0.076	1,100	0.0002
Medical Office	West	Large bulldozers	0.089	900	0.0003
		Loaded trucks	0.076	900	0.0002

Source: Compiled by LSA, Appendix G (2023).
Note: The Town's vibration perception threshold is 0.01 in/sec (RMS) at the property line of the project site.
[1] Distance from the center of the project site to the property line of the adjacent land use.
[2] The RMS value is approximately 0.71 of the peak value based on California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April.
ft = foot/feet
in/sec = inches per second
RMS = root mean square

Table 5.13.O: Potential Construction Vibration Damage

Land Use	Direction	Equipment/ Activity	Reference Vibration Level at 25 ft	Distance to Structure (ft)[1]	Vibration Level
			PPV (in/sec)		PPV (in/sec)
Commercial	North	Large Bulldozers	0.089	140	0.0067
		Loaded Trucks	0.076	140	0.0057
Residences	East	Large Bulldozers	0.089	640	0.0007
		Loaded Trucks	0.076	640	0.0006
Commercial	Southeast	Large Bulldozers	0.089	760	0.0005
		Loaded Trucks	0.076	760	0.0005
Congregate Care	Southwest	Large Bulldozers	0.089	730	0.0006
		Loaded Trucks	0.076	730	0.0005
Medical Office	West	Large Bulldozers	0.089	575	0.0008
		Loaded Trucks	0.076	575	0.0007

Source: Compiled by LSA, Appendix G (2023).
Note: The FTA-recommended building damage threshold is 0.20 PPV [in/sec]) at the receiving non-engineered timber and masonry building.
[1] Distance from the project construction boundary to the building structure.
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity
VdB = vibration velocity decibels

Operational Vibration. Operations of the proposed project would not generate substantial vibration. In addition, vibration generated from project-related traffic on the adjacent roadways (Bear Valley Road and paved drive aisles adjacent to the east and west of the site) is not expected to be substantial for on-road vehicles because rubber tires and suspension systems of on-road vehicles provide vibration isolation. Therefore, vibration generated from project-related operations and traffic on the adjacent roadways would be **less than significant.** Mitigation is not required.

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

No Impact. Apple Valley Airport and Hesperia Airport is 7.4 mile northeast and 7.3 southwest, respectively, of the project site. The Town of Apple Valley Airport Comprehensive Land Use Compatibility Plan[104] and the Hesperia Airport Comprehensive Land Use Plan[105] shows that the project site is outside the 60 dBA CNEL noise contour for both airports. Additionally, there are no private airstrips or heliports within 2 miles of the project site. Therefore, the Project would not expose people working in the project area to excessive airport-related noise levels. **No impact** would occur, and no mitigation is required.

[104] County of San Bernardino. *Town of Apple Valley Comprehensive Airport Land Use Compatibility Plan*. March 1995.
[105] San Bernardino County Airport Land Use Commission. *Hesperia Airport Comprehensive Land Use Plan*. January 1991.

5.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

5.14.1 Impact Analysis

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)?

Less than Significant Impact. CEQA Guidelines Section 15126.2[d] identifies a project as growth inducing if it fosters economic or population growth, or the construction of additional housing either directly or indirectly in the surrounding environment. New employees from commercial or industrial development and new population from residential development represent direct forms of growth, which have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

As discussed in Section 2.4, the proposed project includes the complete demolition of the vacant single-family residence with ancillary shed and development of a commercial center consisting of a grocery store, at least three fast-food restaurants with drive-through operations, a multi-tenant commercial building, and a car wash, totaling 39,743 square feet. Therefore, the project does not include development of residential uses and there would be no direct increase in population. However, implementation of the project would generate employees, which may result in the increase of population growth.

Project-generated population estimates are based on anticipated employment generation from development of the proposed project for retail uses. SCAG anticipates 9.32 employees per acre of development of retail or 1 employee per 702 square feet of retail use in San Bernardino County.[106] Therefore, development of the 8.25-acre project site with 39,743 square feet of commercial uses could generate between 57 and 77 employees.[107]

[106] Southern California Association of Governments. *Employment Density Study Summary Report*. Table 8B. October 31, 2001.

[107] 8.25 acres of commercial uses x 9.32 employees per acre = 76.89 employees. 39,743 square feet of commercial uses ÷ 702 square feet per employee = 56.6 employees.

Although the project would generate between 57 and 77 employees, growth-inducing potential of a project would only be considered substantial under CEQA if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies (e.g., SCAG). As discussed in Section 5.11, Land Use and Planning, the project site is located within the General Commercial (C-G) General Plan Land Use designation and Zoning District. Therefore, development of the project site with the proposed commercial uses would not require an amendment to the Town General Plan or change in zoning. As discussed in Section 5.1.1.c, the project would be subject to the Town's review process, including design review, which would ensure the project is developed in accordance with all applicable provisions of the Town Development Code. As such, implementation of the proposed project would be consistent with the Town General Plan land use designation and Zoning District prescribed for the project site. Therefore, the project would not foster growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies (e.g., SCAG).

Since the proposed project would be consistent with the Town's land use plan and zoning designation for the project site, the project would not generate an employee number beyond what is anticipated by pertinent master plans, land use plans, or in projections made by regional planning agencies (e.g., SCAG). Therefore, the project would not directly or indirectly induce substantial growth in the Town. Impacts would be **less than significant** and mitigation is not required.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. As discussed in Section 2.2, Existing Setting, the project site consists of one vacant single-family residence with ancillary shed in the northwestern portion of the site, and the remaining portions of the site are undeveloped. The project site is zoned commercial with a commercial land use designation, so the Town and regional land use planning agencies do not envision development of the project site with residential uses. Additionally, the single-family residence is currently vacant and would remain vacant until project construction, so implementation of the proposed project would not displace substantial numbers of people or housing, necessitating the construction of replacement house elsewhere. **No impact** would occur, and no mitigation is required.

5.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

5.15.1 Impact Analysis

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?

Less than Significant Impact. The Apple Valley Fire Protection District (AVFPD) provides fire protection and prevention and emergency services to the Town and the project site. The AVFPD is an independent district which encompasses a total of approximately 206 square miles serving the Town as well as unincorporated areas of San Bernardino County.[108] The fire stations nearest to the project site are Station 337 at 19305 Jess Ranch Parkway one mile south of the project site and AVFPD Station 334 at 12143 Kiowa Road 1.7 miles east of the project site. These fire stations have an average response time of 6 minutes, 25 seconds within the Town, ensuring quick access to fire services in emergency.[109] As discussed in Section 5.17, Transportation, the project would not adversely affect the surrounding transportation network or increase the congestion on roadways within the project vicinity with implementation of recommended improvements. Therefore, the project is not expected to reduce the AVFPD's response times due to increased congestion on area roadways.

As discussed in Section 5.14, Population and Housing, the project would generate between approximately 57 and 77 employees. Therefore, development of the proposed project may

[108] Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002.* Page II-18. Certified August 11, 2009.

[109] *Ibid.*

incrementally increase the demand for fire protection services but not to the degree that the existing fire stations could not meet demand because fire hazards are continuously monitored and investigated by AVFPD through their ongoing programs. Additionally, the project would be constructed in accordance with applicable CBC and California Fire Code requirements to minimize fires and project design features would be incorporated into the structural design and layout of the proposed buildings to reduce potential service demand increases to a minimum. For example, the Town and AVFPD will coordinate closely to enforce fire codes and other applicable standards and regulations as part of building plan review and conduct building inspections.[110] Additionally, the AVFPD maintains a mutual aid agreement with Victorville, San Bernardino County Fire Department, and the Bureau of Land Management which allows nearby fire departments to assist the Town during major emergencies.[111]

The proposed project design would be submitted to and approved by the AVFPD prior the issuance of building permits. Furthermore, the Project Applicant would be required to pay applicable Development Impact Fees (DIFs) used to fund capital costs associated with constructing new public safety structures such as fire stations and purchasing equipment for new public safety structures. Based on the information and analysis above, the addition of the proposed buildings constructed in accordance with applicable policies designed to minimize fires (i.e., CBC and California Fire Code) would not require new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Therefore, impacts would be **less than significant,** and mitigation is not required.

ii. Police protection?

