Silicon Sage Centerville Mixed Use Project

Initial Study

37358 through 37494 Fremont Boulevard, 3768 through 3820 Peralta Avenue, 3921 through 3943 Rose Court, and 37417 Jason Way, Fremont, CA.

City of Fremont

July 16, 2018

FINAL

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Quality information

Prepared by	Checked by	Approved by
Various authors	Rodney Jeung	Emma Rawnsley

Revision History

Revision	Revision date	Details
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Prepared for:

City of Fremont
Planning Division – Community Development
39550 Liberty Street, PO Box 5006
Fremont, CA 94537

Prepared by:

AECOM
100 West San Fernando, Suite 200
San Jose, CA, 95113
USA
aecom.com

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Acronyms and Abbreviations

µg/m^3	micrograms per meter cubed
AAA	All Ages and Abilities
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AC Transit	Alameda–Contra Costa Transit District
ACE	Altamont Corridor Express
ACFCWD	Alameda County Flood Control and Water Conservation District
ACM	asbestos-containing materials
ACTC	Alameda County Transportation Commission
ACWD	Alameda County Water District
ADA	Americans with Disabilities Act
ADT	average daily traffic
AF/yr	acre-feet per year
AMP	Archaeological Monitoring Plan
ARB	California Air Resources Board
AUF	acoustical usage factor
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit District
BAU	business-as-usual
bgs	below ground surface
BMP	best management practices
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	*Climate Action Plan*
CDFW	California Department of Fish and Wildlife
Centerville	Centerville's main commercial strip along Fremont Boulevard
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geologic Survey
CH_4	Methane
City	City of Fremont
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide-equivalents
CRHR	California Register of Historical Resources
dB	Decibels
dBA	A-weighted sound levels

DNL	day-night average noise level
DOF	California Department of Finance
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
ESLs	Environmental Screening Levels
FAR	Floor Area Ratio
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FLB	fluorescent light ballasts
FMC	Fremont Municipal Code
FTA	Federal Transit Administration
FUSD	Fremont Unified School District
General Permit	Statewide General Construction Activities Stormwater Permit
General Plan	City of Fremont General Plan
GHG	greenhouse gas
GWP	global warming potential
HARB	Historic Architectural Review Board
HEPA	High efficiency particulate air
HOT	high occupancy toll
HOV	high occupancy vehicle
HPD	Historic Properties Directory
I-680	Interstate 680
I-880	Interstate 880
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
ITS	intelligent transport system
LBP	lead-based paint
L_{dn}	day-night average noise level
L_{eq}	equivalent noise level
LID	low impact development
L_{max}	maximum noise level
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MEI	maximally exposed individual
mgd	million gallons per day
MMT	million metric tons
MRP	Municipal Regional Permit
MSL	mean sea level
MT	metric tons
MTC	Metropolitan Transportation Commission
MUTCD	Manual on Uniform Traffic Control Devices
N_2O	nitrous oxide
NAHC	Native American Heritage Commission

NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	federal Occupational Health and Safety Administration
PCB	Polychlorinated Biphenyl
PDAs	priority development areas
PM	particulate matter
PM_{10}	particulate matter equal to or less than 10 micrometers in diameter
$PM_{2.5}$	particulate matter equal to or less than 2.5 micrometers in diameter
ppm	parts per million
PPV	peak particle velocity
rms	root mean square
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
Scoping Plan	Climate Change Scoping Plan
SF	square-foot or square feet
SFBAAB	San Francisco Bay Area Air Basin
SLF	Sacred Lands File
SO_2	sulfur dioxide
SR	State Route
SR-84	State Route 84
SVOCs	semi-volatile organic compounds
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TCM	Transportation Control Measures
TC-P	Town Center-Pedestrian
TIA	transportation impact analysis
TOD	Transit-Oriented Development
tpd	tons per day
TPH	total petroleum hydrocarbons
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TSCA	Toxic Substances Control Act
U.S. EPA	U.S. Environmental Protection Agency
USD	Union Sanitary District
USGS	United States Geological Survey
UWMP	urban water management plan
VdB	vibration decibels
VOCs	volatile organic compounds
WTP2	Water Treatment Plant No. 2

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1. Introduction

1. Project Title:	Silicon Sage Centerville Mixed-Use Project (PLN2017-00229)
2. Lead Agency Name and Address:	City of Fremont, Community Development Department, 39550 Liberty Street, 1st Floor, Fremont, CA 94538
3. Lead Agency Contact:	Joel Pullen, Senior Planner Phone: (510) 494-4436 Email: jpullen@fremont.gov
4. Project Location:	37358 through 37494 Fremont Boulevard, 3768 through 3820 Peralta Avenue, 3921 through 3943 Rose Court, and 37417 Jason Way, Fremont, CA.
5. Assessor Parcel Number(s):	501-1475-28-2, 501-1475-32-06, 501-1475-33, 501-1475-34, 501-1475-35-2, 501-1475-36-2, 501-1475-37, 501-1475-38, 501-1475-39, 501-1475-40-2, 501-1475-41-1, 501-1475-43-4, 501-1475-49-2, and 501-1475-50-2.
6. Project Sponsor's Name and Address:	SiliconSage Builders, LLC. Attn.: Shaivali Desai 560 S. Mathilda Avenue, Sunnyvale, CA 94086
7. General Plan Designation(s):	Town Center
8. Zoning Designation(s):	Town Center - Pedestrian (TC-P) with Transit-Oriented Development (TOD) Overlay District

2. Project Description

2.1 Project Site and Vicinity

The project site consists of 14 existing parcels totaling approximately 4.6-acres (200,707 square feet [SF]) bounded by Fremont Boulevard, Peralta Boulevard, Jason Way, and Parish Avenue, in the Centerville Community Plan Area of the City of Fremont (City). The project site and vicinity is shown in Figure 2-1. The site is relatively flat, and is at an elevation of approximately 54 feet mean sea level (MSL). The subject property contains mostly commercial buildings (including retail stores, restaurants, and a small warehouse) and associated surface parking. An unoccupied single-family residence (37367 Jason Way) and a decommissioned fire station (37412 Fremont Boulevard) are also present on the site. The former fire station building has been evaluated as potentially eligible for the California Register of Historical Resources and National Register of Historic Places (Page & Turnbull, 2018).

Figure 2-2 shows the project site and the existing uses, and Figure 2-3 shows the former fire station.

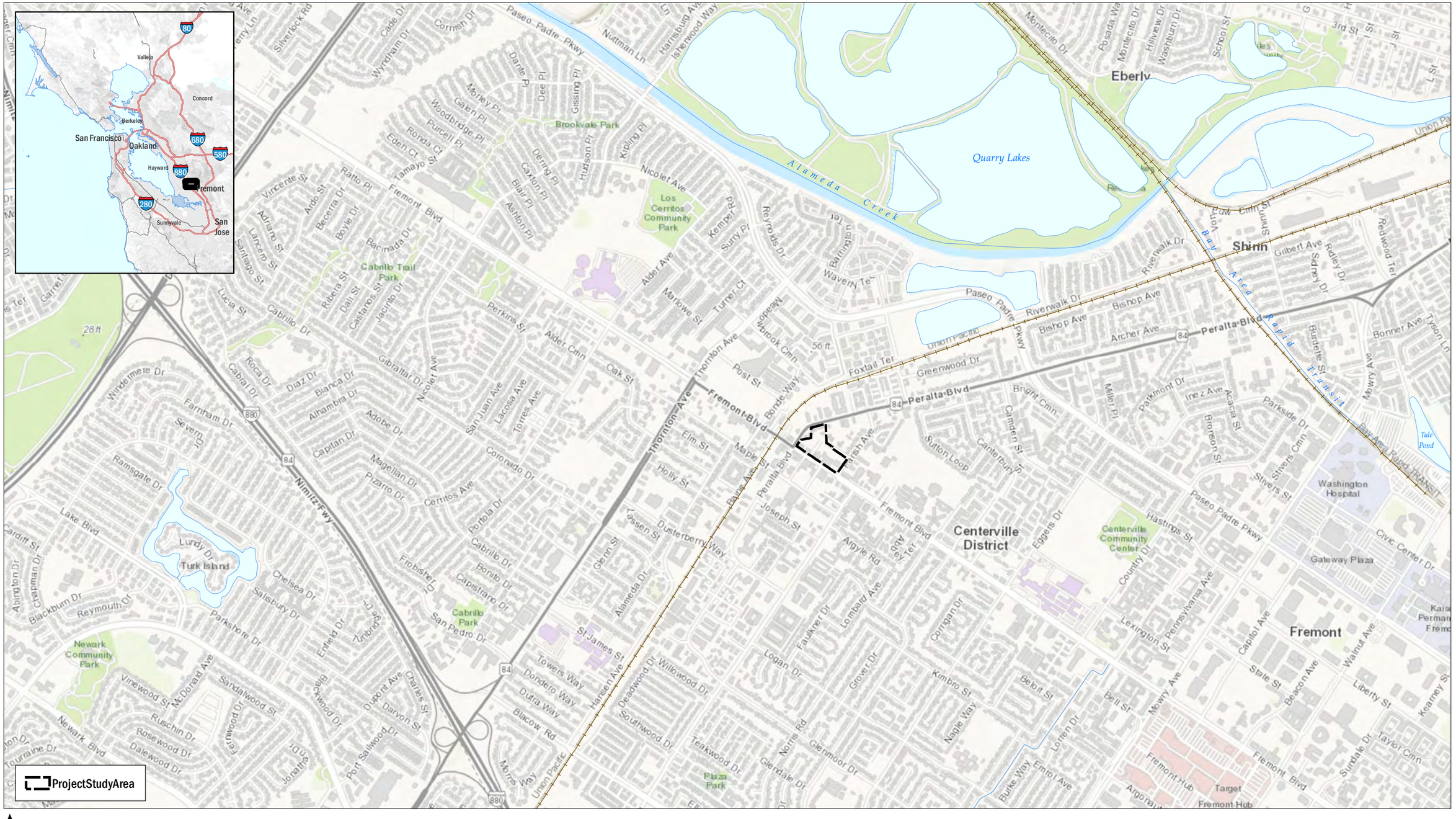
The project site has a General Plan land use designation of Town Center, and is zoned TC-P (TOD), Town Center-Pedestrian with Transit-Oriented Development Overlay District.

2.2 Surrounding Land Uses

Areas to the north and west of Peralta Boulevard and south of Fremont Boulevard in the vicinity of the project site are predominantly commercial, while areas to the north of Jason Way are predominantly residential. Land to the southeast of Parish Avenue is occupied by the Holy Spirit Church and Holy Spirit School and associated uses.

The businesses in the Centerville Town Center area serve the needs of the surrounding community. Commercial and mixed-use land uses are concentrated along Fremont Boulevard, which follow the land use objectives of the Centerville Community Plan Element of the General Plan (City of Fremont, 2011), which incorporated recommendations from the Centerville Framework Plan (City of Fremont, 2010). The zoning allows for a mix of commercial and residential uses along Fremont Boulevard, typically with ground-floor commercial uses and residential uses above. Businesses in the Centerville Town Center are typically small, locally owned enterprises or franchisees. The types of commercial uses include neighborhood-serving restaurants, markets, small shops, and personal services.

Peralta Boulevard, adjacent to the project site, is also designated as State Route 84. Railroad tracks utilized by the Altamont Corridor Express (ACE), Amtrak, and Capitol Corridor passenger services and freight services run approximately parallel to Peralta Boulevard, about 300 to 400 feet north of the project site.



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Fremont Blvd Mixed Use

FIGURE 2-1

Project Site and Vicinity Map

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Imagery: ESRI, 2017

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FIGURE 2-2

Aerial View of Site and Existing Uses

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FIGURE 2-3
Existing Conditions - Former Fire Station

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2.3 Project Objectives

The objectives for the proposed project are to:

- Redevelop an aging, underutilized commercial site with a new mixed-use project that would transform an entire block within the heart of the Centerville Town Center into a vibrant, pedestrian-friendly environment, consistent with the visions of the Centerville Community Plan (2011) and Centerville Framework Plan (2010).
- Enhance the character of the Centerville Town Center with a project that is compatible in scale and design with existing development and historic resources located along Fremont Boulevard and in the surrounding neighborhood, features a complementary mix of land uses that would help to enliven the area, and provide a comfortable and safe environment for pedestrians through the provision of new street improvements and various traffic-calming measures.
- Provide a mid-block pedestrian connection between Peralta Boulevard and Parish Avenue connecting Fremont Boulevard to Jason Way and extend Jason Way all the way to Peralta Boulevard in order to further improve connectivity and walkability in the heart of the historic Town Center.
- Develop high-quality and well-designed housing at higher densities within a Transit-Oriented Development Overlay District which would contribute towards meeting the City's Regional Housing Needs Allocation and encourage transit ridership by locating new housing within walking distance of the Centerville Train Depot and several AC Transit bus lines.
- Promote land use compatibility between the proposed project and the adjoining neighborhood and reinforce the existing pattern of continuous storefronts along Fremont Boulevard by locating the mixed-use buildings directly up to the front property line and the townhomes at the rear of the site adjacent to the existing single-family neighborhood along Jason Way and Parish Avenue.
- Create a continuous and safe walking environment for pedestrians along the subject blocks of Fremont Boulevard, Peralta Boulevard, Parish Avenue, and Jason Way in conformance with the goals and policies of the Mobility Element of the General Plan by eliminating and consolidating driveways, constructing all new sidewalks, and installing a new traffic signal at the intersection of Fremont Boulevard and Parish Avenue.

2.4 Project Characteristics

Table 2-1 below provides a summary of the proposed development, indicating the mix of residential types, amount of retail space, and intended use of the former fire station. In addition to the proposed project, the applicant has proposed a variant, which would increase the amount of residential units, retail floor area, and parking spaces, and demolish the former fire station. The proposed project and the variant are both described in detail in the following sections and are analyzed in this document at an equal level of detail.

2.4.1 Proposed Project (Fire Station Retained)

The proposed project would develop 72 townhomes, 64 apartments, and approximately 25,000 SF of retail uses, along with a community clubhouse, swimming pool, children's playground, and outdoor amenity areas, for use by residents and their guests. The fire station would be retained and refurbished, with a new use as determined by City Council. The residential density of the proposed project would be 29.9 dwelling units per acre. The proposed site plan for the project is shown in Figure 2-4.

Retail uses would be located on the ground floor of two buildings (Buildings A and B) fronting Fremont Boulevard, with residential apartments above. These two buildings would be three stories, except for a small portion of Building A fronting Peralta Boulevard, which would be four stories.

Table 2-1 Comparison of Proposed Project and Variant

Project Component	Proposed Project	Variant
Residential townhomes	72 units	72 units
Residential apartments	64 units	93 units
Retail	25,000 SF	26,000 SF
Parking	255 total on-site spaces 20 on-street spaces	299 total on-site spaces 20 on-street spaces
Proposed use of former fire station building	Seismically upgraded and rehabilitated for future use (to be decided by City Council, possibly as a restaurant/café or daycare). 3,300 SF	Demolished.
Residential density	29.9 dwelling units/acre (rounds to 30)	35.8 dwelling units/acre

The townhomes would be three-story structures behind the commercial/apartment buildings (i.e., on the northern portion of the site) along Jason Way. An entry plaza to the project site would be provided approximately half way along the project's Fremont Boulevard frontage and adjacent to the existing fire station building, which would be retained on the site. An underground parking garage would extend below Building B and the entry plaza, with an entry/exit ramp near the eastern end of the garage.

The proposed project would adjust the parcel boundary of the fire station site to match the size of the building. The other existing structures on the project site (i.e., the commercial businesses and single residence) would be demolished, and the parcels combined.

2.4.2 Variant (Fire Station Demolished)

The variant would develop 72 townhomes, 93 apartments, and approximately 26,000 SF of retail uses, along with a community clubhouse, pool and children's playground, and a community garden, for use by residents and their guests. The residential density of the variant would be 35.8 dwelling units per acre.

The portion of the site proposed for townhomes and the community clubhouse, swimming pool, playground, and outdoor amenity areas would be identical to the layout and development program of the proposed project; the only differences under the variant pertain to the fire station building and the mixed use portion of the project site along the Fremont Boulevard boundary. The proposed site plan for the portion of the variant that varies from the proposed project is shown in Figure 2-5.

Under the variant, the former fire station would be demolished, and proposed Building A would be extended east to include the space occupied by the former fire station building. Above the ground floor, residential apartments on the second and third floors would span the entry plaza to connect Buildings A and B, allowing vehicular and pedestrian access at the street level. The underground parking garage would be extended to the entire length of the combined Buildings A and B, with a second exit ramp at the western end of the garage.

Elevations showing the proposed Fremont Boulevard mixed use frontage under both the proposed project and the variant are presented in Figure 2-6.

2.4.3 New Residential Townhomes and Community Areas

Both the proposed project and variant would include construction of 72 new three-story townhomes on the northeastern portion of the project site, with a mixture of three-bedroom and four-bedroom floor plans. Each home would have a footprint of between approximately 775 and 900 SF, and gross floor area of between approximately 1,800 and 2,100 SF. Maximum building height for the townhomes would be 40 feet.