Less than Significant Impact. The Town contracts with the San Bernardino County Sheriff's Department for law enforcement services within Town limits. The Apple Valley Police Department is located in the Apple Valley Civic Center at 14931 Dale Evans Parkway in Apple Valley, approximately 5.9 miles northeast of the project site.[112] Implementation of the project could incrementally increase the demand for police services. However, the project would include formal surveillance through the use of closed-circuit television, electronic monitoring, and potential security patrols, as well as informal surveillance such as architecture, landscaping, and lighting designed to minimize visual obstacles and eliminate places of concealment for potential assailants.

The Town monitors staffing levels to ensure that adequate police protection and response times continue to be provided as individual development projects are proposed and on an annual basis as part of the Town Council's budgeting process. Currently, the staffing at the Apple Valley Police Department consists of 49 sworn personnel and 14 civilian/general employees, 6 of whom are qualified to perform non-suspect-involved crimes or calls for service. The proposed development would be reviewed by the Apple Valley Police Department to ensure provision of adequate police protection and compliance with established Sheriff's Department standards.[113] The Town would also continue to monitor population levels and Sheriff's Department staffing levels to ensure that

110 *Ibid.* Page III-241.
111 *Ibid.*
112 *Ibid.* Page II-18.
113 *Ibid.*

sufficient levels of police protection are provided.[114] The continual monitoring of police staffing levels by the Town would ensure the project would not result in a significant reduction in police response times.

Funding for new police facilities commensurate with the increased demand for services in the Town would be provided from capital improvement fees levied on new development. These DIFs are one-time charges applied to new development and are imposed to raise revenue for the construction or expansion of capital facilities such as police stations located outside of project boundaries of a new development that benefit the area. DIFs enable the Town to collect fair-share fees from new development projects to fund new infrastructure and services, including police services. DIFs are collected for specific infrastructure needs and are deposited into different accounts representing these requirements.

The project would be designed and operated per applicable standards required by the Town for new development with regard to public safety. The Project Applicant would be required to pay applicable DIFs used to fund capital costs associated with constructing new public safety structures and purchasing equipment for new public safety structures. Payment of applicable DIFs commensurate with the increased demand for services in the Town would offset any increase in demand for police services.

Based on the information and analysis provided above, the addition of the proposed buildings constructed in accordance with applicable policies designed to minimize crime would not require new or physically altered police protection facilities, the construction of which could cause significant environmental effects. Therefore, impacts would be **less than significant,** and mitigation is not required.

iii. Schools?

No Impact. The project does not include housing; therefore, no direct increase in the number of school-age students would occur. California Government Code (Section 65995[b]) establishes the base amount of allowable developer fees imposed by school districts. These base amounts are commonly referred to as "Level 1 fees" and are subject to inflation adjustment every two years. School districts are placed into a specific "level" based on school impact fee amounts that are imposed on the development. With the adoption of Senate Bill 50 and Proposition 1A in 1998, schools meeting certain criteria can now adopt Level 2 and 3 developer fees. The amount of fees that can be charged over the Level 1 amount is determined by the district's total facilities needs and the availability of State matching funds. If there is State facility funding available, districts are able to charge fees equal to 50 percent of their total facility costs, termed "Level 2" fees. If, however, there are no State funds available, "Level 3" fees may be imposed for the full cost of their facility needs.[115]

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[114] *Ibid.* Page III-239.

[115] California State Legislature, Legislative Analyst's Office. *An Evaluation of the School Facility Fee Affordable Housing Assistance Programs*, January 2001. http://www.lao.ca.gov/2001/011701_school_facility_fee.html (accessed September 7, 2022).

Per California Government Code, "The payment or satisfaction of a fee, charge, or other requirement levied or imposed … are hereby deemed to be full and complete mitigation of the impacts on the provision of adequate school facilities." The Project Applicant would be required to pay these development fees in accordance with Government Code 65995 and Education Code 17620. Through payment of development fees, **no impacts** related to school services would occur. Mitigation is not required.

iv. Parks?

Less than Significant Impact. Please refer to Section 5.16.1.a and Section 5.16.1.b below. Impacts would be **less than significant,** and no mitigation is required.

v. Other public facilities?

Less than Significant Impact. Commercial uses do not typically generate substantial unplanned population such that demand for other public facilities, including the Town's library (Newton T. Bass Apple Valley Library located adjacent to Town Hall), would increase. Additionally, as discussed in Section 5.11, Land Use and Planning, and Section 5.14, Population and Housing, the project would be developed in accordance with the existing land use and zoning designation of the site (General Commercial) and the project would generate between approximately 57 to 77 employees, which is consistent with the planned growth of the Town. As such, there would be no substantial increase in the need for a number of public services, such as libraries and Town administrative facilities, as well as those listed above. However, in the same manner for those facilities, the Project Applicant would be required to pay applicable DIFs used to fund capital costs associated with constructing new public facility structures and purchasing equipment for new public facilities, including libraries.

Based on the information and analysis provided above, the proposed project is not expected to result in the need to construct or expand other public facilities, including libraries. Therefore, impacts would be **less than significant,** and mitigation is not required.

5.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
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?	☐	☐	☒	☐

5.16.1 Impact Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. According to the Town's General Plan, the Town consists of 346.87 acres of developed parkland, including seven mini-parks, two neighborhood parks, three community parks, and two special use parks.[116] The Town maintains a performance standard of 3 acres of parkland for every 1,000 residents. As indicated in Section 5.1.1.c, the Town's population is estimated to be 76,224 persons as of July 1, 2021. Therefore, 228.67 acres of parkland are required to maintain the Town's performance standard of 3 acres of parkland for every 1,000 residents. As indicated above, Apple Valley consists of 346.87 acres of developed parkland. Therefore, the Town currently exceeds its parkland performance standard by 118.2 acres.

As discussed in Section 5.14, Population and Housing, the proposed project is anticipated to generate up to approximately 77 employees working at the project site. Therefore, the project could result in the increased use of existing park facilities in the Town. Assuming the 77 employees increased the Town's population by 77 residents, the Town would still exceed its performance standard by approximately 118 acres. Therefore, the probability of project-generated employees causing substantial physical deterioration of existing parks in the Town is low. Additionally, the Project Applicant would be required to pay applicable development fees to contribute to the cost of maintaining existing parks in the Town.

Based on the information and analysis provided above, the development of the proposed project would not create a significant increase in the use of existing neighborhood, regional parks, or other recreational facilities that would result in substantial deterioration of park facilities. Impacts would be **less than significant,** and mitigation is not required.

[116] Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002.* Page II-20. Certified August 11, 2009.

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?

Less than Significant Impact. As discussed in Section 2.4, Proposed Project, the project includes development of a grocery store, car wash, at least 3 restaurants with drive-through operations, and a multiple tenant commercial/retail building. Therefore, the project does not include the development of recreational facilities. Additionally, as discussed in Section 5.16.1.a above, the project would generate up to approximately 77 employees working at the project site, which could increase the Town's population by 77 residents. However, as discussed above, the Town would exceed its parkland performance standard by approximately 118 acres with implementation of the proposed project. Therefore, the Town would have adequate parkland to serve its residents after development of the project and the construction or expansion recreational facilities would not be required. Impacts would be **less than significant**, and mitigation is not required.

5.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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 §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?	☐	☐	☒	☐

5.17.1 Impact Analysis

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The following discussion is based in part on the project-specific Traffic Impact Study (TIS) prepared for the proposed project (Appendix H).[117]

Less than Significant Impact. This section discusses potential impacts to the circulation system, transit services, bicycle facilities, and pedestrian system.