SOURCE: Silicon Sage Builders

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FIGURE 2-4
Proposed Project Site Layout

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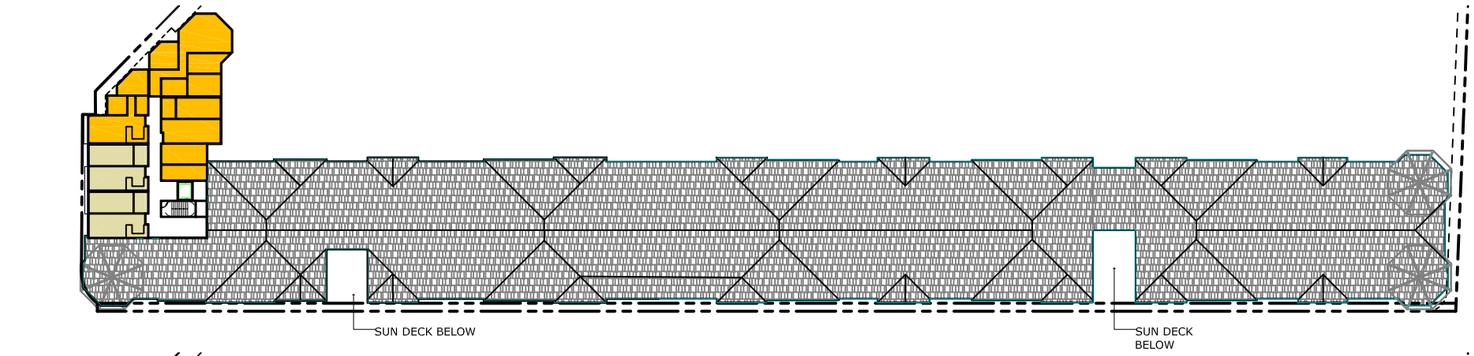
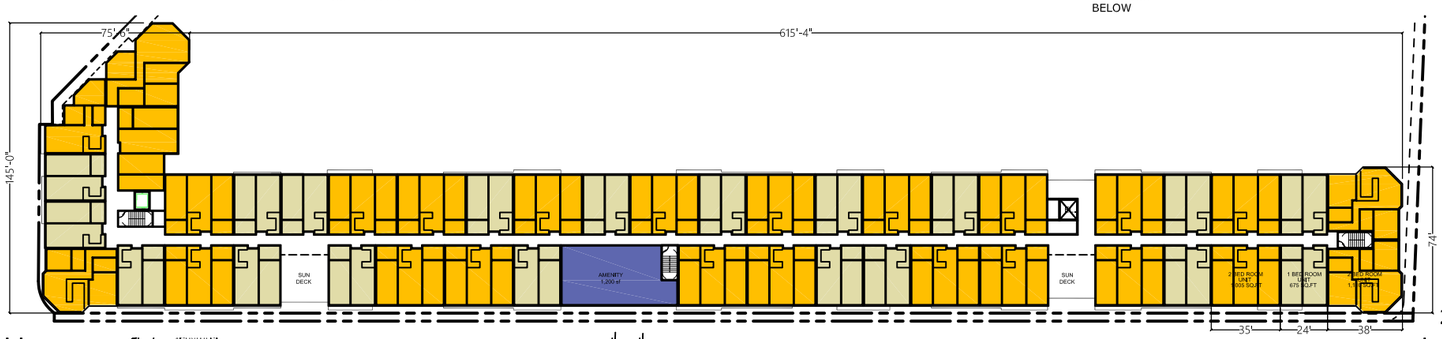


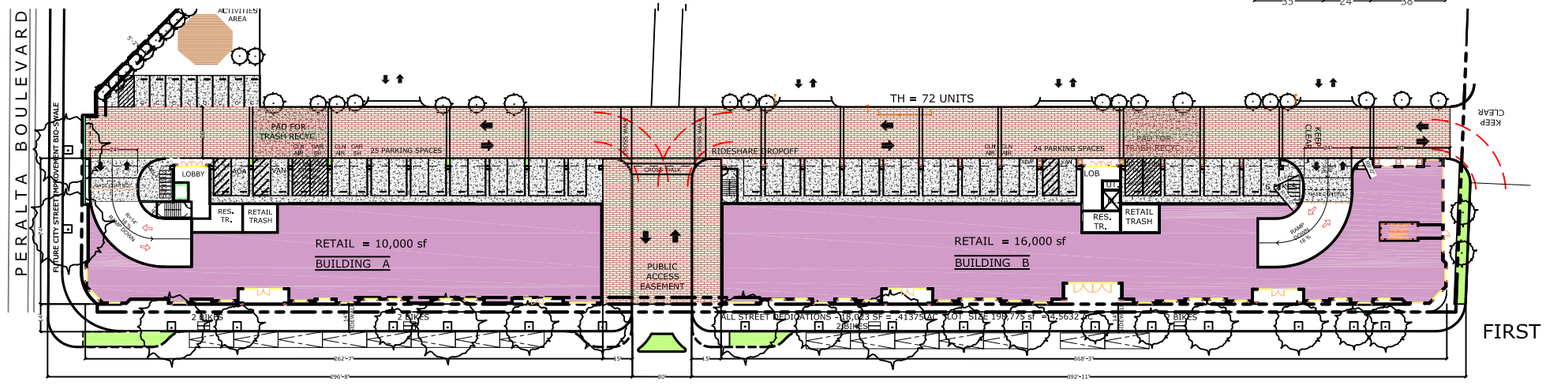
4TH FLOOR PLAN



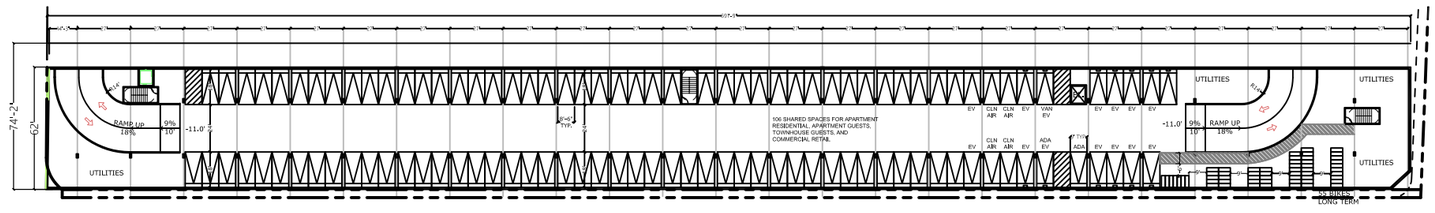
2ND & 3RD FLOOR PLAN TYP.

UNIT COUNT

LEVEL 2 & 3 :	19 X 2 = 38	1-BD UNITS	
	25 X 2 = 50	2-BD UNITS	
LEVEL 4 :	2	1-BD UNITS	
	3	2-BD UNITS	
	TOTAL	**93**	**UNITS**



FIRST FLOOR PLAN



BASEMENT PLAN

Note: Remainder of site under the Project Variant is identical to the Proposed Project (refer Figure 2-4).

SOURCE: Silicon Sage Builders

FIGURE 2-5
Project Variant Site Layout

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PROPOSED PROJECT - CONCEPTUAL MIXED USE BUILDINGS

FREMONT BLVD ELEVATION

PROJECT VARIANT - CONCEPTUAL MIXED USE BUILDINGS

FREMONT BLVD ELEVATION

SOURCE: Silicon Sage Builders

FIGURE 2-6
Conceptual Mixed Use Building Elevations

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Community facilities such as a club house, swimming pool, and children's playground ("tot-lot") are proposed near the center of the site, with a publicly-accessible paseo providing a pedestrian link from the entry plaza on Fremont Boulevard to Jason Way. Several outdoor amenity areas, including a covered lounge, meditation garden, and chess plaza are proposed in the western portion of the site. The variant would be identical to the proposed project in terms of the siting and size of the residential townhomes and community areas.

The 3-story buildings would feature symmetrical facades in the front, with rear garage entrances on the ground floor, and balconies on the second floor. The buildings would feature stucco siding with stone veneer cladding and shingle, tile, and wood accents. The buildings would exhibit a mix of traditional architectural styles used for California Train Depots, including elements of Gothic Revival and Richardsonian Romanesque styles.

Typical elevations of the proposed townhomes are shown in Figure 2-7. The above footprints and floor areas are approximate and would be refined as the final plans and maps are prepared for project entitlement.

2.4.4 New Retail Uses and Residential Apartments

Proposed Project

Under the proposed project, Building A would contain 9,000 SF of ground-floor retail along the frontage of Fremont Boulevard between Peralta Avenue and the existing fire station, with 13 apartments on each of the second and third floors. The portion of the building along the Peralta Boulevard frontage would be one floor taller (four floors) and would contain four additional apartments on the fourth floor.

Building B would contain 16,000 SF of ground-floor retail along the Fremont Boulevard frontage between the proposed entry plaza and Parish Avenue, with 17 residential apartments on each of the second and third floors. Together, Buildings A and B would contain 25,000 SF of retail and 64 two- and three- bedroom apartments.

Buildings A and B would exhibit a mix of Mediterranean and Spanish Revival architectural styles. The ground floors of each building would feature stone veneer cladding and evenly spaced arched openings and multi-lite storefront glazing. Conceptual elevations of the Fremont Boulevard frontage under the proposed project are shown in Figure 2-6 above.

Variant

Under the variant, Building A would contain 10,000 SF of ground-floor retail along the frontage of Fremont Boulevard between Peralta Avenue and the entry plaza. Residential apartments on the second and third floors would extend over the entry plaza to connect with Building B. Similar to the proposed project, the portion of Building A along the Peralta Boulevard frontage would extend to four floors, with five residential apartments on this level.

Building B would contain 16,000 SF of ground-floor retail along the Fremont Boulevard frontage between the proposed entry plaza and Parish Avenue, with residential apartments on both the second and third floors, connecting across the entry plaza to Building A. Together, Buildings A and B would contain 26,000 SF of retail and 93 one- and two- bedroom apartments.

The architectural style and materials of the mixed use buildings would be similar to the proposed project. Conceptual elevations of the Fremont Boulevard frontage under the variant are shown in Figure 2-6 above.

2.4.5 Former Fire Station Building

Proposed Project

The proposed project would seismically upgrade the former fire station building in its current location, and rehabilitate/renovate the building for future use, possibly as a restaurant or café, subject to City Council approval. Conceptual design for the fire station rehabilitation is shown in Figure 2-8. The parcel boundary would be adjusted to match the footprint of the building.

Existing cement plaster on all façades would be retained and repainted. The only exterior changes proposed at the primary (south) façade would be to replace the existing metal pedestrian door and metal roll-up garage door with a metal-framed, fully glazed door and a metal-framed multi-lite garage door, respectively. The transom window above the door and ribbon windows at the second story would be retained. An American flag would also be remounted at the second story below the roofline.

At the rear (north) façade, exterior alterations would include the removal of the existing metal stairs at the northwest corner, and construction of a new, painted metal stair at the opposite rear corner, to access the existing second-story terrace above and the proposed underground parking garage. The existing rear metal canopy would be removed, and the existing rear garage door replaced with a new glazed garage door to match the primary façade. No changes to the rear second story are proposed, except minimal changes related to the proposed removal of the existing staircase and connection with the proposed new staircase at the terrace landing.

No changes are proposed to the western façade of the building, except that a climbing vine would be planted in front of the cement plaster portion of the façade. The existing alleyway along the western façade would be retained for pedestrian access.

The existing building to the east of the former fire station would be demolished, exposing the eastern façade. Two sets of metal-framed storefront sliding doors would be installed along this façade, to provide access from the interior of the building to a seating area of the proposed public entry plaza east of the building. A freestanding wood-framed trellis would be constructed to frame the new doors, and a vertical ladder-like trellis would scale the façade to the left and right of the doors.

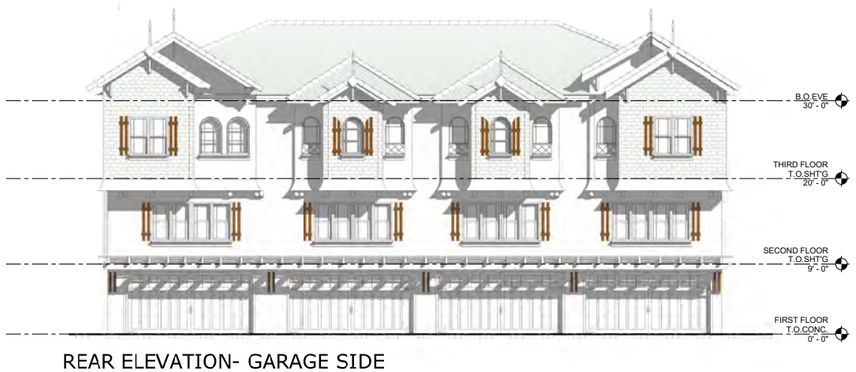
In the interior of the former fire station building, the proposed project would retain the existing open fire station apparatus room at the ground story, and the visual and physical connection to the rear of the site. New Americans with Disabilities Act (ADA) accessible restrooms would be constructed along the western wall, flanked to the south by the existing stairway and to the north by a new elevator. The existing restroom would be removed. On the second story, the overall configuration of space would not be altered. The fire station would provide approximately 3,300 SF of space.

Variant

Under the variant, the former fire station building would be demolished. Demolished materials would be recycled to the maximum extent practical, to minimize waste and waste disposal costs, and to conform to City demolition waste recycling requirements.

FRONT ELEVATION-PARISH AVE.

RIGHT ELEVATION - JASON WAY
NOT TO SCALE



REAR ELEVATION- GARAGE SIDE

EXTERIOR VIEW - PARISH AVE.

SOURCE: Silicon Sage Builders

FIGURE 2-7
Conceptual Townhome Elevations

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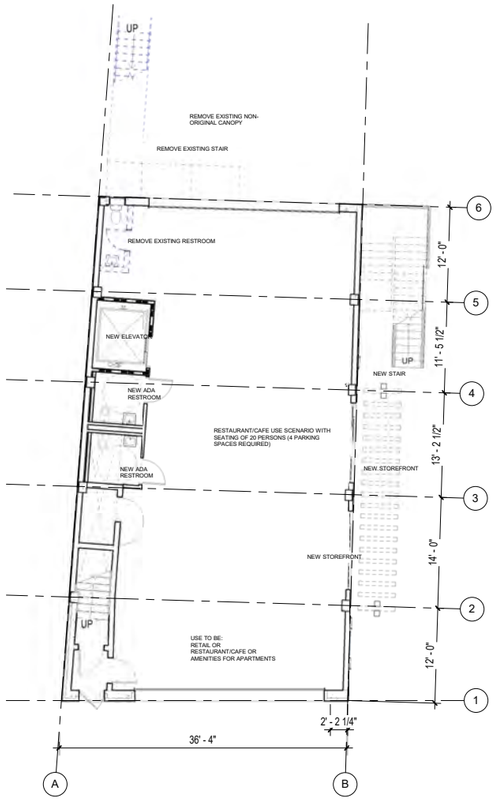
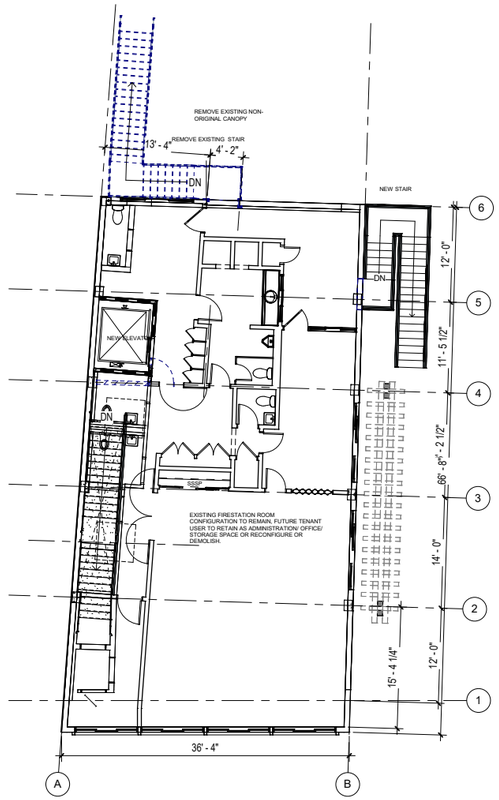
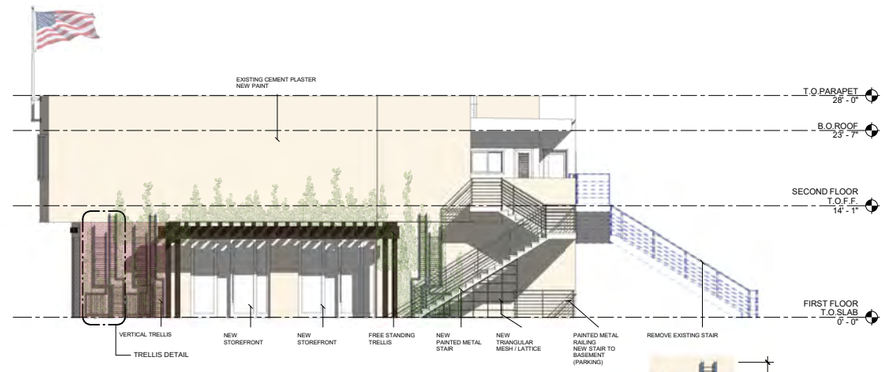


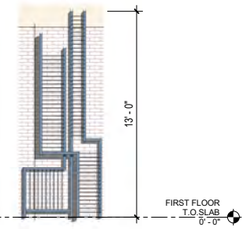
GROUND LEVEL PLAN



SECOND FLOOR PLAN



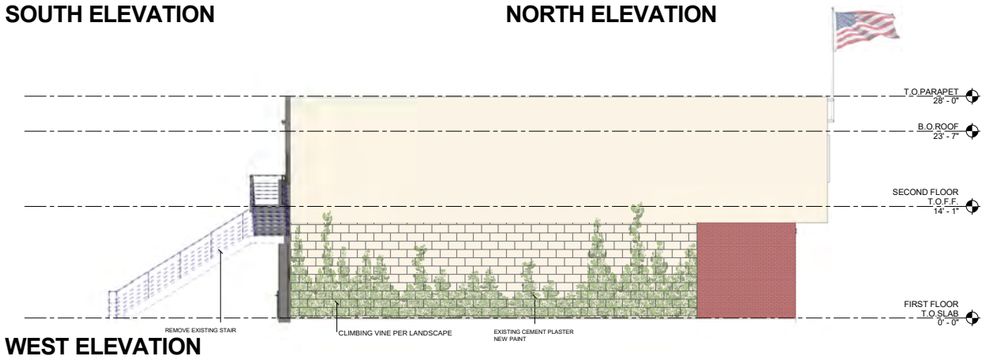
EAST ELEVATION



TRELLIS DETAIL

SOUTH ELEVATION

NORTH ELEVATION



WEST ELEVATION

SOURCE: Silicon Sage Builders

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FIGURE 2-8
Proposed Rehabilitation of Former Fire Station

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2.5 Access and Circulation

2.5.1 Proposed Project

Site Access and Circulation. Access to the project site would be provided via a dedicated driveway on Fremont Boulevard, with a right-turn in and right-turn out restriction and rolled curb median. A dedicated driveway would also be provided on Parish Avenue, with two-way ingress/egress. A new traffic signal would be installed at the Parish Avenue/Fremont Boulevard intersection. The project proposes to extend Jason Way from its current terminus near the middle of the northern site boundary, to connect with Peralta Boulevard via a new street easement. Street parking along the south side of Peralta Boulevard would be prohibited within 240 feet west and 60 feet east of the new intersection with Jason Way, with appropriate landscape design and maintenance to provide adequate sight distance.

Several driveways would serve the project site from the existing and proposed extension of Jason Way, each of which would provide for two-way ingress and egress, and four of which would connect with the internal driveway from Parish Avenue, described above, that extends behind the proposed mixed use buildings, parallel to Fremont Boulevard.

In addition, a gated one-lane trash/recycling truck and emergency vehicle access driveway would be installed on Peralta Boulevard, connecting to the northernmost driveway off Jason Way. Proposed access and circulation is shown on the site plan in Figure 2-4.

Parking. An underground parking garage would be provided under Building B and the adjacent entry plaza, with an ingress/egress ramp near the eastern end of the garage. The parking garage would include 67 parking spaces, for shared use by apartment residents and guests, and retail employees and customers. An additional 44 on-site parking spaces for shared use would be provided at ground level, behind Buildings A and B. A total of 144 on-site parking spaces for townhome residents would be provided in private garages. The total number of on-site parking spaces for the proposed project would, therefore, be 255 spaces, and an additional 15 on-street parking spaces on Fremont Boulevard would be available for retail customers. Five new on-street parking spaces would also be provided along the Jason Way frontage for use by residential visitors.

Bicycle, Pedestrian, and Transit Facilities. A total of 84 bicycle parking spaces would be provided on site: 52 long-term spaces within the underground parking garage, and 32 short-term bicycle parking spaces at various locations throughout the project site, including along the Fremont Boulevard and Jason Way frontages, and adjacent to the surface parking near Buildings A and B. Ten motorcycle parking spaces would be provided in the underground parking garage.

A publicly accessible pedestrian paseo would be provided through the center of the site, connecting the public entry plaza on Fremont Boulevard with Jason Way. An additional pedestrian paseo would traverse the townhome portion of the site, connecting Parish Avenue with Peralta Boulevard. The existing crosswalks at the Fremont/Peralta Boulevard intersection and Fremont Boulevard/Parish Avenue intersections would be maintained, and a new crosswalk would be provided across Fremont Boulevard, adjacent to the pedestrian entry plaza, with high-visibility crosswalk striping. Three new crosswalks and associated traffic-calming “speed tables” would be provided at the Jason Way/Parish Avenue intersection. A new bus shelter would be constructed on Fremont Boulevard, near the Parish Avenue intersection.

2.5.2 Variant

Site Access and Circulation. Access and circulation under the variant would be identical to the proposed project, except that the underground parking garage would extend the entire length of Buildings A and B (along the Fremont Boulevard frontage), and a second ingress/egress ramp would be provided at the western end of the garage, connecting to the internal driveway behind Building A.

Parking. Under the variant, the parking garage would include 106 parking spaces for shared use by apartment residents and guests, and retail employees and customers, (i.e., 39 additional spaces compared to the proposed project). A total of 49 shared parking spaces would be provided behind

Buildings A and B (i.e., five more than the proposed project). The 144 on-site private garage spaces for townhome residents would be identical to the proposed project. The total number of on-site parking spaces for the variant would be 299 spaces. Identical to the proposed project, 15 on-street parking spaces on Fremont Boulevard and five on-street parking spaces on Jason Way would be provided.

Bicycle, Pedestrian, and Transit Facilities. A total of 88 bicycle parking spaces and 10 motorcycle parking spaces would be provided under the variant. Pedestrian access through the site under the variant would be identical to the proposed project, except that the entry plaza off Fremont Boulevard would be narrower and would pass beneath the second and third stories of Buildings A and B, which would connect overhead.

2.6 Utilities and Service Systems

Utilities and service systems under the proposed project and variant would be almost identical, except for minor differences in the vicinity of the former fire station building and proposed Building A. The project and variant would include utility connections to adjacent existing services in surrounding streets, and existing overhead utility lines on Parish Avenue would be undergrounded. Three underground transformers would be installed within the project site, and various utilities would be placed underground beneath the internal driveways and extended portion of Jason Way. New stormwater planters would be constructed to City standards along the extended portion of Jason Way.

The following utility providers would serve the project site:

- Water Supply Alameda County Water District
- Fire Protection City of Fremont Fire Department
- Sanitary Sewer Union Sanitary District
- Storm Drain City of Fremont and Alameda County Flood Control District
- Gas and Electricity Pacific Gas and Electric
- Telephone AT&T
- Cable Television Comcast

2.7 Landscaping and Other Improvements

Landscaping and other improvements under the proposed project and variant would be almost identical, except for minor differences in the vicinity of the former fire station building and proposed Building A. In this location, the proposed project would feature a wide entry plaza adjacent to the rehabilitated former fire station, including six large palm trees. Under the variant, the entry plaza would be narrowed due to the extension of Building A across the former fire station site, and the connection of Buildings A and B across the entry plaza at the second and third floor levels would preclude planting of large trees in this area.

The project site and adjoining sidewalks contain approximately 54 existing trees, including several coast redwood (*Sequoia sempervirens*), northern red oak (*Quercus rubra*), interior live oak (*Quercus wizlizenii*), Mexican fan palm (*Washingtonia robusta*), Japanese zelkova (*Zelkova serrata*), crepe myrtle (*Lagerstroemia indica*), and mayten (*Maytenus boaria*). Of these trees, 48 are considered protected trees under the Tree Preservation Ordinance (Fremont Municipal Code [FMC] Chapter 18.215).

The proposed project and variant would remove 35 of the existing trees and would retain 19 trees. Of the 35 trees to be removed, 29 are protected under the Tree Preservation Ordinance. The remaining 19 protected trees would be retained.

The removal of protected trees is subject to City requirements involving the planting of replacement trees or the payment of in-lieu fees to mitigate the removal of trees that cannot be replaced on the site due to land area constraints, in accordance with the City's mitigation requirements.

Approximately 145 new trees, at minimum 24-inch box size, would be planted as part of the proposed project or variant, in accordance with City requirements. The proposed replacement trees (quantity and type) to mitigate the loss of protected trees are subject to the approval of the City of Fremont Landscape Architect.

2.8 Construction Activities and Schedule

2.8.1 General Construction Activities

Typical construction equipment such as graders, backhoes, excavators, and dozers would be used for site preparation and construction. No pile-driving or blasting is anticipated. Equipment and materials would be staged for construction within established work areas on the project site.

The proposed project would include site grading to prepare the site for the proposed development. The preliminary estimates of site grading volumes for the proposed project and variant are shown in Table 2-2 below. The maximum depth of excavation under both the proposed project and variant is estimated to be 15 feet.

Table 2-2 Estimated Cut and Fill Volumes for Proposed Project and Variant

	Proposed Project	Variant
Estimated Fill Volume	400 cubic yards	400 cubic yards
Estimated Cut Volume	20,500 cubic yards	29,400 cubic yards
Estimated Balance to be exported	20,100 cubic yards	29,000 cubic yards

Heavy vehicles (i.e., haul [tractor-trailer] trucks, machinery) would access the project site via construction entrances off Fremont Boulevard, Peralta Boulevard, and/or Parish Avenue.

Construction of the project is estimated to require an average of 100 construction workers on a typical work day. Up to 400 construction workers per day may be required periodically. Parking for construction workers would be provided on the project site, unless construction activities preclude such use. In such cases, an off-site parking lot would be rented to provide for construction worker parking. There would be no multi-day staging of vehicles or equipment on or along existing roadways.

2.8.2 Construction Schedule and Phasing

Construction activities would occur between 7:00 a.m. and 7:00 p.m. Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturdays and holidays (no construction activities would be allowed on Sundays), in accordance with FMC Chapter 18.160. There would likely be multiple destinations for off-haul materials. Construction workers would also be arriving from different directions. Travel routes for workers, soils export, and material import would be determined in consultation with the City Public Works Department, but would likely travel from Interstate 880, along Fremont Boulevard, to the project site.

Project construction would commence with demolition of existing on-site structures (except the former fire station under the proposed project), followed by site preparation and grading. Retail and residential construction (including fire station rehabilitation under the proposed project), civil utilities, and paving would follow. Project construction is expected to last 18 months, commencing in February 2019 with completion in October 2020. This project schedule is dependent on market conditions, regulatory approvals, and other factors and, therefore, is subject to change.

2.9 Standard Development Requirements

The City of Fremont has established standard development requirements to address resource protection (FMC Chapter 18.218). These requirements apply to air quality (construction-related emissions), biological resources (special-status species), and cultural resources (notification of affiliated California Native American Tribes and accidental discovery of cultural resources).

The proposed project would comply with these standard development requirements, which are described in greater detail in the relevant topical area of the Initial Study (see Sections 4.3, Air Quality; 4.4, Biological Resources; and 4.5, Cultural Resources).

2.10 Project Approvals

The project is a private development proposal that involves private funds (no City, State, or federal funds). The approvals that would require discretionary actions by the City include:

- Discretionary Design Review
- Vesting Tentative Tract Map
- Conditional Use Permit (dependent on possible future uses of commercial component)
- Private Street
- Tree Removal Permit

The project would be reviewed and discussed at public hearings before the Historic Architectural Review Board (HARB), Planning Commission, and City Council.

The project may also require permits and/or approvals from the following agencies:

- Alameda County Flood Control and Water Conservation District
- Alameda County Water District
- Alameda County Department of Environmental Health
- Bay Area Air Quality Management District
- San Francisco Bay Area Regional Water Quality Control Board
- Union Sanitary District
- State Department of Toxic Substances

References:

City of Fremont, 2010. *Centerville Framework Plan*. Available: https://fremont.gov/DocumentCenter/Home/View/3662. Accessed April 5, 2018.

City of Fremont, 2011. *City of Fremont General Plan*. Community Plans Element. Adopted December 2011. Available: https://fremont.gov/398/General-Plan. Accessed February 8, 2018.

Page and Turnbull, 2018. 37412 Fremont Boulevard Historic Resource Impact Analysis. Fremont, California. Prepared for Fremont Community Development Department. Revised May 7.

3. 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 on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ GHG Emissions/Climate Change
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Geology / Soils
☐ Land Use / Planning	☐ Mineral Resources	☒ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☒ Mandatory Findings of Significance

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ENVIRONMENTAL DETERMINATION

On the basis of this Initial Study, the City of Fremont finds:

☐ 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kristie Wheeler
Signature
City of Fremont

7/16/18
Date

Planning Manager
Title

Kristie Wheeler
Printed Name

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4. Environmental Checklist

4.1 Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1.a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
1.b. Substantially damage or destroy scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
1.c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
1.d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting:

The City of Fremont is located on the east side of the San Francisco Bay with the Mission Hills to the east, Union City to the north, and Milpitas to the south. Fremont is characterized as a large, mostly developed suburban community with residential areas mainly located in the eastern portion of the City and industrial and regional commercial areas located in the western portion of the City, along Interstate 880 (I-880).

Visual Character and Views

The 4.6-acre project site is bounded by Fremont Boulevard, Peralta Boulevard, Jason Way, and Parish Avenue in the Centerville Community Plan Area (see Figure 2-1 in Chapter 2, “Project Description”). The project site is within the historic Centerville Town Center, which extends along both sides of Fremont Boulevard between Thornton and Central Avenues and contains the district’s largest and oldest concentration of retail structures. Surrounding the central commercial district are low-density residential neighborhoods composed of single-family detached homes characteristic of the post-war period, newer multi-family units, and a few mixed-use buildings (City of Fremont, 2011).

The project site is relatively flat, and is at an elevation of approximately 54 feet mean sea level. The project site consists mostly of one- and two-story commercial buildings, including retail stores, restaurants, and a small warehouse; paved parking lots; an abandoned lot with weeds and grasses; and landscaped areas planted with ornamental trees and bushes (see Figure 2-2 in Chapter 2, “Project Description”). Buildings on the project site vary in architectural style, height, color, and bulk. An unoccupied single-family residence is located on the project site at 37367 Jason Way. The fenced area behind the house includes garbage and a rusted pick-up truck.

In addition, the project site contains a historic two-story former fire station that is located in the southwestern corner of the project site (37412 Fremont Boulevard). The fire station was built in the early 1950s and is representative of mid-century architecture. The fire station has been decommissioned and is in a state of disrepair (see Figure 2-3 in Chapter 2, “Project Description”).

Areas to the north and west of Peralta Boulevard and south of Fremont Boulevard in the vicinity of the project site are predominantly commercial uses that include neighborhood-serving restaurants, markets, small shops, and personal services as well as small, locally-owned enterprises or franchisees. These buildings are generally consistent with the existing visual character of the project site. Viewers of the project site from these locations include motorists, employees and patrons of local businesses, pedestrians, and bicyclists.

Areas to the north of Jason Way are predominantly single- and multi-story residences. Land to the southeast of Parish Avenue is occupied by the Holy Spirit Church and Holy Spirit School and associated uses. Occupants of these residences and pre-school students, parents, and other visitors to the school and church have views of the project site.

Railroad tracks utilized by the Altamont Corridor Express, Amtrak, and Capitol Corridor passenger services and freight services run approximately parallel to Peralta Boulevard, about 300 to 400 feet north of the project site. Currently, views of the project site are not available from passenger trains due to the flat topography of the project site and intervening commercial and residential uses.

Scenic Highways and Corridors
The California Department of Transportation (Caltrans) administers the California Scenic Highways Program. There are no officially designated California Scenic Highways in the vicinity of the project site (Caltrans, 2017).

The Fremont General Plan designates a 15-mile segment of Paseo Padre Parkway between State Route (SR) 84 and East Warren Avenue, a 6-mile segment of SR 84 between Dumbarton Bridge and Interstate 880, and a 10-mile segment of the Bay Area Rapid Transit District (BART) Line between the Union City border and the Milpitas border as scenic routes (City of Fremont, 2011). The project site is 0.7 mile south of the designated segment of Paseo Padre Parkway, 1.5 miles north of the designated segment of SR 84, and 1.3 miles south and southwest from the designated segment of the BART Line.

Scenic Vistas
Although there are no designated scenic vistas in the project vicinity, East Bay Regional Park District's Mission Peak Regional Preserve is located southeast of the project site and panoramic views of the project area occur from Mission Peak. These viewpoints are approximately seven miles southeast of the project site and provide park visitors distant views of the site and the San Francisco Bay in the background.

Light and Glare
The project area is located in a highly urbanized environment and is surrounded by existing sources of light and glare. These sources of light and glare include existing streetlights along Fremont Boulevard, Peralta Boulevard, Parish Avenue, and Jason Way; exterior lighting on commercial and residential buildings; outdoor lighting on surface parking lots; illuminated signage; reflective building material; and vehicular headlights.

Discussion:

1a) Would the project have a substantial adverse effect on a scenic vista?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Although there are no designated scenic vistas in the project vicinity, the Mission Peak Regional Preserve is located southeast of the project site and panoramic views of the project area occur from Mission Peak. These viewpoints are approximately seven miles southeast of the project site and provide park visitors distant views of the site and the San Francisco Bay in the background. Distant views from Mission Peak overlook urban development, most of which is visually similar to the commercial and residential development proposed for the project site. Because of the distance of the project site from Mission Peak and the density of urban development in the project area, the mixed-use development on the project site would be indistinguishable from the surrounding area. Therefore, the proposed project or variant would not substantially affect views from Mission Peak.

Thus, impacts to scenic vistas would be **less than significant**, and this impact will not be further addressed in the EIR.

1b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Construction and Operation – Proposed Project or Variant: **No Impact**

There are no officially designated California Scenic Highways in the vicinity of the project site. As described above, the project site is 0.7 miles south of the segment of Paseo Padre Parkway designated as a scenic route by the Fremont General Plan, 1.5 miles north of the designated segment of SR 84, and 1.3 miles south and southwest from the designated segment of the BART Line. Because of the flat topography in the area, and surrounding urban development, the project site would not be visible from these City-designated scenic routes. Thus, there would be **no impact** scenic resources, and this impact will not be further addressed in the EIR.

1c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Implementation of the proposed project or variant would noticeably alter the visual character of the project site. Construction of the proposed project would demolish all buildings on the site except for the former fire station, which would be retained and rehabilitated. The proposed project would develop 72 townhomes, 64 apartments, and approximately 25,000 SF of retail uses, along with a community clubhouse, pool and children's playground, and a community garden on the site (see Figure 2-4 in Chapter 2). Rehabilitation of the former fire station would include repainting the cement plaster on all façades; removing the existing rear metal canopy; and removing and replacing existing metal pedestrian doors, metal roll-up garage doors, and the existing metal stairs.

Construction of the variant would demolish all buildings on the site (including the former fire station), and would develop 72 townhomes, 93 apartments, and approximately 26,000 SF of retail uses, along with a community clubhouse, pool and children's playground, and a community garden. The portion of the site proposed for townhomes and the community clubhouse, pool, playground and garden areas would be identical to the layout and development program of the proposed project; the only differences under the variant pertain to the fire station building and the mixed use portion of the project site along the Fremont Boulevard frontage.

The following plans recognize the unique land use and design opportunities and issues in the Centerville Town Center:

- City of Fremont General Plan Chapter 4, Community Character, and Chapter 11, Community Plans (City of Fremont, 2011)
- City of Fremont Centerville Framework Plan (City of Fremont, 2010)
- Citywide Design Guidelines (City of Fremont, 2017)
- Multifamily Design Guidelines (City of Fremont, 2018).

Collectively, the design standards and guidelines in these documents are intended to provide an overall framework for strengthening the interconnections between land uses, Fremont Boulevard, and buildings that influence the identity of the district; ensuring that the scale and design of new development contributes to the vision for Centerville as an attractive, walkable Town Center; and providing a stronger sense of identity, visual quality, and vitality. The list below summarizes some of the design requirements from these documents, with which project site design should conform.

- New buildings should respond and contribute to their context both in the functional and architectural sense. To activate Centerville, buildings should be oriented toward Fremont Boulevard and have a carefully designed frontage oriented parallel to the street that is welcoming to the public.
- New development is encouraged to vertically mix uses.
- A variety of climate appropriate street trees to unify the street.

- Building heights are encouraged to be multi-level, two to three stories in height, and possibly taller.
- Building should be located relatively close to the street right of way and close in adjacency to one another.
- Building facades should create visual interest for pedestrians; break up massing through facade modulation; and have a distinct base, middle, and top zone.
- Project design should complement surrounding development and the character of community.
- Project design should provide authentic representations of architectural styles and details.
- At least two different building types should be included in projects with multiple buildings. Materials, textures, and colors should be used to enhance different parts of a building's facade where appropriate to the architectural style.
- All sides of a building should include architectural detailing. Stucco-textured foam trim molding should not be used as the only application to provide architectural detailing. Architectural detailing includes railings, trellises, trim, cornices, or similar architectural elements.
- Durable/textured building materials (e.g., stone, brick, masonry block, slate, tile) shall be incorporated at the base of buildings in areas where pedestrian activity is expected.

The proposed project and variant would be consistent with the visual and design policies and requirements enumerated above, as well as the intent and purpose of the source documents. The proposed project and variant would redevelop an aging, underutilized commercial site with a new mixed-use project that would alter an entire block within the Centerville Town Center into a pedestrian-active, mixed use environment, consistent with the visions of the Centerville Framework Plan and the City's General Plan. In addition, the proposed project or variant would reinforce the character of the Centerville Town Center with a project that is compatible in use, scale, and design with existing development along Fremont Boulevard and in the surrounding neighborhood.

Under either the proposed project or variant, the townhomes would be three-story structures behind the commercial/apartment buildings (i.e., on the northern portion of the site). The three-story buildings would feature symmetrical facades in the front, with rear garage entrances on the ground floor, and balconies on the second floor. The buildings would feature stucco siding with stone veneer cladding and shingle, tile, and wood accents. The buildings would exhibit a mix of traditional architectural styles used for California Train Depots, including elements of Gothic Revival and Richardsonian Romanesque styles. Typical elevations of the proposed townhomes are shown in Figure 2-7 in Chapter 2. As such, the project design would complement the surrounding development and enhance different parts of the building facades.

Under either the proposed project or variant, the retail uses would be located on the ground floor of two buildings (Buildings A and B), with residential apartments above. These two buildings would be three stories, except for a small portion of Building A fronting Peralta Boulevard, which would be four stories. Buildings A and B would exhibit a mix of Mediterranean and Spanish Revival architectural styles. The ground floors of each building would feature stone veneer cladding and evenly spaced arched openings and multi-lite storefront glazing. Conceptual elevations of the Fremont Boulevard frontage are shown in Figure 2-6 in Chapter 2. These design features fulfill the design objectives for vertically mixed uses and architectural details that distinguish the different floors and pedestrian activity.

Landscaping and other improvements under the proposed project and variant would be almost identical. Approximately 145 new trees would be planted as part of the proposed project or variant, following construction in accordance with City requirements.[1] The proposed project or variant would be required to comply with the landscaping standards and requirements in the City's Zoning Ordinance (Chapter

[1] The project site and adjoining sidewalks currently contain approximately 54 existing trees. The proposed project (and project variant) would remove 35 of the existing trees, of which 29 are protected under the Tree Preservation Ordinance (Fremont Municipal Code [FMC] Chapter 18.215), and the remaining 19 protected trees would be retained. See Section 3.5, "Biological Resources," for further discussion of the City's Tree Preservation Ordinance.

18.45.030(c)) for all commercial and mixed-use districts, which requires all yard areas be landscaped according to their purpose and requires planting Bay friendly and water efficient landscapes meeting State standards. Furthermore, the proposed project would be required to meet Citywide Design Guidelines landscaping requirements that state trees and shrubs should be spaced to allow for mature and long-term growth and unpaved areas should be covered with shrubs and/or ground cover (City of Fremont, 2017). New trees and landscaping would generally contribute to the visual character of the site's interior and exterior appearance and unify the street.

In summary, the proposed project or variant would be consistent with the Centerville Framework Plan and City General Plan and would implement the City's design standards and guidelines for improvements to Centerville Town Center, as described above. The proposed project or variant would be consistent with the City's Place Types Manual for development within a Town Center.[2] The proposed project or variant provide a mixture of low- to mid-rise building ranging from one to three stories, create smaller blocks for convenient pedestrian access, provide traditional architecture, and consist of narrow lots that provide a compact development pattern.