Traffic Circulation. The project would include improvements (e.g., installation of curb, gutter, sidewalk, landscaping, streetlights, and trees) along the frontages of all perimeter roadways, including Bear Valley Road to north, Apple Bear Road (to be constructed along the western frontage of the site as part of the project), and Flying Feather Road to the east. Bear Valley Road is designated by the Town's General Plan as a Major Divided Arterial. The segment of Bear Valley Road along the site's northern frontage currently operates as a six-lane divided Arterial with raised median, and the segment of Bear Valley Road east of Flying Feather Road currently operates as a four-lane divided Arterial with painted median. The project would modify the existing raised median along Bear Valley Road and add dedicated turn lanes at the intersections of Apple Bear Road/Bear Valley Road, Flying Feather Road/Bear Valley Road, and Project Driveway 3/Bear Valley Road to ensure safe access to and from the project site and adequate traffic flows along Bear Valley Road. The project would extend Apple Bear Road south from its existing terminus at the north side of Bear Valley Road to the site's western frontage and be constructed to its full width of 50 feet. Roadway improvements to Apple Bear Road would also include a 10-foot-wide sidewalk with parkway landscaping along the eastern and western sides of the roadway. Flying Feather Road along the site's eastern frontage would also be constructed to its full width of 50 feet and include a 10-foot-wide sidewalk with parkway landscaping along the western side of the roadway adjacent to the

[117] LSA Associates, Inc. *Traffic Impact Study, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino County, California.* February 2023. Appendix H.

project site. Apple Bear Road and Flying Feather Road are local roads that are not designated in the Town's General Plan. Additionally, the project would interconnect to existing sewer, water, electric, gas, and telecommunications utilities within the Bear Valley Road right-of-way. Finally, Section 10 of the TIS (Appendix H) identified improvements to 4 intersections (2 in the Town and 2 in the City of Hesperia/City of Victorville) in the project study area that would improve the level of service at these intersections with project generated traffic under the Opening Year (2024) scenario and Cumulative (2045) scenarios.[118] These improvements would be constructed as part of an agreement between the Project Applicant and the Town Public Works Department in accordance with applicable roadway standards.

Accordingly, implementation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the traffic circulation system, and this impact would be **less than significant**. No mitigation would be required.

Pedestrian System. There are no sidewalks along the project site's northern frontage with Bear Valley Road (south side of Bear Valley Road) or eastern frontage with Flying Feather Road. In the project vicinity, sidewalks exist along portions of the north side of Bear Valley Road. Generally, pedestrian facilities in proximity to the project site are concentrated west of the project site, extending to the Mojave River wash where commercial and residential uses occur. Pedestrian facilities east of the project site are fragmented due to large areas of undeveloped land and scattered residential uses.

The project includes frontage improvements along Bear Valley Road, Apple Bear Road (to be constructed as part of the project), and Flying Feather Road, including curb and gutter, sidewalks, street trees, and lighting that would improve pedestrian circulation and reduce existing pedestrian system gaps in the project vicinity. Accordingly, implementation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the pedestrian system and this impact would be **less than significant**. No mitigation measures would be required.

Transit Services. The Victor Valley Transit Authority (VVTA) is the Regional Transit System operated by the high desert communities of Adelanto, Apple Valley, Hesperia, Victorville, and San Bernardino County. VVTA has 3 bus routes that operate in within the project study area, including Routes 42, 43, and 47. Routes 43 stops along Bear Valley Road adjacent to the northern frontage of the site, with the closest stop approximately 450 feet west of the site. By introducing new employment opportunities on an underutilized property in proximity to an existing bus stop, the project would facilitate increased transit mobility in the project vicinity. The proposed project would be site specific and would not require new transit stops or the significant relocation of existing transit stops. Implementation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the transit services system and this impact would be **less than significant**. No mitigation measures would be required.

Bicycle Facilities. Class II bicycle lanes are present along nearby major corridors such as Apple Valley Road and Kiowa Road and Class I bicycle lanes are planned for future development along the eastbound direction of Bear Valley Road along the northern frontage of the project site in

[118] *Ibid.* Tables 10-A through 10-C.

accordance with the Town's General Plan.[119] As discussed above, the project includes roadway improvements to perimeter roadways (Apple Bear Road, Bear Valley Road, and Flying Feather Road), which would provide additional road width for vehicles and bicycles to co-operate and connect to local and regional bicycle infrastructure. Implementation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the Town's bicycle facilities system and this impact would be **less than significant**. No mitigation measures would be required.

b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Less than Significant Impact. CEQA Guidelines Section 15064.3, subdivision (b) establishes "vehicle miles traveled" criteria in lieu of LOS for analyzing transportation impacts and was signed into law as Senate Bill (SB) 743 in 2013. The Office of Planning and Research (OPR) approved regulatory changes to the CEQA Guidelines that implement SB 743 on December 28, 2018. However, lead agencies were able to use LOS for analyzing transportation impacts until July 1, 2020. Pursuant to SB 743, the County adopted Transportation Impact Study Guidelines (TIS Guidelines) (July 2019), which includes screening criteria, VMT analysis methodology, VMT impact thresholds, and VMT mitigation measures to analyze a project's transportation impacts. The Town recommends that the County's TIS Guidelines be used to determine if a project within the Town can be screened out of a VMT analysis.

According to the County's TIS Guidelines, local-serving retail that has a total square footage less than 50,000 square feet are presumed to have a less than significant VMT impact and can be screened out from a VMT analysis.[120] The proposed project includes development of a grocery store, car wash, at least three restaurants with drive-through operations, and a multiple tenant commercial building, totaling 39,743 square feet. Therefore, both the proposed project is presumed to have a less than significant VMT impact and a VMT analysis is not required. Impacts would be **less than significant**, and mitigation is not required.

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. Roadway improvements in and around the project site would be designed and constructed to satisfy all Town requirements for street widths, corner radii, intersection control, as well as incorporate design standards tailored specifically to site access requirements pursuant to Chapter 9.72 (Off-Street Parking and Loading Regulations) of the Town Development Code. Passenger vehicle and pedestrian access to the project site would be provided by five ingress/egress driveways (2 along Apple Bear Road, 1 along Bear Valley Road (right-in-right-out), and 2 along Flying Feather Road) and sidewalks along the western, northern, and eastern frontages of the site. The southernmost driveways off Flying Feather Road and Apple Bear Road would provide freight trucks with primary access to the loading dock located east of the grocery store building.

[119] *Ibid.* Figure 4-6 and Page 4-3.
[120] *Ibid.* Page 9-1.

Passenger vehicles would enter and exit the site from any of the five project driveways. On-site drive aisles and an internal driveway in the central portion of the site would connect all perimeter driveways and facilitate internal access to parking areas and the proposed buildings and would ensure adequate access throughout the site for first responders to an emergency.

Off-site, the project would include improvements (e.g., installation of curb, gutter, sidewalk, landscaping, streetlights, and trees) along the frontages of all perimeter roadways, including Bear Valley Road to north, Apple Bear Road (to be constructed along the western frontage of the site as part of the project), and Flying Feather Road to the east. Bear Valley Road is designated by the Town's General Plan as a Major Divided Arterial. The segment of Bear Valley Road along the site's northern frontage currently operates as a six-lane divided Arterial with raised median, and the segment of Bear Valley Road east of Flying Feather Road currently operates as a four-lane divided Arterial with painted median. The project would modify the existing raised median along Bear Valley Road and add dedicated turn lanes at the intersections of Apple Bear Road/Bear Valley Road, Flying Feather Road/Bear Valley Road, and Project Driveway 3/Bear Valley Road to ensure safe access to and from the project site and adequate traffic flows along Bear Valley Road (Refer to Figure 4, Conceptual Site Plan). The project would extend Apple Bear Road south from its existing terminus at the north side of Bear Valley Road to the site's western frontage and be constructed to its full width of 50 feet. Roadway improvements to Apple Bear Road would also include a 10-foot-wide sidewalk with parkway landscaping along the eastern and western sides of the roadway. Flying Feather Road along the site's eastern frontage would also be constructed to its full width of 50 feet and include a 10-foot-wide sidewalk with parkway landscaping along the western side of the roadway adjacent to the project site.

The Town, at final plan check, would ensure that all improvements associated with the project are consistent with California Fire Code and Town Development Code standards and requirements. Adherence to these standards and requirements would ensure the proposed project would not include any sharp curves or dangerous intersections. Therefore, no substantial increase in hazards due to a design feature would occur. Impacts are **less than significant,** and mitigation is not required.

d. Would the project result in inadequate emergency access?

Less than Significant Impact. The project could result in temporary restrictions to vehicle traffic along the adjacent Bear Valley Road during construction and also would increase the number of vehicles operating near the site, which would result in an increase in the amount and volume of traffic on local and regional roadways.

Construction. Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Typical Town requirements include prior notification of any lane or road closures with sufficient signage before and during any closures, flag crews with radio communication when necessary to coordinate traffic flow, etc. The Project Applicant would be required to comply with these requirements, which would maintain emergency access and allow for evacuation if needed during construction activities. Compliance with these requirements would

ensure that short-term impacts related to this issue are **less than significant**. Mitigation is not required.