The proposed project or variant would be compatible with the existing visual character and quality of the project site and its surrounding, and overall, would improve the visual quality and character of the project area in a manner consistent with the City's vision for future development in the area. Therefore, the proposed project or variant would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts related to the visual character of the surrounding community would be **less than significant**, and this impact will not be further addressed in the EIR.

1d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Construction activities for the proposed project or variant would comply with the City's construction hours, which are limited to daytime (7am to 7pm on weekdays; 9am to 6pm on Saturdays and holidays; no construction allowed on Sundays). Since construction is limited to daytime hours, new sources of light would not be required to enable construction. While some night time lighting may be required for site security during the construction period, this would be shielded to reduce spillover onto neighboring properties and public rights-of-way. Construction-related impacts from light and glare would be **less than significant**. This impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The light and glare created by development under the proposed project or variant would be consistent with the levels of lighting and glare currently emitted by development surrounding the project site, and the existing one- and two-story commercial buildings, including retail stores, restaurants, and a small warehouse, and parking lots at the project site.

New lighting would be required to meet the Citywide Design Guidelines that are intended to minimize glare on neighboring properties and public rights-of-way by shielding security lighting, and lighting would not project above the fascia or roof line of buildings (City of Fremont, 2017). The City's Multifamily Design Guidelines require pedestrian-scaled lighting to be less than 16 feet in height and be used to illuminate areas used for pedestrian circulation (City of Fremont, 2018). In addition, the proposed project or variant would be required to comply with the development standards and requirements in the City's Zoning Ordinance (Chapter 18.45.030(c)) for all commercial and mixed-use districts, which requires that all exterior light sources be designed so as not to create significant glare on adjacent properties through the use of concealed source and/or downcast light fixtures.

Because the proposed project or variant would not introduce new sources of light and glare different from the existing light and glare from current uses and street lighting and new lighting would be regulated by

[2] The Place Types Manual is included in the Community Character Element of the City's General Plan. The Place Type Manual is an urban design tool used to guide and evaluate urban development in terms of form, scale, and function in the built environment, and includes descriptions, standards, and graphic examples of each place type.

City guidelines and regulations, the proposed project or variant would not generate a substantial new source of light and glare that would adversely affect day or nighttime views in the area. Thus, the project's impacts related to light and glare would be **less than significant**, and this impact will not be further addressed in the EIR.

References:

California Department of Transportation, 2017. Alameda County. Officially Designated Scenic Highway Map. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed: April 13, 2018.

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City of Fremont, 2018. City of Fremont Multifamily Design Guidelines. Adopted October 8, 2013, Amended March 6, 2018. Available: https://fremont.gov/DocumentCenter/View/18609/Multifamily-Design-Guidelines-Amended-March-2018. Accessed May 23, 2018.

4.2 Agricultural and Forestry Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2.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?	☐	☐	☐	☒
2.b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
2.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))?	☐	☐	☐	☒
2.d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
2.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?	☐	☐	☐	☒

Discussion:

2a-2e) Would the proposed project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use? Would the proposed project conflict with existing zoning for agricultural use, or a Williamson Act contract? Would the proposed project conflict with existing zoning for, or cause rezoning of, forest land or timberland? Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use? Would the proposed 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?

Construction and Operation – Proposed Project or Variant: **No Impact**

The California Department of Conservation classifies the project site and the surrounding areas as Urban and Built-up Land; therefore, the project site is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), and is not subject to any Williamson Act contracts (California Department of Conservation 2014; 2015). The site does not contain any forest or timberlands. The 4.6-acre project site is occupied by twelve buildings, including a former fire station, minimal landscaped areas, pedestrian sidewalks, and several paved parking lots. The project area is currently zoned as Town Center-Pedestrian (TC-P) with Transit-Oriented Development overlay (TOD) (City of Fremont, 2016).

Neither the proposed project nor variant would rezone the project site. Consequently, neither the proposed project nor the variant would convert farmland to non-agricultural use, convert forest land to non-forest use, or conflict with existing agricultural or timberland zoning. Construction or operation of the proposed project or variant would, therefore, have **no impact** on agricultural and forest resources, and these impacts will not be further addressed in the EIR.

References:

California Department of Conservation, 2014. Alameda County Important Farmland. Available at ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/ala14.pdf. accessed January 25, 2018.

_____, 2015. Alameda County Williamson Act FY 2014/2015. Available at ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Alameda_14_15_WA.pdf. Accessed January 25, 2018.

City of Fremont, 2016, Zoning Districts: Brief summation, Available at https://fremont.gov/DocumentCenter/Home/View/2031, accessed January 25, 2018

4.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
3.b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
3.c. Result in 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
3.d. Expose sensitive receptors to substantial pollutant concentrations	☐	☒	☐	☐
3.e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Setting:

Air quality is defined by the concentration of pollutants in relation to their impact on human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, and sunlight. Therefore, ambient air quality conditions within the local air basin are influenced by such natural factors as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

The project site is located within the City of Fremont in Alameda County, under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD monitors air quality within Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa counties and portions of Solano and Sonoma counties in the San Francisco Bay Area Air Basin (SFBAAB). Local climatological effects, including wind speed and direction, temperature, inversion layers, and precipitation and fog, can exacerbate air quality problems in the SFBAAB. The climate of the SFBAAB is characterized by warm, dry summers and mild winters.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the United States Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) as being of concern both on a nationwide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); lead; and particulate matter (PM), which is subdivided into two classes based on particle size, PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$). Because the air quality standards for these air pollutants are regulated using human and environment health based criteria, they are commonly referred to as "criteria air pollutants."

Areas are classified under the federal Clean Air Act and California Clean Air Act as attainment, non-attainment, or maintenance (previously non-attainment and currently attainment) for each criteria pollutant based on whether the federal and state air quality standards have been achieved. With respect to federal standards, the SFBAAB is designated as a nonattainment area for ozone and $PM_{2.5}$, and as an attainment or unclassified area for all other pollutants. With respect to the state standards, the SFBAAB is designated as a nonattainment area for ozone, PM_{10}, and $PM_{2.5}$, and as an attainment area for all other pollutants.

Discussion:

3a) Would the project conflict with or obstruct implementation of any applicable air quality plan?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Air quality plans describe air pollution control strategies to be implemented by a city, county, or region. The primary purpose of an air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with the requirements of the federal Clean Air Act and California Clean Air Act requirements. BAAQMD prepares plans to attain state and national ambient air quality standards in the SFBAAB. BAAQMD adopted the *2017 Clean Air Plan: Spare the Air, Cool the Climate* on April 19, 2017 (BAAQMD, 2017). This plan provides a regional strategy to attain state and federal air quality standards by reducing ozone, PM, and toxic air contaminants (TACs).

Air quality plans identify potential control measures and strategies, including rules and regulations that could be implemented to reduce air pollutant emissions from industrial facilities, commercial processes, on- and off-road motor vehicles, and other sources. BAAQMD implements these strategies through rules and regulations, grant and incentive programs, public education and outreach, and partnerships with other agencies and stakeholders.

Projects that are consistent with the assumptions used in development of the air quality plan are considered to not conflict with or obstruct the attainment of air quality levels identified in the plan. Assumptions for emission estimates are based on population, employment, and land use projections taken from local and regional planning documents. As discussed in more detail in Section 4.10, “Land Use and Land Use Planning,” the proposed project or variant would be consistent with the City’s General Plan and Centerville Community Plan land use designation of Town Center, and is zoned, Town Center-Pedestrian with Transit Oriented Development Overlay District TC-P (TOD), which allows for a mix of commercial and residential uses along Fremont Boulevard. Because the proposed project or variant would consist of a mixed-use development that provides pedestrian connections and features high-density housing within a TOD district, the proposed project or variant would be consistent with the development assumptions for land uses and vehicle trips associated with the General Plan land use designation of the site. Thus, the intensity of operational emissions associated with the proposed project or variant has been accounted for in the air quality plan.

In addition, the proposed project or variant would be consistent with Transportation Control Measures (TCM)–D2 and D3, Pedestrian Access and Facilities Improvements and Local Land Use Strategies, respectively. TCM-D2 calls for improvement of pedestrian facilities that encourage walking by funding projects that improve pedestrian access to transit, employment, and major activity centers. TCM-D3 calls for promotion and support for land use patterns, policies and infrastructure investments that support high density mixed-use, residential and employment development in order to facilitate walking, bicycling, and transit use. The proposed project or variant provide pedestrian connections to further improve the connectivity and walkability in the heart of the Town Center as well as high-density housing within walking distance of the Centerville Train Depot and several AC Transit bus lines.

Consistency with the air quality plan is also determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations, or contribute to a new violation of the national ambient air quality standards. The BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines include thresholds of significance that are applied to evaluate regional impacts of project-specific emissions of air pollutants and their impact on BAAQMD’s ability to reach attainment (BAAQMD, 2017).

Emissions that are above these thresholds have not been accommodated in the air quality plans and would not be consistent with the air quality plans. As discussed in Item 3b below, construction and operational criteria pollutant emissions for the proposed project or variant would not exceed BAAQMD significance thresholds. Therefore, the proposed project or variant would not conflict with or obstruct implementation of the BAAQMD 2017 Clean Air Plan. The impact would be **less than significant** and will not be further addressed in the EIR.

3b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Construction of the proposed project or variant would result in the temporary generation of ozone precursors [reactive organic gases (ROG) and nitrogen oxides (NO_X)], PM_{10}, and $PM_{2.5}$ emissions from soil excavation and material transport. ROG and NO_X emissions are primarily associated with mobile equipment exhaust. Fugitive dust emissions are primarily associated with site preparation and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site.

Construction activities for the proposed project would involve the demolition of the existing buildings (except for the former fire station) and the construction of 72 townhomes, 64 apartments, and approximately 25,000 SF of retail uses, along with a community clubhouse, pool and children's playground, and a community garden. The air quality analysis for the proposed project (Appendix A-1) assumed construction would begin in March 2018 and last approximately 14 months, involve demolition of approximately 55,000 square feet of buildings, and result in approximately 20,100 cubic yards of soil off-haul. Although project construction is anticipated to begin in February 2019, the analysis for the proposed project is conservative as exhaust emissions from construction equipment are expected to decrease over time as stricter standards take effect, and as advancements in engine technology, retrofits, and turnover in equipment fleet are anticipated to result in lower levels of emissions over time.

Construction activities for the variant would involve the demolition of all existing buildings and the construction of 72 townhomes, 93 apartments, and approximately 26,000 SF of retail uses, along with a community clubhouse, pool and children's playground, and a community garden. The air quality analysis for the proposed variant (Appendix A-2) assumed construction would begin in February 2019 and last approximately 18 months, include demolition of approximately 58,300 square feet of buildings (including the fire station), and result in approximately 29,000 cubic yards of soil off-haul.

Construction-related emissions associated with typical construction activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod allows use of project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. The total criteria pollutant construction emissions for the proposed project and variant are presented in Table 4.3-1. Additional modeling details and assumptions are provided in Appendix A.

Table 4.3-1 Modeled Construction Emissions

Emission Sources	Project Construction Emissions[c]				Variant Construction Emissions[d]			
	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total Construction Emissions (tons)	1.61	4.47	0.22	0.20	1.99	6.84	0.27	0.25
Average Daily Emissions (lbs/day) [a]	10.8	29.9	1.5	1.3	9.2	31.5	1.2	1.2
Threshold of Significance [b]	54	54	82	54	54	54	82	54
Exceeds Threshold	No	No	No	No	No	No	No	No

[a] *Average Daily Emissions are calculated based on a schedule of 299 construction workdays for the proposed project and 434 construction work days for the variant.*

[b] *Thresholds from Table 2-1 of the BAAQMD CEQA Air Quality Guidelines (BAAQMD, 2017)*

[c] *Source: Modeled by Illingworth & Rodkin, Inc. in 2018 (Appendix A-1).*

[d] *Source: Modeled by AECOM in 2018 (Appendix A-2).*

lbs/day = pounds per day

NO_X = oxides of nitrogen

PM_{10} = particulate matter with aerodynamic diameter less than 10 microns

$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 2.5 microns

ROG = reactive organic gases

As shown in Table 4.3-1, construction-generated emissions of ROG, NO_X, $PM_{2.5}$ exhaust, and PM_{10} exhaust would not exceed applicable emission thresholds of significance for either the proposed project or variant. BAAQMD does not have quantitative emission thresholds for fugitive dust. Instead, BAAQMD recommends that all projects, regardless of the amount of average daily emissions, implement applicable best management practices (BMPs), including those listed as Basic Construction Measures in the BAAQMD CEQA Guidelines (BAAQMD, 2017).

As discussed in Section 2.8 above, the proposed project or variant would comply with the City of Fremont's standard development requirements for resource protection (FMC Chapter 18.218), including the following requirements related to construction-related emissions, which are based on BAAQMD's Basic Construction Measures, and would reduce construction-related fugitive dust and exhaust emissions:

> ***Construction-Related Emissions.*** *The following construction measures, as periodically amended by BAAQMD, are required for all proposed development projects to reduce construction-related fugitive dust and exhaust emissions:*
>
> *(A) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times daily.*
>
> *(B) All haul trucks transporting soil, sand, or other loose material off site shall be covered.*
>
> *(C) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
>
> *(D) All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.*
>
> *(E) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.*

(F) Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

(G) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

(H) A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number also shall be visible to ensure compliance with applicable regulations.

Because the above requirements apply to the proposed project or variant, per FMC Section 18.218.050(a)(1), the proposed project or variant would be consistent with BAAQMD guidance and would not result in the generation of fugitive dust emissions that could result in a significant impact. Thus, construction of the proposed project or variant would not violate or contribute substantially to an existing or projected air quality violation. The impact would be **less than significant** and will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Operational emissions following construction of the proposed project or variant would be generated by area, energy, and mobile sources. Area sources would include consumer products, periodic architectural coatings, and landscape equipment for residential and commercial land uses. Energy sources would include natural gas combustion for space and water heating in residences and retail spaces. Mobile sources would involve vehicle trips associated with residential and commercial activities (e.g., work, shopping, and other trips). The analysis assumed the proposed project and variant would result in approximately 2,017 and 2,093 average daily trips, respectively[3]. Operational emissions were calculated using CalEEMod Version 2016.3.2. Consistent with the definition of baseline conditions pursuant to CEQA Guidelines (Section 15125[e]), the air quality analysis modeled emissions from the existing land uses in order to evaluate the net change in operational emissions associated with the proposed project or variant.

Table 4.3-2 presents the average daily and annual operational emissions from the proposed project and variant. Refer to Appendix A for a detailed summary of the CalEEMod modeling assumptions, inputs, and outputs.

[3] Based on traffic generation as calculated in the Traffic Impact Assessment in Appendix C of this Initial Study.

Table 4.3-2 Operational Emissions for Proposed Project and Variant

Emission Sources	Maximum Project Emissions[b]				Maximum Variant Emissions[c]			
	ROG	NO_X	PM_{10}	$PM_{2.5}$	ROG	NO_X	PM_{10}	$PM_{2.5}$
Total Operational Emissions (tons/year)	1.39	3.86	1.50	0.44	1.61	4.44	1.86	0.53
Existing Uses (tons/year)	0.88	3.80	1.28	0.37	0.88	3.80	1.28	0.37
Net Emissions (tons/year)	**0.51**	**0.06**	**0.22**	**0.07**	**0.73**	**0.64**	**0.58**	**0.16**
Threshold of Significance (tons/year)[a]	10	10	15	10	10	10	15	10
Exceeds Threshold	No	No	No	No	No	No	No	No
Net Emissions (lbs/day)	**2.8**	**0.3**	**1.2**	**0.4**	**4.0**	**3.5**	**3.2**	**0.9**
Threshold of Significance (lbs/day) [a]	54	54	82	54	54	54	82	54
Exceeds Threshold	No	No	No	No	No	No	No	No

[a] *Thresholds from Table 2-1 of the BAAQMD CEQA Air Quality Guidelines (BAAQMD, 2017)*

[b] *Source: Modeled by Illingworth & Rodkin, Inc. in 2018 (Appendix A-1).*

[c] *Source: Modeled by AECOM in 2018 (Appendix A-2).*

lbs/day = pounds per day

NO_X = oxides of nitrogen

PM_{10} = particulate matter with aerodynamic diameter less than 10 microns

$PM_{2.5}$ = particulate matter with aerodynamic diameter less than 2.5 microns

ROG = reactive organic gases

As summarized in Table 4.3-2, the long-term operational emissions attributable to the proposed project or variant would generate emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ that would not exceed the thresholds of significance. Because long-term operational emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ would not exceed the thresholds of significance, the proposed project or variant would not violate or contribute substantially to an existing or projected air quality violation. Consequently, operational air emission impacts would be **less than significant** and will not be further addressed in the EIR.

3c) 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?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and this regional impact is cumulative rather than attributable to any one source. Per CEQA Guidelines Section 15064(h)(4), the existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the incremental effects of the proposed project or variant are cumulatively considerable.

The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. Past, present and future development projects contribute to the region‘s adverse air quality impacts on a cumulative basis. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project’s individual emissions would be cumulatively considerable. If a project does not exceed the BAAQMD-identified significance thresholds, its emissions would not result in a cumulative significant impact.

Based on the project-level analysis described above in Impact 3b, the construction and operational emissions of the proposed project or variant would not exceed the thresholds of significance. Therefore, emissions associated with the proposed project or variant, in combination with other past, present, and reasonably foreseeable development, would result in a **less-than-significant** cumulative impact. This impact will not be addressed further in the EIR.

3d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

The primary community risk impacts associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. Diesel exhaust is among a list of some 200 toxic air contaminants (TACs) that comprise a set of airborne pollutants that pose potential hazards to human health. A TAC can be emitted directly, from a variety of sources like industrial plants and motor vehicles, and can also be formed in the atmosphere through reactions among different pollutants. A health risk assessment of the project construction activities was conducted that evaluated potential health effects of sensitive receptors at nearby residences from construction emissions of diesel PM and $PM_{2.5}$ (see Appendix A-1). Due to anticipated similarity of construction activities between the proposed project and variant, the health risk assessment prepared for the proposed project is assumed to be also applicable to the variant and a separate health risk assessment for the variant was not conducted.

The closest sensitive receptors to the project site are residences north of the project site on Jason Way, and nearby residences to the east, north, and south of the project site. There are also several preschools and a private school in the project vicinity: Holy Spirit School and Preschool on Parish Avenue, immediately southeast of the project site; Childs Hideaway Preschool southeast of the site on Fremont Boulevard; and Genius Kids Preschool northeast of the project site on Peralta Boulevard. Children at these locations are three years of age and older. Emissions and dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments that determine the health risks associated with exposure of residential receptors to TAC emissions should be based on a 30-year exposure period (OEHHA, 2015). The U.S. Environmental Protection Agency (U.S. EPA) ISCST3 dispersion model was used to estimate diesel PM and PM concentrations at existing sensitive receptors in the vicinity of the project construction area. Emission sources for the construction site were grouped into two categories, exhaust emissions of diesel PM and fugitive $PM_{2.5}$ dust emissions. The ISCST3 modeling utilized four area sources to represent the on-site construction emissions: two area sources for diesel PM exhaust emissions and two area sources for fugitive $PM_{2.5}$ dust emissions. Construction emissions were modeled as occurring for approximately 8 hours per day, when the majority of the construction activity involving equipment usage would occur.

As shown in Table 4.3-3, results of the health risk assessment due to construction of the proposed project estimated that the maximum increased residential cancer risk would be 109.8 in one million for an infant exposure and 1.9 in one million for an adult exposure. The maximum increased residential cancer risk for a pre-school child exposure would be 16.8 in one million. As discussed above, risks for the variant are anticipated to be the same as for the proposed project.

Table 4.3-3 Unmitigated Construction-Related Health Risks

Exposure Population	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Acute or Chronic Hazard Index
Residential	1.9	0.8	0.13
Infant	109.8	0.8	0.13
Pre-School	16.8	0.8	0.13
Threshold of Significance [a, b]	10	0.3	1.0
Exceeds Threshold	Yes	Yes	No

Source: Modeled by Illingworth & Rodkin, Inc. in 2018.

[a] *City of Fremont General Plan Implementation Measure 7-7.3A (2011a).*

[b] *BAAQMD (2011).*

$\mu g/m^3$ = micrograms per cubic meter

As shown in Table 4.3-3, the proposed project and variant would exceed the established thresholds of significance with respect to health risks caused by construction activities; therefore, the impact would be potentially significant. Thus, implementation of Mitigation Measure AQ-1 would be required to reduce this impact to a level of less than significant.

> ***Mitigation Measure AQ-1: Selection of equipment during construction to minimize diesel PM and $PM_{2.5}$ emissions.***
>
> *The construction contractor shall use off-road construction diesel engines that meet, at a minimum, the Tier 4 interim California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case-by-case basis when the contractor has documented that no Tier 4 Interim equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms.*

Table 4.3-4 shows the risk level for the maximally exposed individual (MEI) from construction of the proposed project or variant with implementation of Mitigation Measure AQ-1.

Table 4.3-4 Mitigated Construction Health Risks

Exposure Population	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Acute or Chronic Hazard Index
Residential	0.1	0.08	0.01
Infant	6.3	0.08	0.01
Pre-School	1.0	0.08	0.01
Threshold of Significance [a, b]	10	0.3	1.0
Exceeds Threshold	No	No	No

Source: Modeled by Illingworth & Rodkin, Inc. in 2018.

Notes:

[a] *City of Fremont General Plan Implementation Measure 7-7.3A (2011a).*

[b] *BAAQMD (2011).*

$\mu g/m^3$ = micrograms per cubic meter

With implementation of Mitigation Measure AQ-1, construction emissions for the proposed project or variant would not exceed the established thresholds of significance, and therefore would not expose sensitive receptors to substantial pollutant concentrations. The construction-related impact would be **less than significant with mitigation** and will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Carbon Monoxide

The primary mobile-source pollutant of localized concern is CO. Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed, and delay. Transport of CO is limited since it disperses rapidly with distance from the source under normal meteorological conditions. However, under specific meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels for local sensitive land uses such as residential units, hospitals, schools, and childcare facilities. As a result, air districts typically recommend analysis of CO emissions at a local rather than a regional level.

Air pollutant monitoring data indicate that CO levels have been below state and federal standards in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard. The highest measured level over any 8-hour averaging period during the last 3 years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. In addition, the BAAQMD CEQA Guidelines suggest that projects would not result in a CO impact if the project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

As discussed in Section 4.16, “Traffic and Transportation,” intersections affected by the proposed project or variant would have traffic volumes less than 10,000 vehicles per hour and, thus, would result in a **less-than-significant** impact to localized CO concentrations.

TAC Emissions

The proposed project or variant would introduce new sensitive receptors (residences) in the proximity of nearby TAC sources, such as Peralta Boulevard (State Route 84 [SR-84]), local roadways, and railroad traffic. The BAAQMD recommends using a 1,000-foot screening radius around a project site for purposes of identifying community health risk from siting a new sensitive receptor or a new source of TACs. However, the California Supreme Court determined in 2015 that CEQA does not require an analysis of how the existing environment might affect a project’s future users or residents (California Building Industry Association v. Bay Area Air Quality Management District 62 Cal. 4th 369). Though not necessarily a CEQA issue, an analysis of existing TAC sources on future project receptors (residences) is provided for informational purposes, and to comply with the Clean Air Plan goal of reducing population TAC exposure and protecting public health in the Bay Area.

Operation of the proposed project or variant would involve residential and commercial land uses that would not be a substantial source of TAC and/or $PM_{2.5}$ emissions. Further, there are no stationary sources within 1,000 feet of the project area (BAAQMD Stationary Source Screening Analysis Tool, Alameda, 2012). However, BAAQMD considers roadways with traffic volumes of over 10,000 vehicles per day to have a potentially significant impact on a proposed project. Thus, health risk and hazard impacts from sources of TACs within 1,000 feet of the project site include SR-84/Peralta Boulevard, local surface streets, and nearby railroad traffic from the Centerville/Niles Cutoff rail line. SR-84/Peralta Boulevard and local roadways are located approximately 10 feet north of the project site. The railroad is located approximately 300 to 400 feet from the project site.

The analysis prepared by Illingworth & Rodkin, Inc. used BAAQMD’s Highway Screening Analysis Tool and the Roadway Screening Analysis Calculator for Alameda County to assess the health risk and hazard impacts from traffic on the future on-site sensitive receptors, and is provided in Appendix A-1. The analysis is applicable to both the proposed project and variant. Health risk and hazard impacts from the rail line were obtained from the Fremont General Plan Update (City of Fremont, 2011b). The cumulative cancer risk levels, $PM_{2.5}$ concentrations, and hazard impacts are shown in Table 4.3-5.

Table 4.3-5 Combined Community TAC Sources

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Acute or Chronic Hazard Index
Peralta Boulevard (SR-84)	21.2	0.17	0.02
Fremont Boulevard	15.7	0.46	<0.03
Centerville/Niles Cutoff Rail Line	11.5	0.02	-
Combined Sources	48.4	0.65	<0.05
City of Fremont General Plan Combined Source Threshold [a,b]	100.0	0.8	10.0
Exceeds Threshold	No	No	No

Source: Modeled by Illingworth & Rodkin, Inc. in 2018.

Notes:

[a] *City of Fremont General Plan Implementation Measure 7-7.3B (2011a).*

[b] *BAAQMD (2011).*

$\mu g/m^3$ = micrograms per cubic meter

As shown in Table 4.3-5, the cumulative cancer risk on proposed project or variant residents from nearby TAC sources would be approximately 48.4 per million which is below both BAAQMD and the City of Fremont General Plan recommended cumulative significance threshold of a cancer risk of 100 in a million. The cumulative $PM_{2.5}$ concentration is estimated to be 0.65 $\mu g/m^3$, which is also below the BAAQMD's cumulative significance threshold of 0.8 $\mu g/m^3$. The cumulative hazard index is estimated to be less than 0.05, which is less than BAAQMD's cumulative significance threshold of 10.0. The maximum impact for each source would not occur in the same location on the project site; thus, this analysis presents a conservative scenario.

Based on this assessment of exposure to nearby TAC sources, operational emissions would not expose future sensitive receptors of the proposed project or variant to substantial pollutant concentrations. This operational impact would be **less than significant** and will not be further addressed in the EIR.

3e) Would the project create objectionable odors affecting a substantial number of people? Less than Significant Impact.

Construction – Proposed Project or Variant

Construction activities associated with the proposed project or variant could result in short-term odor emissions from diesel exhaust associated with construction equipment. The proposed project or variant would use typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Therefore, construction of the proposed project or variant would not create objectionable odors affecting a substantial number of people. The impact would be **less than significant** and will not be further addressed in the EIR.

Operation – Proposed Project or Variant

Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities. The project site would not be located in close proximity to any of these types of odor-generating facilities. The land uses associated with the proposed project or variant would be residential and commercial, which are not typically a generator of odor emissions. Therefore, the proposed project or variant would not create objectionable odors affecting a substantial number of people. The impact would be **less than significant** and will not be further addressed in the EIR.

References:

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Office of Environmental Health Hazard Assessment (OEHHA), 2015. Adoption of Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Available online at http://www.oehha.ca.gov/air/hot_spots/hotspots2015.html. Accessed April 2018.

4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4.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, ore regulations, or by the California Department of Fish and Game of U.S. Fish and Wildlife Service?	☐	☐	☒	☐
4.b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
4.c. Have substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
4.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 impeded the use of native wildlife nursery sites?	☐	☐	☐	☒
4.e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
4.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?	☐	☐	☐	☒

Setting:

The project site is within the Centerville town center, a highly urbanized area in the City containing the main thoroughfares of Fremont Boulevard and Peralta Boulevard, stores, restaurants and businesses, apartments and the Centerville/Niles Cutoff rail corridor. The project site is approximately 0.75 mile southwest of Alameda Creek and the Quarry Lakes Regional Recreation Area, 3 miles southwest of the open space in the east bay hills, and 3.5 miles northeast of salt ponds/marshes of San Francisco Bay. The project site consists of several stores, restaurants and businesses along Fremont Boulevard and Peralta Boulevard, a parking lot, an abandoned lot with weeds and grasses, and small landscaped areas.

The project site contains 54 landscaped trees including redwood (*Sequoia sempervirens*), crape myrtle (*Lagerstroemia indica*), Mayten tree (*Maytenus boaria*), white birch (*Betula pendula*), glossy privet (*Ligustrum lucidum*), interior live oak (*Quercus wislizenii*), zelkova tree (*Zelkova serrata*), sweet gum tree (*Liquidamber styracifula*) and Chinese pistachio (*Pistacia chinensis*). The majority of the trees are along the sidewalks of Fremont Boulevard, Parish Avenue, and Jason Way, with several others within landscaped areas of the parking lot and on the unoccupied residential lot near the center of the site.

A review of the California Natural Diversity Database (CNDDB) was conducted to identify special-status plant and animal species and their habitats that have previously been recorded in the greater project vicinity (CDFW, 2018). The CNDDB search covered the Newark United States Geological Survey (USGS) 7.5 minute quadrangle and surrounding eight quadrangles, and identified 37 special-status plant species,

18 bird species, two fish species, two invertebrate species, nine mammal species, four reptile species, and four amphibian species.

A biological reconnaissance survey was conducted by an AECOM biologist on February 8, 2018, to examine the project site for special-status plant and animal species and their habitats, and to document the existing plants and animals at the site. No special-status plants were observed at the project site, and the site did not have habitats conducive for special-status plants. Because the project site was almost entirely paved or covered with buildings and landscaping, it is considered very unlikely for special-status plant species to be present. With the exception of nesting areas and roosting areas for birds and bats, habitats supporting special-status plants or animals were not detected at the project site. In addition, no jurisdictional wetlands or waters of the U.S. were observed at the project site.

Discussion:

4a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction – Proposed Project or Variant: **Less-Than-Significant Impact**

Construction of the proposed project or variant could adversely affect, either directly or through habitat modification, special-status bird or bat species that nest or roost at the project site or within the nearby vicinity. In addition, migratory bird nests that are protected by the federal Migratory Bird and Treaty Act and Fish and Game Code Section 3503 could also be adversely affected directly by construction activities. Implementation of the City of Fremont's standard development requirements relating to biological resources (FMC Section 18.218.050(b)) would avoid adverse effects of construction on nesting birds or roosting bats by requiring preconstruction surveys during the appropriate seasons and, when nests or roosts are detected, by requiring application of appropriate protective buffer zones and monitoring. These protective measures would prevent bird and bat mortality and the loss of active nests and roosts. No other plant or wildlife species identified as a candidate, sensitive, or special-status species are expected to be adversely affected by the project. Further discussion of the potential for special-status species to occur on the project site, and potential impacts of the project, is provided below.

Nesting Birds

Nesting habitat for birds and raptors is present at the project site due to the presence of a variety of types of trees and structures on which birds could build a nest. The urbanized setting and continual presence of human disturbance would likely favor the presence of bird species commonly found in cities around the San Francisco Bay Area such as mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), and western scrub jay (*Aphelocoma californica*). These bird species are accustomed to searching for food sources and navigating the disturbances that are present in the urban environment. No special-status bird species were observed at or near the project site during the reconnaissance survey. Although there is a CNDDB occurrence of a California black rail from 1949 at Alameda Creek potentially within 2 miles, the habitat for the black rail, which consists of saltmarsh and freshwater marshland, is not present in the project area or surrounding environment. No bird nests were observed at the project site during the reconnaissance survey; however, there were potential nesting places for birds throughout the project site.

If an active nest were to be directly affected by construction activities, the nest, eggs, chicks or adults could be harmed and/or the nest could become abandoned. These impacts would constitute potentially significant impacts of the proposed project or variant. As discussed in Section 2.8 above, the project or variant must comply with the City's standard development requirements for resource protection (FMC Chapter 18.218), including the following requirements relating to nesting birds, which would prevent bird nests from being adversely affected by the project:

> ***Nesting Birds.*** *New development projects with the potential to impact nesting birds through tree or shrub removal shall implement the following measures prior to removal of any trees/shrubs, grading, or ground disturbing activities:*

(A) Avoidance. Proposed project construction activities shall avoid the bird nesting season (February 1st through August 31st) when possible.

(B) Preconstruction Surveys. If construction activities are scheduled during the nesting season, a qualified biologist shall conduct a preconstruction survey to identify any potential nesting activity. The biologist shall determine the number and time frame (prior to construction) of surveys to be conducted.

(C) Protective Buffer Zone(s). If the survey indicates the presence of nesting birds, protective buffer zones shall be established around the nests. The size of the buffer zone shall be recommended by the biologist in consultation with the CDFW depending on the species of nesting bird and level of potential disturbance.

(D) Initiation of Construction Activities. The buffer zones shall remain in place until the young have fledged and are foraging independently. A qualified biologist shall monitor the nests closely until it is determined the nests are no longer active, at which time construction activities may commence within the buffer area.

Because the above requirements would apply to the proposed project and variant, per FMC Section 18.218.050(b)(2), the impacts of construction on nesting birds would be **less than significant**. This impact will not be discussed further in the EIR.

Bats

The CNNDB search identified three special-status bat species that have potential to occur in the project vicinity, the pallid bat (*Antrozous pallidus*), the western mastiff bat (*Eumops perotis californicus*), and the Townsend's big eared bat (*Corynorhinus townsendii*), all of which are California species of special concern. No bats or signs of bat roosting were observed during the reconnaissance survey; however, bats could roost in abandoned buildings, under the eaves, or in tree hollows at the project site. Generally, many species of bats are sensitive to human-related noises and disturbances and will typically find roosting locations in rural areas or on the outskirts of urbanization where there is a reduced level of disturbance or interaction with people. However, despite bats' normal sensitivity to disturbance, with the presence of roosting habitat at the project site, there is a potential for bats to occur, particularly in those buildings that are not inhabited.

If bats roost at the site, there is potential for construction activities to disturb active bat roosts, harm individual bats, or adversely affect maternal roosts and pups. These impacts would be potentially significant due to the potential for causing mortality. However, as discussed in Section 2.8 above, the proposed project or variant would be required to implement the City's standard development requirements for resource protection, including the following requirements related to bats, which would prevent bat roosts from being adversely affected during construction:

Roosting Bats. *New development with potential to impact special-status or roosting bat species through demolition of existing structures or removal of trees on-site shall conduct the following measures prior to demolition:*

(A) Preconstruction Surveys. A qualified biologist shall conduct a preconstruction survey during seasonal periods of bat activity (mid-February through mid-October) to determine suitability of structure(s) or trees as bat roost habitat.

(B) Protective Buffer Zone(s). If active bat roosts are found on-site, a suitable buffer from construction shall be established per the biologist. The biologist shall determine the species of bats present and the type of roost.

(C) Mitigation and Exclusion. If the bats are identified as common species, and the roost is not being used as a maternity roost or hibernation site, the bats may be evicted using methods developed by a qualified biologist. If special-status bat species are found present, or if the roost is determined to be a maternity roost or hibernation site for any species, then the

qualified biologist shall develop a bat mitigation and exclusion plan to compensate for lost roost. The site shall not be disturbed until CDFW approves the mitigation plan.

Because the above requirements apply to the proposed project or variant, per FMC Section 18.218.050(b)(2), the impacts of project construction on bat species would be **less than significant**.

While potential bat roosting areas for special-status bat species are present at the project site, and would be removed as a result of project construction, these areas are not high-quality habitat for bats. The project site does not have caves or mines, which are the preferred roosting habitat for Townsend's big eared bats or have tall cliffs or rock crevices which western mastiff bats prefer for roosting (Western Bat Working Group, 2005). The site also does not contain any preferred foraging areas near riparian areas, and is surrounded by adjacent residences and businesses which make the habitat at the site less than ideal due to their sensitivity to disturbances. Therefore, due to the limited quantity and quality of habitat being affected by this project in comparison to the available habitat in nearby open habitats, the potential loss of bat habitat due to site demolition and grading activities would be **less than significant**. This impact will not be discussed further in the EIR.

Fish, Invertebrates, Terrestrial Mammals

Suitable habitat at the project site does not exist for any of the special-status invertebrates or fish or other (non-bat) mammal species identified in the CNDDB search. As a result, they would not be expected to occur at the project site, and there would be **no impacts** on special-status fish, invertebrates, or terrestrial mammals from construction of the proposed project or variant. This impact will not be discussed further in the EIR.

Reptiles and Amphibians

There were eight different species of reptile and amphibian special-status species identified in the CNDDB search; and the closest occurrence of any these species was a western pond turtle occurrence approximately 2 miles away in the Quarry Lakes Regional Recreation Area. The nearest CNDDB occurrence of California red-legged frog is approximately 2.5 miles away and for California tiger salamander is at least 4 miles away. All other occurrences of special-status reptile and amphibian species are over 5 miles away.

The western pond turtle, the California red-legged frog, and the California tiger salamander all require aquatic habitat for at least part of their life history. The project site contains no aquatic habitat nor is there any connectivity from the project site to aquatic habitat. In addition, there were no areas of the site that provide suitable upland habitat for special-status amphibian and reptiles. None of the special-status reptile or amphibian species identified by the CNDDB search had suitable habitat present at the project site.

During the reconnaissance survey, no special-status reptiles and amphibians or their habitats were found at the project site. There would be **no impacts** on special-status reptiles and amphibians from construction of the proposed project or variant. This impact will not be discussed further in the EIR.

Plants

There were 37 special-status plant species identified in the CNDDB search, many of which occur in specific habitat areas, such as serpentine grasslands, chaparral, coastal scrub, vernal pools, none of which occur at the project site. Project site maps and photos were reviewed to determine potential habitats that might be present at the project site, and the reconnaissance survey assessed the potential for occurrence of special-status plant species that occur in such habitats. The project site consisted of almost entirely paved or landscaped areas and did not have habitats conducive for special-status plants. Barren lots or backyards in the project area contained weedy and grass vegetation that was almost entirely non-native. During the reconnaissance survey, no special-status plants were found at the project site. It is unlikely for special status plant species to occur at the project site due to their absence during the survey and the absence of their habitat. Therefore, there would be **no impacts** on special-status plants from construction of the proposed project or variant. This impact will not be discussed further in the EIR.

Operation – Proposed Project or Variant: **No Impact**

Once constructed, the project site under either the proposed project or variant would contain a mix of townhomes and mixed use retail/apartment buildings, as well as associated community use, parking, access, and landscaping areas, including more than 100 new landscape trees.

Nesting Birds

Similar to existing conditions, trees within the post-construction project site would provide potential nesting habitat, particularly for bird species that are accustomed to searching for food sources and navigating the disturbances that are present in the urban environment. Ongoing use of the site for residential and retail purposes would not be expected to result in the destruction of or other adverse effects to nests or nesting birds; therefore, operation of the proposed project or variant would have **no impacts** on nesting birds and this impact will not be discussed further in the EIR.