Operation. Access to and from the project site for passenger vehicles would be available via five ingress/egress driveways (2 along Apple Bear Road, 1 along Bear Valley Road (right-in-right-out), and 2 along Flying Feather Road). The southernmost driveways off Flying Feather Road and Apple Bear Road would provide freight trucks with primary access to the loading dock located east of the grocery store building. On-site drive aisles and an internal driveway in the central portion of the site would connect all perimeter driveways and facilitate internal access to parking areas and the proposed buildings and would ensure adequate access throughout the site for first responders to an emergency. All site access points and driveway aprons are designed and would be constructed to adequate widths for public safety and emergency access pursuant to the California Fire Code and Town Development Code standards and requirements.

Implementation of the proposed project would increase the number of vehicles and trucks operating near the site and would generate an increase in the amount and volume of traffic on local and regional roadway networks. In accordance with the California Fire Code, the project proponent is required to design, construct, and maintain structures, roadways, and facilities to maintain appropriate emergency/evacuation access to and from the project site as codified in Chapter 9.37 (Commercial and Office Districts Design Standards) and Chapter 9.72 (Off-Street Parking and Loading Regulations) of the Town Development Code.

Proper site design and compliance with standard and emergency access requirements would allow for evacuation if necessary during project operations. This would ensure that long-term impacts related to circulation system operations affecting emergency access and evacuation are **less than significant.** Mitigation is not required.

5.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

5.18.1 Impact Analysis

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)?

Please refer to Section 5.18.1.a.ii, below.

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation Incorporated. The term "California Native American tribe" is defined as "a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission (NAHC)."

Chapter 532, Statutes of 2014 (i.e., Assembly Bill 52), requires Lead Agencies to evaluate a project's potential to affect "tribal cultural resources." Such resources include "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources." Assembly Bill (AB) 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in PRC Section 5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and State CEQA Guidelines Section 15064.5[a]).

"Local register of historical resources" means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

A resource may be listed as a historical resource in the California Register of Historical Resources if it meets any of the following National Register of Historic Places criteria as defined in PRC Section 5024.1(C):

a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

b. Is associated with the lives of persons important in our past.

c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

d. Has yielded, or may be likely to yield, information important in prehistory or history.

A "substantial adverse change" to a historical resource, according to PRC Section 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

CEQA Guidelines do not preclude identification of historical resources as defined in Public Resources Code Sections 5020.1(j) or 5024.1. Pursuant to State CEQA Guidelines Section 15064.5[c][4], if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It

shall be sufficient that both the resource and the effect on it are noted in the Initial Study, but they need not be considered further in the CEQA process.[121]

Per AB 52 (specifically California Public Resources Code 21080.3.1), Native American consultation is required upon request by interested California Native American tribes that have previously requested that the Town of Apple Valley provide them with notice of such projects.

The Town mailed notices of the proposed project to five Native American tribes on February 21, 2023, pursuant to AB 52. The Town received one response from Yuhaaviatam of San Manuel Nation (YSMN) (formerly known as the San Manuel Band of Mission Indians) for consultation, and prescribed **Mitigation Measures CUL-2 through CUL-4** identified in Section 5.5, Cultural Resources, and **Mitigation Measures TCR-1 and TCR-2** identified below to protect archaeological resources, including tribal cultural resources, during project construction. As discussed in Section 5.5.1.a, there are no resources on the project site that are listed or eligible for listing in the CRHR or in a local register of historical resources; however, project construction has the potential to encounter subsurface resources. Therefore, compliance with **Mitigation Measures CUL-2 through CUL-4 and TCR-1 through TCR-2** would ensure the project would be conditioned to cease excavation or construction activities if cultural, tribal cultural, archaeological resources, or human remains are identified and would include provisions for Native American Monitoring of ground-disturbing activities in such an instance. These mitigation measures also would ensure further consultation with interested Native American Tribes for the appropriate treatment of Tribal Cultural Resources. Therefore, impacts to Tribal Cultural Resources would be reduced to **less than significant with mitigation incorporated**.

Mitigation Measures. **Mitigation Measures CUL-2 through CUL-4** identified in Section 5.5, Cultural Resources, **Mitigation Measures TCR-1 through TCR-2** identified below are prescribed by the YSMN to reduce potentially significant impacts to tribal cultural resources to less-than-significant levels.

Mitigation Measure TCR-1 The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in **Mitigation Measure CUL-2**, of any pre-contact and/or historic-era 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 YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

[121] Pursuant to Section 21082.3(c) of the Public Resources Code, details on the nature, extent, and location of Tribal Cultural Resources identified by Native American Tribes shall remain confidential for the purposes of this analysis.

Mitigation Measure TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Project Applicant and the Town for dissemination to YSMN. The Town and/or Project Applicant shall, in good faith, consult with YSMN throughout the life of the project.

5.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
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?	☐	☒	☐	☐

5.19.1 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. Proposed project improvements, including the construction and expansion of water, drainage, gas, electric, and telecommunications facilities are described in Section 2.4.7, and would interconnect to existing utilities where available along the site frontage of Bear Valley Road.

The approval of drainage features and other utility improvements occurs through the building plan check process. As part of this process, all project-related drainage features and utility infrastructure would be required to comply with Chapter 8.12 (California Building Code), Chapter 8.18 (California Plumbing Code), Chapter 10.01 (Wastewater Services), Chapter 9.35.040 (Site Development Standards) of the Town Development Code, as well as Lahontan RWQCB standards. On-site project-related drainage features would be designed, installed, and maintained per the Phase II MS4 Permit, the Town Development Code, and the requirements identified in the Final WQMP (per **Standard Conditions HYD-2** and **HYD-3**).

All proposed improvements and interconnection to drainage, electric power, water, and wastewater facilities would be installed simultaneously with finish grading activities and required project frontage improvements (curb, gutter, sidewalk, landscaping, streetlights, and trees) along Bear Valley Road, Apple Bear Road, and Flying Feather Road. The areas of potential impact from drainage

and utility infrastructure improvements are included in the analysis of this Initial Study and associated technical studies, and impacts are mitigated where necessary to less than significant levels. As a result, interconnection to the existing utilities in the project vicinity would not result in substantial disturbance to native habitat or soils, or to the operation of existing roadways and utilities. There would be no significant environmental effects specifically related to the installation of utility interconnections that are not encompassed within the project's construction and operational footprints, and therefore already identified, disclosed, and subject to all applicable conditions, as well as local, State, and federal regulations, as part of this Initial Study. Therefore, impacts related to relocation of utilities would remain **less than significant.** Mitigation is not required.

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. Liberty Utilities-Apple Valley (Liberty) is one of twelve retail water purveyors under the administration of the Mojave Water Agency (MWA) that provides domestic water services to most of the Town of Apple Valley, including to the project site. Liberty's primary source of water is local groundwater produced from the Mojave Basin Area, which is an adjudicated basin monitored by the MWA Board.

On March 28, 2022, the California Governor issued Executive Order N-7-22, which encourages all Californians and water agencies to restrict water usage, restrict new and expansion of existing groundwater wells, promote projects that facilitate groundwater recharge, and reduce their reliance on imported water from the State Water Project (SWP).[122] On May 24, 2022, the California State Water Resource Control Board adopted emergency water conservation regulations,[123] effective June 10, 2022, requiring Liberty to implement Stage 2 of its Water Shortage Contingency Plan and prohibit use of potable water for irrigating non-functional turf at commercial sites such as the project site.[124]

In response to state emergency drought orders, Liberty enacted Stage 2 of its Schedule 14.1 Water Shortage Contingency Plan for the Apple Valley and Yermo service areas, which requires customers to reduce their usage by 20 percent from the amount used in 2020 to close the gap between water supply and water demand. Customers who use more than their allocation (compared to 2020) may be charged a drought surcharge pursuant to Schedule 14.1 of the Water Shortage Contingency Plan. Additionally, Stage 2 of Liberty's Water Shortage Contingency Plan requires the following mandatory water use restrictions:[125]

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122 State of California, Executive Department. *Executive Order N-7-22*. March 28, 2022. https://www.gov.ca.gov/wp-content/uploads/2022/03/March-2022-Drought-EO.pdf (accessed February 20, 2023).

123 Liberty Utilities. *Notice of Water Shortage Contingency Plan and Public Meeting Liberty Utilities (Apple Valley Ranchos Water) Corp.* Pages 1 and 2. Date filed: December 8, 2021; Effective January 7, 2022. Website: https://california.libertyutilities.com/uploads/Customer%20Notice%20AV_FINAL%206-7-2022%20Final.pdf. (accessed February 20, 2023).

124 *Ibid.*

125 *Ibid.*

- All outdoor irrigation is restricted to 2 days per week and is prohibited between the hours of 8:00 a.m. and 7:00 p.m.
- Non-essential outdoor irrigation may be prohibited at a later date if deemed necessary by the local water agency or local city ordinance.
- The application of potable water to outdoor landscapes in a manner that causes runoff such that water flow onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures.
- The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use.
- The use of potable water for washing buildings, structures, sidewalks, walkways, patios, tennis courts, or other hard-surfaced, non-porous areas.
- The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system.
- The use of potable water for watering outside plants, lawn, landscape, and turf area during certain hours prohibited by applicable laws, during and up to 48 hours after measurable rainfall (0.1 inch or more).
- The utility will promptly notify customers when aware of leaks within the customer's control. The failure to promptly repair any leaks, breaks, or other malfunction resulting in water waste in a customer's domestic or outdoor water system after notification by the utility, unless other, specific arrangements are made with and agreed to by the utility.
- The serving of water, other than upon request, in eating and drinking establishments, including but not limited to restaurants, hotels, cafes, bars, or other public places where food or drink are served and/or purchased.
- Hotels/motels must provide guests with the option of choosing not to have towels and linens laundered daily and prominently display notice of this option in each guestroom.
- The use of potable water for irrigation of ornamental turf on public street medians.
- The use of potable water for irrigation outside of newly constructed homes and buildings that is not delivered by drip or micro spray systems.
- Commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water use in an amount consistent with the mandated reduction.
- Further reduction in or the complete prohibition of any other use of water declared non-essential, unauthorized, prohibited, or unlawful by an authorized government or regulatory agency or official.
- Use of potable water for watering streets with trucks, or other vehicles, except for initial wash-down for construction purposes (if street sweeping is not feasible), or to protect the health and safety of the public.

Although Liberty has historically used imported water from the MWA to replenish its groundwater supplies,[126] Liberty does not currently use purchased imported water supplies to meet its water demands.[127] According to Liberty's 2020 Urban Water Management Plan (UWMP), Liberty anticipates to have sufficient water supplies to meet demand through the year 2045 under Normal Year, Single-Dry Year, and Multiple-Dry Year conditions.[128] Additionally, Liberty would implement various stages of its Water Shortage Contingency Plan when necessary to reduce its water demand and balance its demand with available water supplies during Multiple-Dry Year conditions.[129] Liberty models each scenario based on the land use and zoning designations of each local jurisdiction it serves. As discussed in Section 5.11.1.b, the proposed project is consistent with and would be developed in accordance with the land use and zoning designations of the project site. Therefore, the proposed project within the Town of Apple Valley is already accounted for in the water (e.g. groundwater) supply and demand scenarios determined by Liberty and sufficient water supplies would be available to serve the project. Since sufficient water supplies are available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years, impacts would be **less than significant.** No mitigation is required.

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. The project site is within the Town of Apple Valley which owns, operates, and maintains its local wastewater collection system. Currently, the Town has force main lines and gravity sewer lines that connect to regional intercept lines and convey wastewater to a wastewater treatment plant operated by the Victor Valley Wastewater Treatment Authority (VVWRA) in Victorville.[130] These regional intercept lines are owned and maintained by VVWRA and are located along Dale Evans parkway, trending southeasterly along Stoddard Wells Road to Victorville, as well as well as from Nanticoke Road along Standing Rock Avenue and then along Highway 18 to the Town's western boundary. Operational discharge flows treated by the VVWRA would be required to comply with waste discharge requirements for that facility. VVWRA serves an area of the Mojave Desert made up of nearly 400,000 residents.[131] The plant has a capacity of 18 million gallons per day (MGD) and averages treatment of 13 million gallons of water on a daily basis.[132] In the event that VVWRA is unable to meet the projected wastewater treatment demand,

126 Liberty Utilities- Apple Valley. *Final Draft 2020 Urban Water Management Plan.* Page 1-3. June 2021.
127 *Ibid*. Page 6-7.
128 *Ibid.* Page 7-12.
129 *Ibid.* Page 7-16.
130 Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002*. Page II-16. Certified August 11, 2009.
131 Better Buildings U.S. Department of Energy. *Victor Valley Wastewater Reclamation Authority.* https://betterbuildingssolutioncenter.energy.gov/partners/victor-valley-wastewater-reclamation-authority (accessed September 8, 2022).
132 Liberty Utilities- Apple Valley. *Final Draft 2020 Urban Water Management Plan.* Page 6-16. June 2021.

Apple Valley Subregional Water Reclamation Plant (AVSWRP) and Hesperia Subregional Water Reclamation Plant (HSWRP) would be able to supplement capacity.[133]

The Town's average wastewater flow is 100 gallons per person per day.[134] As discussed in Section 5.14, Population and Housing, the project is expected to generate up to approximately 77 employees. Under a worst-case scenario where the project site would be occupied 24 hours per day, project employees would generate 7,700 gallons of wastewater per day[135] or 2.81 million gallons of wastewater per year. The project's estimated wastewater treatment demand represents 0.15 percent of VVWRA's current daily surplus capacity.[136] As sufficient surplus treatment capacity is available, impacts would be **less than significant,** and mitigation is not required.

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. Solid waste collection is a "demand-responsive" service, and current service levels can be expanded and funded through user fees. Solid waste from the proposed project would be hauled by Burrtec Waste Industries, Inc. and transferred to the Victor Valley Materials Recycling Facility (MRF)/Transfer Station. From the MRF, the non-recyclable material would be transferred to the Victorville Landfill. Victorville Landfill has an average daily throughput of 900 tons per day and a daily maximum throughput of 3,000 tons per day; therefore, has an average surplus capacity of 2,100 tons per day.[137] As of March 2020, the Victorville Landfill has a remaining capacity of 79.4 million cubic yards.[138]

Based on a generation rate of 11.9 pounds per employee per day (between 57 and 77 employees per shift),[139] the project would generate between 678.3 and 916.3 pounds of solid waste per day.[140] This amount is equivalent to as much as 0.0051 percent of the average daily surplus capacity at

133 Town of Apple Valley. *Town Council Staff Report.* https://www.applevalley.org/home/showpublisheddocument/23886/636440017260170000 (accessed September 8, 2022).

134 Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002*. Page III-251. Certified August 11, 2009.

135 100 gallons/person/day × 77 persons = 7,700 gallons per day

136 7,700 gallons per day ÷ 5 MGD surplus capacity at VVWRA = 0.15 percent of surplus capacity

137 Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002*. Page III-253. Certified August 11, 2009.

138 California Department of Resources Recycling and Recovery (CalRecycle). *Solid Waste Information System (SWIS). SWIS Facility/Site Activity Details: Mid-Valley Sanitary Landfill (36-AA-0045).* https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652 (accessed February 20, 2023).

139 California Department of Resources Recycling and Recovery (CalRecycle). *California's 2017 Per Capita Disposal Rate Estimate*. https://calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/2017-2/ (accessed January 3, 2023).

140 11.9 pounds per employee per day × 57 employees = 678.3 pounds of solid waste per day. 11.9 pounds per employee per day × 77 employees = 916.3 pounds of solid waste per day.

Victorville Landfill.[141] Therefore, the Victorville Landfill has adequate capacity to serve the proposed project. As adequate daily surplus capacity exists at the receiving landfill, and the project would comply with local and State waste reduction strategies, the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. Impacts would be **less than significant,** and mitigation is not required.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant with Mitigation Incorporated. Construction and operation of the proposed project would result in the generation of solid waste that must be managed in accordance with applicable federal, State, and local management and reduction statutes.

Construction. As discussed in Section 5.9.1.a, Hazards and Hazardous Materials, the project would result in the demolition of the residential structure and ancillary shed located in the northwestern portion of the project site, which may contain ACM and LBM materials. Therefore, the project would have the potential to conflict with regulations related to solid waste, including the disposal of ACM and LBM materials.