Bats

Similar to existing conditions, the post-construction project site would provide potential bat habitat (e.g., building eaves or tree hollows); however, this would not be high-quality habitat due to the lack of nearby preferred foraging areas and the frequent and significant human-related disturbances already present in the vicinity. Ongoing use of the site for residential and retail purposes would not be expected to result in the disturbance of active roosts or other adverse effects on bats; therefore, operation of the proposed project or variant would have **no impacts** on bats and this impact will not be discussed further in the EIR.

Other Special-Status Plants and Wildlife Species

As discussed above under construction impacts, the project site does not contain other special-status plants or wildlife species, or habitat for such species, and the proposed project or variant would not provide new habitat that would be expected to support special-status species. Ongoing use of the site for residential and retail purposes would therefore have **no impacts** on special-status species and this impact will not be discussed further in the EIR.

4b-4c) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction and Operation – Proposed Project or Variant: **No Impact**

The project site was surveyed for sensitive natural communities, riparian areas, and potential jurisdictional wetlands during the reconnaissance survey on February 8, 2018. None of these sensitive biological communities and habitats were identified during the survey and, therefore, none are expected to be affected by the project. Consequently, construction and operation of the project would have **no impact** on sensitive natural communities, riparian areas, or federally protected wetlands. These impacts will not be discussed further in the EIR.

4d) 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?

Construction and Operation – Proposed Project or Variant: **No Impact**

Because the project is in an area surrounded by urban development, no aquatic or terrestrial migratory corridors or nursery sites exist on the property or adjacent properties for wildlife movement. The project would not impede wildlife that currently exists in the developed areas surrounding the project site from moving to other surrounding areas. Construction and operation of the proposed project would, therefore, have **no impact** on the movements of migratory or resident wildlife or fish species. This impact will not be discussed further in the EIR.

4e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

The arborist report and tree inventory prepared for the project site identified 54 existing trees, 48 of which are designated as Protected Trees pursuant to the City of Fremont's Tree Preservation Ordinance (FMC Chapter 18.215) (Callander Associates, 2018). The street trees along Fremont Boulevard and Peralta Boulevard would be retained, along with two large trees (black acacia and English walnut) along the existing alley that would become part of the Jason Way extension under the proposed project or variant. A total of 35 existing trees would be removed as part of the project due to poor health and/or conflicts with the proposed improvements, 29 of which would require a permit for removal due to their qualification as protected trees under the Tree Preservation Ordinance. The proposed project and variant would include provision of approximately 145 replacement trees throughout the project site. The removal of protected trees is subject to requirements involving the planting of replacement trees or the payment of in-lieu fees to mitigate the removal of trees that cannot be replaced on-site due to land area constraints, in accordance with the mitigation requirements of the City's Tree Preservation Ordinance. Because the applicant must comply with requirements of the Tree Preservation Ordinance and permit conditions to allow the removal of trees and provide required replacement trees, there would be no conflicts with any local policies or ordinances protecting biological resources. Construction impacts would be **less than significant** and this impact will not be discussed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Following construction, ongoing operation of the proposed project or variant would not be expected to result in further tree removal, but should tree removal be needed in the future, a permit from the City would be required for any tree protected under the Tree Protection Ordinance. As a result, project operation would not conflict with local policies or ordinances protecting biological resources, and impacts would be **less than significant.** This impact will not be discussed further in the EIR.

4f) 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?

Construction and Operation – Proposed Project or Variant: **No Impact**

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans covering the project area. Thus, construction or operation of the proposed project or variant would have **no impact** on or conflict with habitat conservation plans in the area. This impact will not be discussed further in the EIR.

References:

California Department of Fish and Wildlife (CDFW), 2018. California Natural Diversity Database data request for U.S. Geological Survey Newark 7.5 minute topographic quadrangle and eight surrounding quads. Accessed January 29, 2018.

Callander Associates, 2018. Arborist's Report for the Future Development of the Fremont Boulevard Mixed Use Project, Fremont, CA. Revised March 1.

Western Bat Working Group, 2005. Species Accounts for the Pallid bat, Townsend's big eared bat, and Western mastiff bat. Accessed at http://www.wbwg.org/western-bat-species.

4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5.a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☒	☐	☐	☐
5.b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
5.c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
5.d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Setting:

The project site is in a developed urban neighborhood at the eastern corner of Fremont and Peralta boulevards and contains several commercial buildings, a residence, and a former fire station, all surrounding a large surface parking lot. The project site is mostly paved so that its original ground surface is obscured and precludes direct observation of native soils that may reveal or suggest potential on-site archaeological resources. It is located on a broad alluvial plain between Mission Hills and the San Francisco Bay. The nearest extant watercourse, 2,000 feet to the north, is the channelized flow of Alameda Creek (U.S. Geological Survey, 1915, 1947, 1973). A second watercourse, a branch of Alameda Creek named Sanjen de los Alisos, originally ran less than 500 feet to the north but it appears to have been culverted. The landform within the project site is mapped as a Holocene-age natural levee deposit (Qhl) deposited by Sanjen de los Alisos (Helley and Graymer, 1997). These natural levee deposits are composed of loose, moderately to well-sorted sandy or clayey silt grading to silty clay. They border stream channels and slope away to flatter floodplains and basins. The soils that have developed on these levee deposits are classified as Yolo silt loam. Yolo series soils are very thick and likely date to less than 3,000 years old. The official soil series description includes buried Ab horizons (paleosols) (National Cooperative Soil Survey, 2018).

The following brief context statement is derived from a cultural resources review prepared for the Centerville Redevelopment Plan Environmental Impact Report (Basin Research Associates, Inc., 1997) unless otherwise cited.

There are no known indigenous settlements within or adjacent to the project area, although the project site's general setting near seasonal and perennial watercourses, the marshlands of the Bay, and the nearby hills would have been a favorable location. CA-ALA-21, a prehistoric village/mound site, is the nearest recorded archaeological site, approximately 0.25 mile to the southwest. This site was noted on J.D. Whitney's 1873 "Map of the Region Adjacent to the Bay of San Francisco" and recorded in 1950 based on the map (William Self Associates, 1997). Ethnographic literature indicates that the project site is near the territorial border of the Alson and Tuibun tribes, who occupied the Fremont Plain of southwest Alameda County. Although precise territorial boundaries are not known, the Alson may have controlled the area along the Bay shoreline from near today's Highway 84 south to Scott Creek, while the Tuibun were located just to the north (Milliken, 1995). The Alson and Tuibun tribes spoke a dialect of Ohlone, one of the five mutually unintelligible language families that existed in the San Francisco Bay Area that also included Bay Miwok, Plains Miwok, Patwin, and Wappo (Milliken, 1995).

Alameda Creek was visited numerous times during Spanish-era expeditions to the area and Mission San Jose, founded in 1797, was sited approximately 5 miles to the east. The project site was part of the

mission's grazing lands, but no known Mission-period improvements were made to the project site or immediate vicinity.

The intersection of Fremont and Peralta marks the center of the early American period crossroads town originally known as Hardscrabble (1850), then Centreville (by 1878), and finally Centerville (1893) (Thompson & West, 1878). During the second half of the nineteenth century, Centerville was along the main north-south route connecting San Jose and Oakland and was at the mid-point between Alvarado, Vallejo Mills/Niles, Newark, and Mission San Jose, and between the Southern Pacific and Central Pacific rail lines. The current Fremont Boulevard (known as Main Street in Centerville) and Peralta Boulevard (previously Niles Road) follow these early road alignments, with only minor modification.

Although Centerville did not originally have a railroad station, it was linked to other nearby settlements by stage and later horse car. It remained a successful and stable agricultural community in the second half of the nineteenth century; by 1878, it had a population of 300 and a number of churches, stores, and saloons. The land along Fremont and Peralta boulevards was generally divided into small farms of 10 to 60 acres, although the center of town had a much higher density. The 1887 Sanborn map depicts dwellings and shops (e.g., a cobbler, barber, harness shop, tin shop, bowling alley, and general merchandise shop) fronting both Main Street (Fremont Boulevard) and Niles Road (Peralta Boulevard) within or adjacent to the project site. The rear yards of these buildings included smaller outbuildings, likely barns, storage sheds, and possibly privies. The 1896 Sanborn map depicts a similar mix of dwellings and shops, as does the 1926 Sanborn map.

Centerville continued to be an agricultural center following the turn of the twentieth century, and shipping and canning industries expanded in the region in the 1920s. None of the nineteenth century buildings along Fremont Boulevard survive; all were demolished and replaced in the early to mid-twentieth century. The dwellings and outbuildings in the center of the project site were demolished and the area paved over with the parking lot. The economy in Centerville declined by the 1950s when agriculture ceased to be viable and the business district along Main Street deteriorated after the Nimitz Freeway was built in 1957. Centerville, along with Irvington, Niles/Vallejo Mills, Mission San Jose, and Warm Springs were incorporated into the City of Fremont in 1956.

Records Search

A records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System on February 15, 2018 (File No. 17-2043). Site records and previous studies of the project site and a 0.25-mile radius were reviewed. The National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the City of Fremont Register, and the Office of Historic Preservation Historic Properties Directory (HPD) data files were also reviewed.

Studies within the Project Site

Three studies have been previously completed within the project site.

- S-15220 (Garaventa et al., 1990): This cultural resources study was prepared as part of a California Department of Transportation (Caltrans) assessment for Route 84 Realignment Alternatives in Fremont, Hayward, and Union City and included parcels fronting Peralta Boulevard within the project site. The study included a literature review, records search, and "windshield architectural survey." The study found a generally high archaeological sensitivity in the vicinity of the project site.

- S-15220a (Garaventa et al., 1995): This Historic Property Survey Report / Finding of No Effect was prepared for Caltrans following recommendations in the 1990 study. The study included an archaeological and architectural survey. No archaeological resources were identified in the report's study area. Seventy-six buildings were recorded, one of which is immediately adjacent to the project site. As discussed below, this resource at 3754 Peralta Boulevard was found ineligible for the NRHP.

- S-21145 (Basin Research Associates, Inc., 1997): This cultural resources review was prepared for the Centerville Redevelopment Plan EIR. This study provided a context statement for

Centerville, identified previously documented resources within the study area, and identified areas of archaeological and architectural sensitivity. The project site is within the "North Fremont Boulevard Commercial Subarea." Basin Research Associates, Inc. found that "[t]his subarea has the largest number and highest density of historic properties especially in its core area. Archaeological sensitivity is low in the west area [outside the project site] and generally high to extreme for the parcels fronting along Fremont Boulevard near the central and eastern areas [which includes the project site]." The study noted that "it is the considered opinion of [the consultant] that improvement projects within the proposed redevelopment area have the potential to both indirectly and directly impact known and unknown archaeological resources and historic buildings and structures. Such disturbance could result in significant impacts to the integrity of archaeological deposits and the loss of information important to prehistory and history."

Studies and Resources within 0.25-mile of the Project Site

One previously recorded architectural resource, 3754 Peralta Boulevard (P-01-008553), is immediately adjacent to the northern boundary of the project site. The farm complex at this address includes a house, barn, and tankhouse. The house was estimated to have a construction date c. 1910, though the barn and tankhouse were potentially older, with the c. 1910 house replacing an earlier residence. The house was noted as a "fine, intact example of a Craftsman bungalow," but it was not identified as an outstanding example and the barn and tankhouse were found to lack integrity (Hill, 1993a). The complex was found ineligible for the NRHP; it was not evaluated for its CRHR or local listing eligibility (Status Code 6Y in the HPD).

Seven additional studies were previously completed within a 0.25-mile radius and one additional architectural resource (P-01-008552) was identified within this study area. This resource, 3781 Peralta Boulevard, is a Colonial Revival residence across Peralta Boulevard from the project site. Although the building has a high level of integrity, it was found ineligible for the NRHP (Hill, 1993b). It was not evaluated for its CRHR or local listing eligibility (Status Code 6Y in the HPD).

City of Fremont Register

The City of Fremont Register lists three resources that are approximately within the project site:

- Fremont Boulevard/Centerville (early settlement)
- Town Hall Site
- Old Town Complex

These resources have not been formally evaluated for listing on the CRHR or NRHP and the location of the Town Hall Site has not been definitively identified, though it may be at 37412 Fremont Boulevard on the parcel that was subsequently developed with the fire station. The Fremont Boulevard/Center site is described in the Fremont Register as "Hardscrabble, Centreville," which is further described in the setting section above (page 43) as follows: "the intersection of Fremont and Peralta marks the center of the early American period crossroads town originally known as Hardscrabble (1850)." The boundary of the Old Town Complex is described generally in the Fremont Register as both sides of Fremont Boulevard extending from the Firehouse to Walton (which is now the entrance and parking area to the railroad station north of the project site and Peralta Boulevard). These resources are included in Appendix D of the City of Fremont's General Plan (December 2011).

Additional Studies

One additional study, *37412 Fremont Boulevard Historic Resource Impact Assessment* (Page & Turnbull, 2017), includes the project site but is not on file at the NWIC. This study identified the mid-century fire station at 37412 Fremont Boulevard (within the project site), as a CRHR-eligible resource. The fire station was also recorded and evaluated in 2007, where it was described as retaining a "high degree of architectural integrity" and was found eligible for the CRHR under Criterion 3 (architecture) as a notable local example of mid-century Modernism in the International Style (Hill and Minor, 2007). The remaining

buildings on the project site were found not eligible. A full discussion of the built environment resources will be included in the Focused EIR.

Sacred Lands File Search

On March 5, 2018, AECOM requested a Sacred Lands File (SLF) search and Native American contact list for the project site from the Native American Heritage Commission (NAHC). On March 27, 2018 (in a letter dated March 21, 2018), the NAHC responded that the SLF search was "negative… [h]owever, the absence of site specific information in the SLF does not preclude the presence of cultural resources in any project area." Native American consultation pursuant to Assembly Bill (AB) 52 is being completed by the City of Fremont, as discussed in Section 4.17.

Field Survey

A pedestrian survey of the project site was conducted by an AECOM archaeologist on February 23, 2018. The project site was approximately 98 percent paved. The survey also included the small fenced-in lot at the intersection of Jason Way and Rose Court. This unpaved portion of the project site was covered with several inches of decomposing plant material and was densely vegetated. The dense vegetation (non-native grasses, etc.) within the project site limited ground surface visibility. Vegetation was scraped away to better view the ground surface and rodent burrow back dirt piles were closely inspected for indicators of archaeological deposits. All visible soils appeared to be imported mulch and garden soil. Due to the lack of ground surface visibility, no archaeological resources were identified during the survey.

Discussion:

5a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.57?

Construction and Operation – Proposed Project: **Potentially Significant Impact**

The proposed project would include alterations to the mid-century fire station that was previously found to possess sufficient significance and integrity to be considered a historical resource for the purposes of CEQA (Page & Turnbull, 2017). Impacts to this historical resource resulting from construction and operation of the proposed project would be **potentially significant**. These impacts and potential mitigations will be further analyzed in the Focused EIR.

Construction and Operation – Variant: **Potentially Significant Impact**

The variant would include demolition of the mid-century fire station. Impacts to this historical resources resulting from construction and operation of the variant would be **potentially significant**. These impacts and potential mitigations will be further analyzed in the Focused EIR.

5b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Construction – Proposed Project: **Less than Significant with Mitigation**

Construction of the proposed project would include excavation for one level of below-grade parking beneath the proposed mixed use buildings (Building A) that would extend approximately 443 feet along the Fremont Boulevard frontage. The proposed basement would extend a minimum of 74 feet northeast from the existing sidewalk and would be excavated to a depth of 15 feet (SiliconSage Builders, 2018). This work would largely be contained beneath the footprints of the extant buildings, but may extend beneath their foundations (e.g., beneath the prior depth of disturbance). The amount of fill placed on the project site prior to the construction of the extant buildings, if any, is unknown.

Other ground-disturbing activities on preliminary project plans include grading for building foundations, installation of subdrains in newly-established streets, installation of storm drains and bioretention features, and tree planting. The depth of ground disturbance for these proposed activities would be about four feet (SiliconSage Builders, 2018).

As discussed under “Setting” above, the project site is sensitive for both prehistoric and historic-period archaeological resources.

Analyses in previous archaeological studies in the Bay Area have revealed that buried sites do not occur randomly across the landscape, but are correlated with certain environmental and geomorphic factors, including proximity to water, landform slope (flatter being more sensitive), and the relative age of the landform (generally, younger being more sensitive). Soils in the project site are mapped as weakly-developed Yolo silt loam on a Holocene-age levee deposit, both indicators of a moderate to high sensitivity for buried prehistoric archaeological resources (Meyer and Rosenthal, 2007; Rosenthal and Meyer, 2004). Due to a lack of specific subsurface information, however, this potential is largely undefined and is simply predicated on the environmental setting of the project site.

Based on the 1997 Basin Research Associates, Inc. study conducted for the Centerville Redevelopment Plan EIR and supplemental historic-period map research, the intersection of Fremont and Peralta boulevards was the epicenter of the Centerville settlement and has a high sensitivity for buried historic-period Euro-American archaeological resources associated with buildings identifiable on nineteenth century maps. The project site has been previously identified by the City of Fremont as a sensitive landscape: the general “early settlement” area of Centerville at the intersection of Fremont and Peralta boulevards, the Old Town Complex along both sides of Fremont Boulevard from the fire station to the train station, and the specific location of the demolished town hall site (within the Centerville settlement) are all Fremont Register-listed properties that have been identified approximately within the project site. These properties are listed on the Fremont Register as points of historical interest without any extant built environment components, nor any known archaeological components. As such, neither has been evaluated for the CRHR. It is possible that historic-period archaeological resources dating to the early American period in California (i.e., the 1850s), if present below surface within the project area, would be contributing elements to the locally-listed Centerville settlement.

No archaeological resources have been previously identified within the 0.25-mile records search radius, or were identified during the pedestrian survey; however, the ground surface is largely obscured. Despite the lack of known resources, there is the potential for previously unknown archaeological resources to be present within the project site based on geomorphic factors and the history of the area.

The largest proposed construction impacts would occur along Fremont Boulevard in areas that have been developed since the 1850s and were identified by Basin Research Associates, Inc. to have “extreme” archaeological sensitivity. However, most of the construction impacts would occur beneath existing buildings, somewhat diminishing the potential of encountering intact archaeological resources. Shallower impacts would occur across the project site for building, utility, and stormwater construction. The amount of fill beneath the extant buildings and parking lot, if any, is unknown. Work in this area, especially in the center of the parcel where Sanborn maps indicate the presence of dwellings and outbuildings, has the potential to encounter historic-period resources beneath the pavement and fill, if present.

Based on the overall moderate to high sensitivity of the project site, there is the potential that archaeological remains that qualify as historical resources or unique archaeological resources under CEQA may be encountered. As a result, construction activities could adversely affect these previously-unidentified resources.

As stated in Section 2.8 above, the proposed project would comply with the City of Fremont’s standard development requirements (codified in the Fremont Municipal Code Chapter 18.218.050), which include the following requirements relating to accidental discovery of cultural resources:

> ***Accidental Discovery of Cultural Resources.*** *The following requirements shall be met to address the potential for accidental discovery of cultural resources during ground disturbing excavation:*
>
> *(A) The project proponent shall include a note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources.*

(B) The project proponent shall retain a professional archaeologist to provide a preconstruction briefing to supervisory personnel of any excavation contractor to alert them to the possibility of exposing buried cultural resources, including significant prehistoric archaeological resources. The briefing shall discuss any cultural resources, including archaeological objects, that could be exposed, the need to stop excavation at the discovery, and the procedures to follow regarding discovery protection and notification of the project proponent and archaeological team.

(C) In the event that any human remains or historical, archaeological or paleontological resources are discovered during ground disturbing excavation, the provisions of CEQA Guidelines Sections 15064[.5](e) and (f) requiring cessation of work, notification, and immediate evaluation shall be followed. (Ord. 27-2016 § 37, 12-6-16.)