The Town of Apple Valley would require the Project Applicant to prepare a Construction Waste Management Plan (CWMP) to ensure a minimum 65 percent of all demolition and construction waste would be recycled/reused in accordance with CalGreen Code Sections 4.408 and 5.408. Additionally, if ACM and LBM materials are identified within the structures proposed for demolition, the Project Applicant would be required to hire a Certified Asbestos Consultant and Lead Inspector Assessor to prepare disposal tickets from a San Bernardino County Department of Public Works-Solid Waste Management Division-approved disposal facility and obtain SCAQMD air clearances prior to any asbestos removal activity pursuant to **Mitigation Measures HAZ-1** through **HAZ-4.** Therefore, the project would comply with federal, State, and local management reduction statutes and regulations related to solid waste during project construction. Impacts would be reduced to **less than significant with mitigation incorporated.**

Operation. The project operator is required to coordinate with Burrtec Waste Industries, Inc., which would collect solid waste from the site and transfer the solid waste to the MRF. The MRF would sort the solid waste into recyclable and non-recyclable waste and would transfer the non-recyclable waste to Victorville Landfill for disposal. All development within the Town, including the proposed project, is required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other local, State, and federal solid waste disposal standards. Therefore, the project would comply with federal, State, and local management reduction statutes and regulations related to solid waste during project operation and impacts would be **less than significant.** Mitigation is not required.

[141] 916.3 pounds of solid waste per day ÷ 2,100 tons (18,000,000 pounds) daily surplus = 0.0051 percent.

5.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

5.20.1 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. According to the California Department of Forestry and Fire Protection (CALFIRE), the project site is not located within a wildfire State Responsibility Area, nor is the site classified as a Very High Fire Hazard Severity Zone (VHFHSZ).[142] The nearest VHFHSZ is located approximately 10 miles south of the site. The project is located in an urbanized area with local roads, highway (State Route 18: Happy Trails Hwy), and freeway (Barstow Freeway 15) encircling the region that provide adequate access and departure from the area in the event of an emergency, such as a wildfire. The project is designed to comply with current California Fire Code (2022 California Fire Code) standards for development for commercial retail uses, the Town's Building Code Standards, and standards as set forth by the AVFPD. Adequate emergency access points also are included in the project design. Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan within a VHFHSZ. Impacts would be **less than significant**, and mitigation is not required.

142 California Department of Forestry and Fire Protection. *Fire and Resource Assessment Program (FRAP).* https://egis.fire.ca.gov/FHSZ/ (accessed September 7, 2022).

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

Less than Significant Impact. As described above, the proposed project is not located within or near a wildfire State Responsibility Area, nor is the land classified as a VHFHSZ.[143] The project site is predominately flat and lacks significant slopes. Wildfires have the tendency for uncontrolled spread when the terrain is hilly or mountainous and not conducive to practicable firefighting capabilities. The likelihood of uncontrolled spread of a wildfire near or on the project site is relatively low since the surrounding topography is relatively flat with substantial development to the north, northwest, and west of the site and limited vegetation to the west, south, and east.

San Bernardino County and the Town are subject to seasonal wind events including times during the fall and winter when Santa Ana Wind conditions are prevalent. Santa Ana Wind conditions in the area of the proposed project typically blow from a northeast to southwest direction (an offshore flow). Wildfires have been recorded during such Santa Ana Wind events sometimes leading to uncontrolled spread of wildfires. CALFIRE and the San Bernardino County Fire Department have taken these conditions and the locations of Fire Hazard Severity Zones into consideration when determining potential impacts associated with wildfire spread within the Town of Apple Valley and surrounding cities. If such a conflagration[144] driven by winds were to get out of control, the Town's AVFPD and San Bernardino County Fire Department have procedures in place to respond to such an emergency and evacuate residents and employees as needed (refer to Section 5.9.1.f above).

Wind events can also result in smoke drift from nearby wildfires resulting in smoke settling in low-lying areas. The Town is located in Victor Valley between the Fairview and Granite Mountains to the east, Sidewinder, Black, and Turtle Mountains to the north and northeast, and Ord and San Bernardino Mountains to the south.[145] Therefore, the potential for smoke settlement from nearby wildfires is a possibility, but smoke settlement would be temporary and would more than likely clear out within a couple days of when settlement commenced (based on weather conditions).

Overall, implementation of the proposed project would have a low probability of exposing occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope or prevailing winds. Impacts would be **less than significant.** Mitigation is not required.

143 *Ibid.*

144 Conflagration is an extensive fire that destroys a great deal of land or property.

145 Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002.* Page III-124. Certified August 11, 2009.

c. Would the project 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?

Less than Significant Impact. As described above, the proposed project is not located within or near a wildfire State Responsibility Area, nor is the land classified as a VHFHSZ.[146] The project includes development of a commercial buildings, demolition of existing structures, on-site utility infrastructure, surface parking lots, and off-site improvements to the project frontages and utility infrastructure. The project would not incorporate infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other non-existing utilities) that may exacerbate fire risk because all improvements would be implemented in an urbanized setting in accordance with the CBC, California Fire Code, and applicable local ordinances. Therefore, impacts would be **less than significant,** and mitigation is not required.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant Impact. As described above, the proposed project is not located within or near a wildfire State Responsibility Area, nor is the land classified as a VHFHSZ.[147] According to the Town's Local Hazard Mitigation Plan, the project site is not located in flood hazard or inundation zones,[148] and the site is not located near bodies of water or enclosed water storage features which could result in tsunamis or seiches. Therefore, flood risks associated with runoff caused by post-fire slope instability or post-fire drainage change are low.

The project site is located on land that is relatively flat, and the foothills of the San Bernardino Mountains are approximately 4.7 miles south of the site. Additionally, the land between the project site and the San Bernardino Mountains is developed with residential, commercial, and industrial uses. The distance and intervening uses between the project site and foothills of the San Bernardino Mountains precludes the project site from significant risks due to landslides caused by post-fire slope instability or post-fire drainage changes. Impacts would be **less than significant,** and mitigation is not required.

146 California Department of Forestry and Fire Protection. *Fire and Resource Assessment Program (FRAP).* https://egis.fire.ca.gov/FHSZ/ (accessed September 7, 2022).

147 *Ibid.*

148 Town of Apple Valley. *Local Hazard Mitigation Plan*. Figure 4-2. https://www.applevalley.org/home/showpublisheddocument/24623/636571391905830000 (accessed on September 7, 2022).

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

5.21.1 Impact Analysis

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

Less than Significant with Mitigation Incorporated. The project site is surrounded by undeveloped land to the immediate east (across Flying Feather Road), south, and west, and developed land (Bear Valley Road and commercial uses) to the north. The project site is mostly undeveloped and contains one residential structure with ancillary shed. The undeveloped portions of the project site consist of sparse patches of rubber rabbit brush and does not contain mature trees.

No riparian or sensitive natural community is located on site, and there is no designated critical habitat within or adjacent to the project site for any species.[149] The project site does not include any federally protected wetlands or any drainage features, ponded areas, wetlands, or riparian habitat subject to jurisdiction by the CDFW, USACE, and/or RWQCB.[150] The Biological Resources Report prepared for the project included a literature search and pedestrian survey of the site and determined that the threatened, endangered, or candidate species with potential to occur in the project vicinity are considered absent from the site due to lack of suitable habitat, except for

[149] Phoenix Biological Consulting. *Focused Burrowing Owl, Mohave Ground Squirrel, and Desert Tortoise Surveys for Apple Bear Retail Site*. Pages 6 through 10. January 4, 2023. Appendix B.

[150] *Ibid.* Pages 4 through 11.

burrowing owl.[151] The Biological Resources Assessment determined that the project site provides suitable habitat for burrowing owl due to the presence of ground squirrel burrows, indicating the potential for this species to emigrate onto the site to nest.[152] Additionally, desert shrubs and burrows that provide suitable nesting habitat for common bird species and burrowing owl are located on the project site and would be removed from the site with implementation of the project. The project would be conditioned to ensure a qualified biologist conducts a pre-construction survey for burrowing owl and nesting birds to ensure that burrowing owl and nesting birds are protected during project construction (**Mitigation Measures BIO-1 through BIO-3**).