Implementation of the above standard development requirements would reduce the likelihood of potential impacts to previously unidentified archaeological resources; however, given the overall moderate to high archaeological sensitivity of the project site, it is uncertain if these requirements alone would reduce potential impacts to a less-than-significant level. Mitigation Measure CUL-1 is proposed to provide additional protection to potential resources, by requiring an archaeological monitoring plan to be developed and implemented during construction, which will provide additional information on the areas of the project site containing heightened archaeological potential and presence of an archaeological monitor during construction to improve the likelihood that any unidentified archaeological resources are recognized and treated appropriately, should they be discovered during construction.

Mitigation Measure CUL-1: Archaeological Monitoring.

The applicant or its consultant shall retain a qualified archaeologist to prepare an Archaeological Monitoring Plan (AMP), and to implement the AMP during construction. The AMP shall include a refined archaeological sensitivity analysis to identify areas of heightened archaeological potential; construction worker training and archaeological monitoring protocols; archaeological deposits evaluation and significance thresholds; and provisions for mitigation planning (e.g., data recovery protocol), curation, and tribal coordination. Upon completion of the archaeological monitoring, a report shall be prepared documenting the methods, findings, and recommendations. The report shall be submitted to the City, the applicant, and the NWIC. The applicant and its contractors shall implement all recommendations of the AMP.

With adherence to the City's standard development requirements, and implementation of Mitigation Measure CUL-1, the construction-related impacts of the proposed project on archaeological resources would be **less than significant with mitigation incorporated**, and will not be further addressed in the EIR.

Construction – Variant: **Less than Significant with Mitigation**

Construction of the variant would include similar ground-disturbing activities as the proposed project, except that the proposed below-grade parking garage would be larger, extending the entire length of the Fremont Boulevard frontage (approximately 692 feet). As such, the variant would have similar or slightly greater potential impacts on previously unidentified archaeological resources as the proposed project.

Similar to the proposed project, adherence to the City's standard development requirements (FMC 18.218.050) would reduce the likelihood of potential impacts on archaeological resources, but may not reduce such impacts to a less-than-significant level, given the overall moderate to high archaeological sensitivity of the project site. Mitigation Measure CUL-1 would require an archaeological monitoring plan to be developed prior to construction and presence of an archaeological monitor during construction activities,

With adherence to the City's standard development requirements, and implementation of Mitigation Measure CUL-1, the construction-related impacts of the variant on archaeological resources would be **less than significant with mitigation incorporated**, and will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **No Impact**

Operation of the proposed project or variant, once constructed, would not require disturbance of additional areas outside of the construction footprint. As such, operation of the proposed project or variant would have **no impact** on archaeological resources and these impacts will not be further addressed in the EIR.

5c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Construction – Proposed Project or Variant: **No Impact**

Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the extensive volume of sedimentary rock deposits preserved worldwide and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils—particularly vertebrate fossils—are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life. Paleontological resource localities are those sites where the fossilized remains of extinct animals and/or plants have been preserved. Rock formations that are considered of paleontological sensitivity are those units that have yielded significant vertebrate or invertebrate fossil remains. These include, but are not limited to, sedimentary rock units that contain significant paleontological resources anywhere within its geographic extent.

The project site is underlain by Holocene natural levee deposits (Qhl) (Helley and Graymer, 1997). Holocene deposits are generally considered too young to contain significant fossils. A records search at the University of California, Berkeley Museum of Paleontology's catalog did not identify any previously recorded fossil localities in the vicinity of the project site or any Holocene-age vertebrate or invertebrate fossils in Alameda County.

It is expected that construction impacts would occur entirely in Holocene-age soils and unidentified paleontological deposits are unlikely to be present within the project site. In addition, the proposed project and variant would be required to implement the City's standard development conditions (FMC 18.218.050), which include protocols to be followed if unidentified paleontological resources are discovered during construction. As such, construction of the proposed project or variant would have **no impact** on paleontological resources and this impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **No Impact**

Operation of the proposed project or variant, once constructed, would not require disturbance of additional areas outside of the construction footprint. As discussed above, the project site is underlain by Holocene-age soils and unidentified paleontological deposits are unlikely to be present within the project site. As such, operation of the proposed project or variant would have **no impact** on paleontological resources, and this impact will not be further addressed in the EIR.

5d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Archival research conducted at the NWIC indicated that the project site does not contain any previously recorded Native American sites or historic-period archaeological sites. No evidence of human remains was encountered during field surveys of the project site. However, the potential cannot be completely discounted that human remains may be buried in the project site. In the event that human remains are found, the applicant will be required to comply with Public Resource Code Section 5097.98. As discussed above, the proposed project and variant also would be required to implement the City's standard development conditions (FMC 18.218.050), which include protocols to be followed if human remains are discovered during construction.

With implementation of state law and the City of Fremont's standard development requirements, construction-related impacts of the proposed project or variant relating to disturbance of human remains would be **less than significant** by ensuring appropriate treatment of human remains.. Compliance with Mitigation Measure CUL-1 will further avoid and mitigate any impacts, and this impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **No Impact**

Operation of the proposed project or variant, once constructed, would not require disturbance of additional areas outside of the construction footprint of the project. As such, operation of the proposed project or variant would have **no impact** in relation to disturbance of human remains, and these impacts will not be further addressed in the EIR.

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4.6 Geology, Soils, and Seismicity

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6.a. Expose people or structures to 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?	☐	☐	☒	☐
6.b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
6.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?	☐	☐	☒	☐
6.d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
6.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?	☐	☐	☐	☒

Setting:

The project site is in a seismically-active region of the Coast Ranges geomorphic province, characterized by northwest trending valleys and mountain ranges running sub-parallel to the San Andreas Fault Zone. In addition to the Hayward Fault, approximately 2.5 miles to the east of the project site, other large, regional active faults include the Calaveras Fault further to the east, and the San Andreas Fault to the west of San Francisco Bay. There are also several Quaternary faults, such as the Mission and Chabot Faults, which could be a source of seismic ground shaking (CGS, 2015). According to the USGS, the Hayward Fault and the Calaveras Faults pose the highest threat of seismic activity in the San Francisco Bay Area, with the Hayward Fault having a 14.3 percent likelihood of a magnitude 6.7 or larger quake in the next 30 years (USGS, 2015).

The project site is not within an area identified as susceptible to significant risk of liquefaction (CGS, 2004). The project site sits on Quaternary interfluvial freshwater basin deposits overlying Quaternary fluvial and alluvial fan deposits (Silicon Valley Soil Engineering, 2016). The project site and surrounding areas are identified as having the soil type “Yolo silt loam,” a well-drained silty alluvium derived from sedimentary rock with low potential for subsidence (NRCS, 2018). A nearby soil assessment conducted in 2014 (approximately 750 feet northeast of the project site) revealed native soils as sandy silts and clayey gravel to a depth of 55 feet below ground surface (bgs) (Impact Environmental Services, 2014). It is reasonable to assume that the project site has similar native soil composition.

The project site is generally flat and is not designated as an active landslide and is not within close proximity to a historically active or active landslide (CGS, 2011).

Discussion:

6a.i) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault?

Construction and Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

The Alquist-Priolo Earthquake Fault Zoning Act restricts construction activity in known active and well defined fault zones likely to experience surface fault rupture. The project site is not within an Alquist-Priolo Earthquake Fault Zone (California Division of Mines and Geology, 1982).

The nearest fault to the project site is the Hayward Fault, approximately 2.5 miles to the east. The Hayward Fault runs approximately 74 miles northward along the base of the East Bay Hills to San Pablo Bay and is part of a chain of active faults in the region including the San Andreas Fault to the west and the Calaveras Fault to the east (California Department of Conservation, 2008). According to the USGS, the Hayward Fault and the Calaveras Faults pose the highest threat of seismic activity in the San Francisco Bay Area (USGS, 2015).

Because the project site is not within a designated Alquist-Priolo Earthquake Zone, and is not on or immediately adjacent to an active fault, construction or operation of the proposed project (or variant) would have a **less-than-significant** impact in relation to fault rupture hazards. This impact will not be addressed further in the EIR.

6a.ii) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Construction and Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

In the event of an earthquake on the Hayward, Calaveras, or San Andreas faults, or others in the project vicinity, the project site would experience a range of ground shaking effects, and depending on a variety of factors such as distance to the epicenter, magnitude of the event, and behavior of underlying materials, ground shaking could be substantial. Earthquake strength and epicenters are unpredictable and may result in damage to surrounding roadways, utilities, and building foundations.

The City General Plan includes policies and implementation measures to reduce impacts related to strong seismic ground shaking. City General Plan Policy 10-1.1 regulates the location of new development and redevelopment in a manner that avoids geologic hazards to life and property and Implementation Measure 10-1.1.D requires all development impacts associated with geologic hazards are mitigated to an acceptable level as defined by the State of California. City General Plan Policy 10-2.1 regulates the location of new development and redevelopment in a manner to minimize potential damage and hazards related to expected seismic activity. Implementation 10-2.1.A requires all proposed development complies with the provisions of the Seismic Hazards Mapping Act and all other seismic safety criteria established by the City of Fremont and Implementation Measure 10-2.1.B requires all development impacts associated with seismic hazards are mitigated to an acceptable level as defined by the State of California. The State of California defines an “acceptable level” of risk as that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project (Title 14 CCR Section 3721[a]).

The project and variant would be required to comply with the seismic standards of the most recent version of the California Building Code, which includes measures to ensure that structures can withstand the maximum expected ground shaking without catastrophic failure. The proposed project includes plans to rehabilitate the abandoned historic fire station for adaptive reuse, which would include seismic upgrading of the fire station to make sure the building is compliant with applicable building codes. While complete avoidance of any damage may not be feasible during a seismic event, adherence to industry-standard seismic design measures in accordance with current building codes would mean that potential impacts from strong seismic ground shaking would be less than significant. The proposed project or the variant would not alter geologic or soil conditions at the project site in a manner that would exacerbate the

potential or magnitude for seismic ground shaking, which is a function of the location of the epicenter, the size of the event, and the underlying geological formations, none of which would be affected by the proposed project or variant. For this reason, construction and operational impacts of the proposed project and the variant related to seismic ground shaking would be **less than significant** and will not be addressed further in the EIR.

6a.iii) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Construction and Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

As noted above under "Setting," the project site is not within an area identified as susceptible to significant risk of liquefaction. The proposed project and the variant would be required to follow the seismic standards of the most recent version of the California Building Code for construction of new structures, which includes measures to ensure that potential settlement and resultant damage from liquefaction or other seismic-related ground failure is minimized. The proposed project would also include rehabilitation of the former historic firehouse for adaptive reuse, which would involve seismic upgrading of the building to meet current building codes. While complete avoidance of any damage may not be feasible, incorporation of industry-standard seismic design measures in accordance with current building codes would reduce potential impacts from seismic-related ground failure to less-than-significant levels. Construction and operation of the proposed project or variant would not alter geologic or soil conditions at the project site in a manner that would exacerbate the potential for seismic liquefaction, which depends on the intensity of ground shaking, presence of loose, granular sediments, and groundwater saturation levels (USGS, 2006). For this reason, the construction and operational impacts of the proposed project and variant related to liquefaction would **be less than significant** and will not be addressed further in the EIR.

6a.iv) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Construction and Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

Because the site does not contain steep slopes and is not on or near a known landslide, construction or operation of the proposed project or variant would have a **less-than-significant** impact related to landslide hazards, and this impact will not be addressed further in the EIR.

6b) Would the project result in substantial soil erosion or the loss of topsoil?

Construction– Proposed Project or Variant: **Less-Than-Significant Impact**

Construction of the proposed project and variant would involve the demolition of existing buildings,[4] as well as demolition of existing parking lots and removal of trees to accommodate the new development. The site would then be graded to form building pads, street and sidewalk grades followed by construction activities to build the new residential and mixed use buildings, clubhouse, pool, and recreational open space. These activities have the potential to cause erosion and loss of topsoil. As discussed in Section 4.9, "Hydrology and Water Quality," disturbances to the property under both the proposed project and variant would be greater than an acre, requiring coverage under the Statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activities Stormwater Permit (General Permit) through the California State Water Resources Control Board (SWRCB). To obtain coverage under the General Permit, submission of a Storm Water Pollution Prevention Plan (SWPPP) would be required, which requires implementation of Best Management Practices including the following and/or similar measures to minimize erosion and topsoil loss:

- *Minimize Active Construction Area.* The number of access routes, size of staging areas, and the size of the active construction sites would be limited to the minimum necessary to achieve project

[4] Under the proposed project, eleven of the twelve existing buildings would be demolished (only the fire station building would be retained); under the variant, all twelve existing buildings would be demolished.

objectives and the staging, storage, equipment laydown, access routes, and parking areas would be established on paved or previously disturbed areas to the extent feasible.

- *Implement Erosion Control.* Standard construction site erosion control measures would be used where sediment from exposed slopes could erode and enter drainage facilities. Areas of disturbed soils that slope toward drainages would be stabilized when not actively in use to reduce erosion potential.

With implementation of Best Management Practices required by the SWPPP under the NPDES General Permit, the potential construction impacts of erosion and topsoil loss would be **less than significant** under both the proposed project and the variant, and will not be addressed further in the EIR.

Operation – Proposed Project or Variant

The proposed project and variant include development of residential townhomes, mixed use buildings, open space areas (e.g., community clubhouse, children's play area), parking spaces, internal roadways, and pedestrian paseos. The majority of the project site would be hardscaped, and non-hardscaped areas would be grassed or landscaped. Erosion or loss of topsoil would not be anticipated to continue beyond the construction period. There would be **no impact** related to erosion and topsoil loss from operation of the proposed project or variant, and this topic will not be addressed further in the EIR.

6c) 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?

Construction and Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

Because a majority of the project site has undergone previous soil-disturbing activities and development, it is reasonable to assume there may be areas of deep and loose fill. If not designed appropriately, construction on relatively loose materials or over materials of differing properties could be subject to subsidence or differential settlement. However, the proposed project and variant would be required to comply with site preparation standards in accordance with the most recent California Building Code requirements, which include site-specific design-level evaluation of underlying materials and their engineering characteristics. As such, the proposed project or variant would be required to remove unsuitable materials and either recompact or replace with engineered fill. With compliance and implementation of industry standard engineering design measures in accordance with building code standards, the potential impacts associated with unstable soils would be reduced, and hazards associated with unstable soils would not be intensified by the proposed project or variant. Due to required compliance with applicable state building codes for both the proposed project and the variant, the impacts of construction or operation related to unstable soils would be **less than significant** and will not be addressed further in the EIR.

6d) Be located on expansive soil, creating substantial risks to life or property?

Construction and Operation – Proposed Project or Variant: **No Impact**

The predominant soil type in the vicinity of the project site, Yolo silt loam, has a low to moderate linear extensibility, which is a measure of the soil's potential for shrink/swell expansion (NRCS, 2018). As such, the project site is not on expansive soil, and construction or operation of the proposed project or variant would not create substantial risks to life or property, nor exacerbate potential impacts, related to expansive soils. There would be no impact and this topic will not be addressed further in the EIR.

6e) 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?

Construction and Operation – Proposed Project or Variant: **No Impact**

Neither the proposed project nor variant propose septic tanks or alternative wastewater disposal. Wastewater collected from the proposed development would be conveyed to existing sanitary sewer lines adjacent to the site. As a result, there would be **no impact** from construction or operation of the proposed

project or variant on the suitability of soils to accommodate septic tanks or alternative wastewater treatment systems. This impact will not be addressed further in the EIR.

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4.7 Greenhouse Gas Emissions

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

Setting:

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHG), play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters earth's atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. Infrared radiation is absorbed by GHGs; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

GHGs are present in the atmosphere naturally, are released by natural sources and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change that are relevant to the proposed project:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)

Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4 is the main component of natural gas and is associated with agricultural practices and landfills. N_2O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of 1. The other main GHGs that have been attributed to human activity include CH_4, which has a GWP of 28, and N_2O, which has a GWP of 265 (Intergovernmental Panel on Climate Change [IPCC], 2013). For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 28 tons of CO_2. GHGs with lower emission rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP). The concept of CO_2-equivalents (CO_2e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

Discussion:

7a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Off-road equipment, materials transport, and worker commutes during construction of the proposed project or variant would generate GHG emissions. Total project construction GHG emissions were

estimated using the methodology discussed earlier under Section 4.3, “Air Quality.” The total estimated construction-related emissions for the proposed project would be approximately 705 metric tons (MT) CO_2e, or 1,275 MT CO_2e for the variant. Additional modeling assumptions and details are provided in Appendix A-1 and A-2.

BAAQMD has not adopted thresholds for evaluating GHG emissions from construction activities. However, BAAQMD recommends that the lead agency quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals (BAAQMD, 2017).

Direct comparison of construction GHG emissions with long-term thresholds would not be appropriate because these emissions cease upon completion of construction. Other districts (e.g., South Coast Air Quality Management District, 2008; San Luis Obispo County Air Pollution Control District, 2012) recommend that GHG emissions from construction activities be amortized over a project’s operational lifetime (typically assumed to be 30 years) for comparison with long-term GHG emissions significance thresholds. For comparison to the BAAQMD threshold, construction emissions were amortized over the lifetime of the project and added to the annual operational emissions (see Table 4.7-1). The amortized construction emissions for the proposed project or variant were estimated at 24 or 43 MT CO_2e per year, respectively.[5]

Operation of the proposed project or variant would generate GHG emissions associated with building operation, energy use, and mobile sources from vehicle trips by residents and visitors. Operational emissions for the proposed project and variant were estimated using the methodology discussed earlier under Section 4.1, “Air Quality.” In addition, GHG emissions from energy usage take account of Pacific Gas & Electric’s specific CO_2 intensity improvements per the Renewable Portfolio Standard (Pacific Gas & Electric, 2015). For operational-related GHG emissions of a land use development, such as the proposed project or variant, BAAQMD recommends a threshold of significance[6] of less than 1,100 MT CO_2e MT per year or 4.6 MT CO_2e per service population (defined as number of residents plus employees) per year. Operational GHG emissions include area emissions, energy demand, vehicle trips, waste, and water usage. Consistent with the definition of baseline conditions pursuant to CEQA Guidelines (Section 15125(e)), this analysis evaluates the net change in operational emissions from the existing land uses to the proposed project or variant. Estimated operational GHG emissions for the proposed project and variant are shown in Table 4.7-1. Additional modeling assumptions and details are provided in Appendix A.

As shown in Table 4.7-1, total net annual GHG emissions for the proposed project or variant would not exceed the BAAQMD threshold of 1,100 MT CO_2e per year. Therefore, the proposed project or variant would not generate GHG emissions that may have a significant impact on the environment. The impact would be **less than significant** and will not be further addressed in the EIR.

[5] For the project, 705 MT CO_2e over 30 years equals approximately 24 MT CO_2e per year. For the variant, 1,275 MT CO_2e over 30 years equals approximately 43 MT CO_2e per year.

[6] The bright-line threshold of 1,100 MT CO_2e per year is a numeric emissions level below which a project’s contribution to global climate change would be less than “cumulatively considerable” (BAAQMD, 2017). Therefore, if a project’s emissions are below the bright-line threshold, the project’s contribution to global climate change would be less than cumulatively considerable. For a project to be considered to result in a significant impact on the environment due to GHG emissions, estimated project emissions must exceed both the total annual threshold and the service population threshold. For example, if a project’s emissions are above the bright-line threshold, emissions would still be less than cumulatively significant if the project would result in an efficiency of 4.6 MT CO_2e per service population or better.