With implementation of **Mitigation Measures BIO-1 and BIO-2**, impacts to candidate, sensitive, or special status species, including burrowing owl, would be reduced to **less than significant with mitigation incorporated.** Through implementation of **Mitigation Measure BIO-3,** native resident or migratory fish or wildlife species (including nesting birds), established native resident or migratory wildlife corridors, and native wildlife nursery sites would be reduced to **less than significant with mitigation incorporated**.

Based on the results of the cultural records search, no precontact or historic cultural resources have been previously recorded within the project area. An archaeological field survey conducted at the project area was negative for surficial evidence of precontact cultural resources; however, 10 historic period features (slabs and water management/conveyance features, documented as LSA-WDN2201-S-1) were identified within the project area. A Phase II Archeological Testing report was prepared to determine the historical significance of the on-site features encountered during the field survey. The testing yielded predominantly negative results, with some temporally ambiguous refuse (sanitary food cans).[153] Additionally, observations of the historic features documented on-site revealed that the former on-site agricultural complex consisted of residential structures and buildings that had burned down, large equipment or poultry sheds, and a cluster of water conveyance structures.[154]

The Phase II report determined that historic resource number LSA-WDN2201-S-1, comprising 10 historic features, is an unremarkable example of a common resource type (foundation/feature remnants of at least one agricultural complex that likely dates from before World War II to at least the end of the historic period [1970s]). Additionally, the Phase II report determined that collectively, these features do not meet any of the 4 criterions (criterions a) through d) listed in Section 5.5.1.a. Therefore, the Phase II report concluded that historic resource number LSA-WDN2201-S-1 is not considered a "historic resource" under CEQA Guidelines 15064.5 and is not eligible for listing in the CRHR.[155]

Although there were no precontact or historic cultural resources identified within the project area, the project would be required to comply with all applicable regulations protecting cultural, tribal

151 *Ibid.* Page 6.
152 *Ibid.*
153 LSA Associates, Inc. *Phase II Archeological Testing, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino County, California.* Pages 7 and 8. April 2023. Appendix C2.
154 *Ibid.* Pages 8 and 9.
155 *Ibid.* Page 11.

cultural, and archaeological resources in the event that these resources are encountered during project construction. Therefore, **Mitigation Measures CUL-1 through CUL-3** are prescribed to ensure that the project would be conditioned to cease excavation or construction activities if cultural, tribal cultural, or archaeological resources are identified during construction and would incorporate archaeological and Native American Monitoring of ground-disturbing activities in such an instance. These conditions also would ensure further consultation with interested Native American Tribes for the appropriate treatment of tribal cultural resources. Additionally, implementation of **Mitigation Measures GEO-2 and GEO-3** would ensure unanticipated paleontological resources encountered during construction would be managed pursuant to applicable regulatory policy. Accordingly, impacts to important examples of major periods of California history or prehistory would be **less than significant with mitigation incorporated.**

The proposed project has either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated with respect to all natural resources issues pursuant to CEQA. Due to the limited scope of physical impacts to the environment associated with the proposed project, implementation of the mitigation measures described above would ensure impacts to the quality of the environment would be reduced to **less than significant with mitigation incorporated**.

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

Less than Significant with Mitigation Incorporated. CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable, or which can compound to increase other environmental impacts." Section 15130 of the CEQA Guidelines requires evaluation of potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of "reasonably foreseeable probable future" projects, per CEQA Section 15355. Cumulative impacts can result from a combination of the proposed project together with other closely related projects that cause an adverse change in the environment. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

The proposed project's impacts would be individually limited and not cumulatively considerable, because these impacts are either temporary in nature (e.g., limited to the construction period) or are limited to the project site (e.g., potential discovery of unknown cultural or paleontological resources). The potentially significant impacts that would be reduced to a less-than-significant level with implementation of recommended mitigation measures include the topics of biological resources, cultural resources (including tribal cultural resources), paleontological resources, geological hazards, and hazardous materials. Specifically, implementation of **Mitigation Measures BIO-1 through BIO-3** would ensure that impacts to burrowing owl and nesting birds are reduced to less-than-significant levels. Implementation of **Mitigation Measures CUL-1 through CUL-4, TCR-1 and TCR-2, and GEO-2 and GEO-3,** would ensure that impacts to historic and precontact archaeological resources, human remains, tribal cultural resources, and paleontological resources

would be reduced to less-than-significant levels. For the topics of geological hazards, potentially significant impacts to humans and structures would be reduced to less-than-significant levels with implementation of **Mitigation Measure GEO-1**. Furthermore, implementation of **Mitigation Measures HAZ-1 through HAZ-5** would ensure that impacts from the transport, use, or disposal of hazardous materials during project construction, including ACM and LBP materials and the unknown contents on on-site drums, would be reduced to less-than-significant levels.

Adherence to Standard Conditions would also further ensure that impacts related to construction- and operation-period water quality and utility infrastructure and construction-period noise would remain less than significant.

For the topics of aesthetics, agricultural and forestry resources, air quality, energy, greenhouse gases, land use and planning, mineral resources, population and housing, public services, recreation, transportation and wildfire, the project would have no impacts or less-than-significant impacts, and therefore, the project would not substantially contribute to any potential cumulative impacts for these topics.

All environmental impacts that could occur as a result of the proposed project would be reduced to a less-than-significant level through the implementation of the mitigation measures recommended in this document.

When future development proposals are considered by the Town, these proposals would undergo environmental review pursuant to CEQA, and when necessary, mitigation measures would be adopted as appropriate. In most cases, this environmental review and compliance with project conditions of approval, relevant policies and mitigation measures, and the General Plan, and compliance with applicable regulations would ensure that significant impacts would be avoided or otherwise mitigated to less-than-significant levels.

Implementation of these measures would ensure that the impacts of the project and other projects within the vicinity would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be **less than significant with mitigation incorporated**.

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

Less than Significant with Mitigation Incorporated. All development associated with the proposed project must comply with applicable provisions of the 2022 CBC and the Town's building regulations. Accordingly, proper engineering design and construction in conformance with the 2022 CBC standards and a site-specific geotechnical investigation prepared in conformance the current CBC and applicable Town standards (**Mitigation Measure GEO-1**) would ensure that the project does not subject people to significant geologic hazards.

The proposed project would result in the demolition of structures that were potentially constructed prior to regulation of ACM and LBM. Additionally, the proposed project would remove the existing

drums located on-site, which could contain hazardous materials. With implementation of **Mitigation Measures HAZ-1 through HAZ-5**, impacts to the public through the disposal of ACM and LBM and removal of drums during project demolition activities would be reduced to **less than significant with mitigation incorporated**.

As detailed in Section 5.13, Noise, construction and operation of the project would not generate a substantial temporary or permanent increase in ambient noise levels or generate vibration in the vicinity of the project in excess of standards established in the local general plan or noise ordinance with adherence to **Standard Conditions NOI-1 and NOI-2**. Adherence to **Standard Condition NOI-1** would ensure noise and vibration would be restricted to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays (Monday through Friday). Additionally, adherence to **Standard Condition NOI-2** would ensure construction equipment includes suitable exhaust and air intake silencers to ensure construction noise impacts remain less than significant.

Through compliance with existing regulations and policy as codified in **Mitigation Measure GEO-1**, **Mitigation Measures HAZ-1 through HAZ-5**, and **Standard Conditions NOI-1 and NOI-2**, substantial direct or indirect effects on human beings would be reduced to **less than significant with mitigation incorporated**.

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7.0 REFERENCES

AEI Consultants. *Phase I Environmental Site Assessment*. February 1, 2021. Appendix E.

Apple Valley Unified School District. *School Directory.* https://www.avusd.org/schools (accessed February 20, 2023).

Better Buildings U.S. Department of Energy. *Victor Valley Wastewater Reclamation Authority.* https://betterbuildingssolutioncenter.energy.gov/partners/victor-valley-wastewater-reclamation-authority (accessed September 8, 2022).

Title 14, Chapter 3, Sections 15000 through 15387.

California Department of Conservation. *California Important Farmland Finder.* https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed September 6, 2022).

California Department of Forestry and Fire Protection. *Fire and Resource Assessment Program (FRAP).* https://egis.fire.ca.gov/FHSZ/ (accessed September 7, 2022).

California Department of Resources Recycling and Recovery (CalRecycle). *California's 2017 Per Capita Disposal Rate Estimate*. https://calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/2017-2/ (accessed January 3, 2023).

California Department of Resources Recycling and Recovery (CalRecycle). *Solid Waste Information System (SWIS). SWIS Facility/Site Activity Details: Mid-Valley Sanitary Landfill (36-AA-0045).* https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652 (accessed February 20, 2023).

California Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese).* https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM,COLUR&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+(CORTESE) (accessed February 20, 2023).

California Department of Transportation. *California State Scenic Highway System Map.* https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed September 6, 2022).

California Energy Commission. *California Gasoline Data, Facts, and Statistics.* Website: www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics (accessed April 2023).

California Energy Commission. *Electricity Consumption by County.* Websites: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed April 2023).

California Energy Commission. *Gas Consumption by County.* Websites: ecdms.energy.ca.gov/gasbycounty.aspx (accessed April 2023).

California Energy Commission. 2015. *Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026.* Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed April 2023).

California State Legislature, Legislative Analyst's Office. *An Evaluation of the School Facility Fee Affordable Housing Assistance Programs*, January 2001. http://www.lao.ca.gov/2001/011701_school_facility_fee.html (accessed September 7, 2022).

County of San Bernardino. *Town of Apple Valley Comprehensive Airport Land Use Compatibility Plan*. March 1995.

Federal Emergency Management Agency. *Flood Insurance Rate Map No. 06071C6505J*. https://msc.fema.gov/portal/search?AddressQuery=highland%2C%20california?AddressQuery=highland%2C%20california#searchresultsanchor (extracted February 16, 2023).

Federal Highway Administration. *Highway Construction Noise Handbook. Roadway Construction Noise Model, FHWA-HEP-06-015. DOT-VNTSC-FHWA-06-02*. NTIS No. PB2006-109012. August 2006.

Federal Highway Administration (FHWA). *Highway Traffic Noise Prediction Model, FHWA RD-77-108*. 1977.

Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123*. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

Krazan & Associates, Inc. *Addendum No. 1 - Geotechnical Engineering Report, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California*. October 6, 2021. Appendix D2.

Krazan & Associates, Inc. *Geotechnical Engineering Investigation, Proposed Apple Bear Retail Center, 19439 Bear Valley Road, Apple Valley, California.* September 9, 2021. Appendix D1.

Liberty Utilities. *Notice of Water Shortage Contingency Plan and Public Meeting Liberty Utilities (Apple Valley Ranchos Water) Corp.* Date filed: December 8, 2021; Effective January 7, 2022. Website: https://california.libertyutilities.com/uploads/Customer%20Notice%20AV_FINAL%206-7-2022%20Final.pdf. (accessed February 20, 2023).

Liberty Utilities- Apple Valley. *Final Draft 2020 Urban Water Management Plan.* June 2021.

LSA Associates, Inc. *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Apple Bear Commercial Project in Apple Valley, California*. June 14, 2023. Appendix A.

LSA Associates, Inc. *Archeological Resources Assessment for the Apple Bear Commercial Project on Bear Valley Road, Apple Valley, San Bernardino County, California (LSA Project No. WDN2201).* January 16, 2023. Appendix C1.

LSA Associates, Inc. *Biological Monitoring for Cultural Resource Investigation Associated with the Apple Bear Commercial Project, Apple Valley, California.* Page 1. April 13, 2023. Appendix C3.

LSA Associates, Inc. *Noise Impact Analysis for Mister Car Wash*. March 2023.

LSA Associates, Inc. *Operational Noise Impact Analysis for Richmond Wholesale Meat Distribution Center*. May 2016.

LSA Associates, Inc. *Phase II Archeological Testing, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino County, California*. April 2023. Appendix C2.

LSA Associates, Inc. *Traffic Impact Study, Apple Bear Commercial Project, Town of Apple Valley, San Bernardino, California.* February 2023. Appendix H.

MCG Architecture. *Plan Check Response Sheet – Corrections*. 1.c. Site Plan. December 1, 2022.

Michael Brandman Associates. *Final Environmental Impact Report – Foxglove Shopping Center Project. SCH No. 2011051031. City of Madera*. February 1, 2013.

Mojave Desert Air Quality Management District. *2017 MDAQMD Federal 75 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)*. Adopted February 27, 2017.

Phoenix Biological Consulting. *Focused Burrowing Owl, Mohave Ground Squirrel, and Desert Tortoise Surveys for Apple Bear Retail Site*. January 4, 2023. Appendix B.

San Bernardino County. *Countywide Plan Policy Plan*. Policy Map HZ-9 Airport Safety & Planning. July 6, 2020.

San Bernardino County Airport Land Use Commission. *Hesperia Airport Comprehensive Land Use Plan*. January 1991.

Southern California Association of Governments. *Employment Density Study Summary Report*. October 31, 2001.

Southern California Edison (SCE). 2020. *Who We Are.* Website: https://www.sce.com/about-us/who-we-are (accessed April 2023).

Southern California Gas Company (SoCalGas). n.d. *Company Profile.* Website: www.socalgas.com/about-us/company-profile (accessed April 2023).

State of California Department of Conservation, California Important Farmland Finder. *San Bernardino County Williamson Act FY 2015/2016 (Sheet 2 of 2*).

State of California, Executive Department. *Executive Order N-7-22*. March 28, 2022. https://www.gov.ca.gov/wp-content/uploads/2022/03/March-2022-Drought-EO.pdf (accessed February 20, 2023).

State of California Regional Water Quality Control Board. *Water Quality Control Plan for the Lahontan Region*. Chapter 2: Present and Potential Beneficial Uses. As amended through January 14, 2016.

Sustainable Groundwater Management Act (SGMA) Basin Prioritization Dashboard. *Basin Priority Details, Upper Mojave River Valley (6-042)*. Website: https://gis.water.ca.gov/app/bp-dashboard/final/ (accessed February 16, 2023).

Tait & Associates. *Preliminary Hydrology Study, Apple Bear Retail Site.* September 12, 2022. Appendix F2.

Tait & Associates. *Preliminary Water Quality Management Plan for Apple Bear Retail Site.* September 12, 2022. Appendix F1.

The County of San Bernardino. *Mojave River Watershed Technical Guidance Document for Water Quality Management Plans*. April 4. 2016.

Town of Apple Valley. *Development Code 2010.* Chapter 9.35, Commercial and Office Districts. 2010.

Town of Apple Valley. *Environmental Impact Report (SCH# 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002*. Certified August 11, 2009.

Town of Apple Valley. *General Plan, Community Development.* Adopted August 11, 2009, last Amended October 27, 2015.

Town of Apple Valley. *General Plan Land Use Map.* Adopted September 11, 2009, last Amended October 27, 2015.

Town of Apple Valley. *Local Hazard Mitigation Plan*. https://www.applevalley.org/home/showpublisheddocument/24623/636571391905830000 (accessed on September 7, 2022).

Town of Apple Valley. *Services, Planning, Multi-Specific Habitat Conservation Plan*. https://www.applevalley.org/services/planning-division/multi-species-habitat-conservation-plan (accessed February 20, 2023).

Town of Apple Valley. *Terra Nova/Town of Apple Valley 2009 General Plan.*

Town of Apple Valley. *Town Council Staff Report.* https://www.applevalley.org/home/showpublisheddocument/23886/636440017260170000 (accessed September 8, 2022).

Town of Apple Valley. *Zoning Map.* Adopted April 27, 2010, last Amended September 24, 2019.

United States Census Bureau. *QuickFacts, Apple Valley Town, California.* https://www.census.gov/quickfacts/fact/table/applevalleytowncalifornia,US/PST045221 (accessed September 6, 2022).

United States Department of Transportation (DOT). 2021. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Website: www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed April 2023).

United States Geological Survey. *Apple Valley South, California 7.5-Minute Series Topographic Quadrangle Map*. 1980.

APPENDIX A

AIR QUALITY, GREENHOUSE GAS, AND ENERGY ANALYSIS

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APPENDIX B

BIOLOGICAL REPORT

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TRAFFIC IMPACT STUDY

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APPENDIX I

MITIGATION MONITORING AND REPORTING PROGRAM

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