Table 4.7-1 GHG Emissions for the Proposed Project and Variant

Emissions Source	Existing Uses (MT CO_2e)	Proposed Project[b] (MT CO_2e)	Variant[c] (MT CO_2e)
Amortized Construction Emissions	-	24	43
Area Sources	<1	7	9
Energy Consumption	178	455	431
Mobile Sources	1,655	1,843	2,258
Waste	28	55	52
Water Usage	13	26	30
Total Annual Emissions	1,874	**2,410**	**2,823**
Net Annual GHG Emissions (MT CO_2e) [a]		**536**	**949**
Threshold of Significance (MT CO_2e)		1,100	1,100
Exceed Threshold		No	No

Notes:

[a] *Net GHG emissions include the existing uses subtracted from the total project GHG emissions, which includes annual operational emissions and amortized construction emissions.*

[b] *Source: Modeled by Illingworth & Rodkin, Inc. in 2018 (Appendix A-1).*

[c] *Source: Modeled by AECOM in 2018 (Appendix A-2).*

Abbreviations and Acronyms:

MT = metric tons

CO_2e = carbon dioxide equivalents

7b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

In 2006, California passed the *California Global Warming Solutions Act of 2006* (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. It requires that statewide GHG emissions be reduced to 1990 levels by 2020.

In December 2008, ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which contains the main strategies California will implement to achieve the GHG reductions from business-as-usual (BAU) emissions required by AB 32 (ARB, 2008). BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. As directed by AB 32, ARB has also approved a statewide GHG emissions limit. On December 6, 2007, ARB staff resolved an amount of 427 million metric tons (MMT) CO_2e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. ARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT CO_2e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT CO_2e. Thus, an estimated reduction of 80 MMT CO_2e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required ARB and other state agencies to develop and adopt regulations and other initiatives reducing GHG emissions by 2012.

Senate Bill (SB) 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, ARB approved the Final Proposed 2017 Scoping Plan Update: The Strategy for Achieving California's 2030 GHG Target in November 2017 (ARB, 2017). The 2017 Scoping Plan draws from the previous plans to present strategies to reaching California's 2030 GHG reduction target. None of these statewide plans or policies constitutes a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. In addition, it is assumed that any requirements formulated under the mandate of AB 32 and SB 32 would be implemented consistent with statewide policies and laws.

The Fremont City Council adopted an ordinance, effective January 1, 2011, which mandates that new residential buildings comply with the Green Building Code, or, alternately, achieve at least fifty points from the GreenPoint Checklist (City of Fremont, 2012). In 2012, the City of Fremont adopted the *Fremont Climate Action Plan* (CAP) to address the major sources of GHG emissions to meet the emission reduction goal of 25 percent below Fremont's 2005 conditions by 2020 (City of Fremont, 2012). As explained in the CAP, this emission target is more ambitious than the State's goal of reducing GHG emissions to 1990 levels by 2020 (equivalent to a 12 percent reduction below 2005 levels). To meet this ambitious local goal, the City adopted community-wide measures to reduce emissions in the following sectors: land use and mobility, energy, solid waste, water, and municipal services and operations. As such, the measures in the CAP were established to meet the local goals established by the City of Fremont, and also serve to aid in reducing emissions statewide.

Since adoption of the CAP, the City of Fremont has also adopted an ordinance, the Fremont Green Building Standards Code (FMC Chapter 15.48), related to implementation of the 2016 California Green Building Standards Code (CALGreen). The 2016 CALGreen requirements include mandatory measures for all new building construction, and the CALGreen Residential and Non-Residential Mandatory Measures checklists must be included on a plan sheet for all projects subject to these measures (City of Fremont, 2017). The CAP does not include any additional measures that are directly applicable to the proposed project or variant.

Based on the proposed project's or variant's required adherence to the City's Green Building Ordinance, the proposed project or variant would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Therefore, the impact would be **less than significant** and will not be further addressed in the EIR.

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4.8 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8.a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
8.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?	☐	☒	☐	☐
8.c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
8d. 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?	☐	☐	☐	☒
8.e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
8.f. For a project within the vicinity of a private airstrip, would the project result in safety hazard for people residing or working in the project area?	☐	☐	☐	☒
8.g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
8.h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Setting:

A Phase I Environmental Site Assessment (ESA) was prepared for the majority of the project site in 2016, which identified potential recognized environmental conditions that suggest the presence of hazardous materials or waste. The ESA detected indications relating to the possible (unconfirmed) presence of a Chevron service station on the southern portion of the site (Silicon Valley Engineering, 2016a). Subsequent soil sampling identified elevated concentrations of the heavy metals arsenic, chromium, and lead, and further testing was recommended to better define the area of concern and to determine if soils removed from the project site would be considered a California or federal hazardous waste for disposal purposes (Silicon Valley Engineering, 2016b).

A subsequent peer review of the Phase I ESA and soil sampling results found several data gaps, omissions, and inconsistencies within these reports. The peer review recommended additional environmental investigation (including additional soil sampling) for the project site, in particular in the vicinity of the suspected former service station at 37480 Fremont Boulevard, and within the northern portion of the project site that was not studied by the previous investigations, and which is less than 200 feet from the former Panesar Beacon facility, an active Leaking Underground Storage Tank (LUST) site (AECOM, 2018; IES, 2015).

Several of the existing structures on the project site were constructed prior to the mid-1970s, when use of asbestos-containing materials (ACM), lead-based paint (LBP), and Polychlorinated Biphenyl (PCB)-containing fluorescent light ballasts (FLB) was common. It is unknown, but considered likely based on their construction time frame, that some of the existing structures on the project site contain such hazardous building materials. ACM and LBP can cause human health impacts if disturbance during demolition or construction activities causes asbestos fibers or lead particles to become airborne and subsequently inhaled (EPA, 2018a; 2018b).

Several transformers were identified on the project site (Silicon Valley Engineering, 2016a), for which the manufacture dates are unknown, and therefore, in accordance with EPA guidance, must be assumed to contain PCBs (EPA, 2018c). PCBs can be released to the environment (soil, water, or air) if PCB-containing waste is not handled and disposed of properly, where it can accumulate in plants and animals, and be ingested by humans (EPA, 2018d).

Discussion:

8a-8b) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 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?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

Hazardous materials at the project site during construction could include hazardous building materials in existing structures; contaminated soils or groundwater; and hazardous substances used during construction. Potential impacts relating to the routine transport, use, disposal, or accident/upset of each of these types of hazardous material during construction would be similar for both the proposed project and variant, and are discussed in more detail in turn, below.

Hazardous Building Materials:

Construction of the proposed project or variant would require demolition of existing structures on the site, except for the existing fire station building, which would be rehabilitated for future re-use under the proposed project. Fire station rehabilitation would include the removal or demolition of some building features, as well as renovation and reconstruction activities. Construction of the variant would require demolition of all existing structures on the site. Demolition and/or renovation of structures would potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs.

Appropriate identification, removal and disposal (according to applicable regulations) of potentially hazardous building materials would reduce exposure risks from hazardous building materials at the project site. Both the federal Occupational Safety and Health Administration (OSHA) and California Division of Occupational Safety and Health (Cal-OSHA) regulate worker exposure during construction activities that disturb LBP. The Interim Final Rule found in 29 Code of Federal Regulations (CFR) 1926.62 covers construction work which may expose employees to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. OSHA-specified compliance includes respiratory protection, protective clothing, housekeeping, special high-efficiency filtered vacuums, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.

ACMs are regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. Any ACMs, if present, would need appropriate abatement of identified asbestos prior to demolition or rehabilitation. Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement. BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing) is

intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses national emissions standards for asbestos and requires that BAAQMD be notified 10 days in advance of any proposed demolition or abatement work on structures with asbestos-containing materials. All asbestos-containing material found on the site must be removed before the start of demolition or renovation activity in accordance with the rule. Methods of removal identified in Rule 2 could include wetting of asbestos-containing material during cutting, stripping, demolition, renovation, removal; using a high efficiency particulate air(HEPA) exhaust, ventilation, and collection system designed and operated to capture the emissions from asbestos-containing material; or removing asbestos-containing material in units or sections so long as the exposed asbestos-containing material is adequately wetted or encapsulated to prevent emissions of particulate asbestos material. Rule 2 specifies that asbestos-containing material is to be isolated by physical barriers from the outside air to the extent feasible during removal and a Cal-OSHA certified contractor must present during removal of all asbestos-containing material. Rule 2 further identifies disposal methods, which could include treatment of asbestos-containing waste material with water, processing of asbestos-containing waste material into nonfriable forms, and conversion of asbestos-containing waste material into non-asbestos (asbestos-free) material. Compliance with Rule 2 ensures construction workers and the public are not exposed to ACMs that could result in negative health effects, such as lung disease.

PCB-containing FLBs would be of concern if they are leaking or they will be removed and disposed of as hazardous waste. According to EPA Toxic Substances Control Act (TSCA) regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. Identification and remediation of PCB-containing transformers would be the responsibility of the utility owner, presumed in this case to be Pacific Gas and Electric.

Mitigation Measure HAZ-1 requires that a survey for hazardous building materials be undertaken at the site, and that any hazardous building materials (if present) be properly removed and disposed of by a certified Cal-OSHA contractor prior to demolition activities.

> ***Mitigation Measure HAZ-1: Hazardous Building Materials Survey and Abatement.***
>
> *Prior to building permit issuance for demolition or renovation activities of any structures, the applicant shall retain a Cal-OSHA certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and PCB-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the City to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing), as a condition of the demolition or building permit. Following completion of removal activities, the applicant shall submit documentation to the City verifying that all hazardous materials were properly removed and disposed.*

Implementation of Mitigation Measure HAZ-1 and compliance with applicable local, State, and federal regulations would result in hazardous building materials being appropriately handled, transported, and disposed of, and adequate precautions being undertaken to prevent potential exposure to workers or the public. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies. These actions would reduce construction impacts related to hazardous building materials to **less than significant** with mitigation for both the proposed project and variant. This impact will not be addressed further in the EIR.

Soil and Groundwater Contamination:

Construction of the proposed project or variant would require site grading activities, which would potentially expose construction workers and the public to hazardous conditions through disturbance, transportation, or disposal of contaminated soils and/or groundwater. Grading activities could also result in accidental release of contaminants from the soil to groundwater or air.

Construction of the proposed project or variant would involve site grading activities and handling of site soils, which in some parts of the project site are known to contain arsenic and nickel at concentrations (up to 13 mg/kg and 94 mg/kg, respectively) that exceed the relevant regional background or environmental screening levels for direct construction worker exposure (Silicon Valley Engineering, 2016b). Additionally, lead and chromium are known to be present in soils at concentrations (up to 55 mg/kg and 73 mg/kg, respectively) that require further analysis to determine if handling and disposal as a California or federal hazardous waste would be required if soils are removed from the project site during construction (Silicon Valley Engineering, 2016b). Groundwater at the nearby Panesar Beacon LUST site, approximately 200 feet north of the project site, is contaminated with xylenes, diesel and gasoline, and groundwater flow direction appears to be to the south, towards the project site (IES, 2017).

Due to the lack of sampling locations in the vicinity of the suspected former service station and in the northern portion of the project site near the Panesar Beacon LUST site, there could be additional contaminants (such as petroleum hydrocarbons or volatile organic compounds), or higher concentrations of contaminants, than the existing environmental reports for the site suggest (AECOM, 2018). As a result, ground-disturbing activities during construction, such as site grading and utility trenching would potentially expose construction workers and the public to hazardous conditions, through disturbance, transportation, or disposal of contaminated soils or groundwater. Grading activities could also result in accidental mobilization of contaminants from the soil to groundwater or air. Depending on the concentration of any contaminants, if present, excess soils generated during construction may exceed California or federal hazardous waste criteria, which could result in exposure for construction workers and the public if not handled, transported, or disposed of appropriately. Impacts relating to potentially contaminated soils and/or groundwater would be potentially significant.

Implementation of Mitigation Measure HAZ-2 would reduce these potential impacts by requiring further investigation of the project site to adequately delineate the presence and extent of contamination, and setting out protocols to be implemented in areas containing contaminated soils or groundwater if present. Implementation of Mitigation Measure HAZ-2 would further reduce the potential impacts by requiring implementation of appropriate health and safety procedures, and protocols for unanticipated discovery of contamination during construction.

Mitigation Measure HAZ-2: Environmental Site Investigation and Mitigation Plan.

Prior to the issuance of a grading permit and before any substantial ground disturbance, the applicant shall hire a qualified environmental professional to conduct additional environmental site investigation and prepare a site mitigation plan for the project site. The site mitigation plan, and any remedial actions required as part of it, shall be implemented by the applicant and its contractors to the satisfaction of the relevant oversight agencies (City of Fremont Fire Department, Alameda County Water District (ACWD) and/or designated Alameda County or State Department oversight agency, or other appropriate agency having jurisdiction) to ensure sufficient minimization of risk to human health and the environment is completed.

At a minimum, the site mitigation plan shall:

- *Establish appropriate site-specific cleanup targets, which are protective of human health and the environment, based on the proposed future land uses(s). At a minimum, these targets shall be equal to, or more protective than the San Francisco Bay Regional Water Quality Control Board's (RWQCB) Environmental Screening Levels (ESLs) for Residential Use, or in the case of contaminants which have naturally occurring background levels that exceed the residential ESLs, the target shall be equal to, or more protective than, the regional background level for that contaminant.*

- *Delineate the extent of soil and/or groundwater contamination at levels exceeding the plan's clean up targets. Identify and implement measures such as excavation, containment, or treatment of the hazardous materials to achieve the plan's cleanup levels. The site mitigation plan should include figures and drawings showing areas and depths of soil excavation or treatment, soil waste classifications, and any mitigating*

measures. Within such areas, the plan shall establish procedures for safe handling and transportation of the excavated materials, consistent with State, federal, and local regulations, including:

- *Removal of soil and materials shall be performed by a licensed engineering contractor with a Class A license and hazardous-substance removal certification. A California-licensed engineer shall provide field oversight on behalf of the applicant to document the origin and destination of all removed materials. If necessary, removed materials shall be temporarily stockpiled and covered with plastic sheeting pending relocation, segregation, or off-haul.*

- *If excess materials are off-hauled, waste profiling of the material shall be completed and documented. Materials classified as nonhazardous waste shall be transported under a bill of lading. Materials classified as hazardous waste shall be transported under a hazardous waste manifest. All materials shall be disposed of at an appropriately licensed landfill or facility.*

- *Trucking operations shall comply with Caltrans and any other applicable regulations, and all trucks shall be licensed and permitted to carry the appropriate waste classification. The tracking of dirt by trucks leaving the project site shall be minimized by cleaning the wheels upon exit and cleaning the loading zone and exit area as needed.*

- *Description of post-excavation confirmation sampling requirements. If residual contamination remains at the site above the site-specific cleanup targets, include appropriate controls, including institutional controls where and if necessary, to assure that activities by future users do not expose them to unacceptable health and safety risks. Such controls may include but are not limited to visual barriers over contaminated soil, followed by a cap of clean soil or hard surface materials; operation and maintenance protocols for any disturbance of contaminated soils; and recording of deed restrictions, such as activity and use limitations, with the Alameda County Recorder's Office to assure that the remedy is maintained.*

- *Delineate areas of the site where contaminants exceed the RWCQB's ESLs for direct exposure by construction workers. Establish procedures for limiting access to such areas to properly trained personnel. Establish minimum requirements for site-specific health and safety plans, to protect the general public and workers in the construction area (note: these requirements and the environmental sampling results shall be provided by the applicant to all contractors, who shall be responsible for developing their own construction worker health and safety plans and training requirements).*

- *Include contingency measures to address unanticipated conditions or contaminants encountered during construction and development activities. The contingency measures shall establish and describe procedures for responding in the event that unanticipated subsurface hazards or hazardous material releases are discovered during construction, including appropriately notifying nearby property owners, schools, and residents and following appropriate site control procedures. Control procedures would include but not be limited to further investigation and, if necessary, remediation of such hazards or releases, including off-site removal and disposal, containment, or treatment. If unanticipated subsurface hazards or hazardous material releases are discovered during construction, the contingency measures addressing unknown contaminants shall be followed. The contingency measures shall be amended as necessary if new information becomes available that could affect implementation of the measures.*

Implementation of Mitigation Measure HAZ-2 would reduce potential impacts related to subsurface soil or groundwater contamination during construction of both the proposed project and variant to **less than significant with mitigation**. This impact will not be addressed further in the EIR.

Use of Hazardous Materials:

Construction of both the proposed project and variant would require use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and construction materials containing hazardous materials (solvents, adhesives, paints, etc.); therefore, there is potential for accidental spills or releases of hazardous materials during construction.

Limited quantities of certain hazardous materials such as fuels, oils, solvents, and glues would be used during construction, which if spilled could enter surface water, result in soil or groundwater contamination, or expose workers to hazardous materials. Given the size of the proposed project or variant, there is low likelihood that significant quantities of hazardous materials would be stored at the site during construction. Because the project site is greater than one acre, coverage under the State Water Resource Control Board's Construction General Permit would be obtained. As part of the Construction General Permit, the contractor would be required to prepare and implement a SWPPP which would include best management practices, including the following and/or similar measure to minimize the risk of accidental spills of hazardous materials during construction:

> *Hazardous Spill Prevention. Vehicles and equipment would be maintained in proper working condition to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Service/maintenance vehicles would carry materials to absorb leaks or spills. Servicing, refueling, and staging of construction equipment would take place only at designated areas where a spill would not flow to drainages. Equipment washing, if needed, would occur only in designated locations where water would not flow into drainage channels. Hazardous spills would be cleaned up immediately and contaminated soil would be properly disposed of at a licensed facility.*

By implementing the SWPPP and associated BMPs, construction-related hazardous substances, such as oil and greases, would be managed through appropriate material handling and good housekeeping practices. These actions would apply to construction of both the project and the variant. With implementation of the SWPPP, the construction-related impacts pertaining to use of hazardous materials would be **less than significant**. This impact will not be addressed further in the EIR.

Operation – Proposed Project: **Less than Significant with Mitigation**

Hazardous Building Materials:

Operation of the proposed project would potentially expose future users of the fire station building to asbestos fibers or lead-based paint dust, if any such materials remained in the building following its rehabilitation. Such an impact could be potentially significant, particularly during any future renovation activities that might further disturb existing materials. However, as discussed above in relation to construction impacts, Mitigation Measure HAZ-1 would require any such hazardous building materials to be properly removed from all structures on the project site (including the fire station, which would remain on site under the proposed project) in accordance with federal and State law. Implementation of Mitigation Measure HAZ-1 would therefore reduce potential exposure to such hazardous building materials from operation of the proposed project to **less than significant with mitigation**. This impact will not be addressed further in the EIR.

Soil and Groundwater Contamination:

As discussed above under construction impacts, while soil sampling undertaken to date has not detected contaminants in concentrations that exceed residential or commercial land use ESLs, further environmental investigation is required to determine if such concentrations exist on the site. If soil contamination exceeding residential or commercial land use ESLs does exist and is not adequately addressed during construction, then operation of the proposed project could expose future residents, employees, or visitors to contaminated soils, groundwater, or soil gas, particularly during ground-disturbing activities such as landscape maintenance, utility installation, or gardening (via direct contact or generation of fugitive dust), or potentially through vapor intrusion into proposed buildings. Such impacts could be potentially significant.

Implementation of Mitigation Measure HAZ-2, above, would require additional environmental site investigation and preparation of a site mitigation plan for the project site. The site mitigation plan would not only include measures to protect construction workers during site preparation and construction work, but would also include measures to remove potential contaminant exposure pathways that could adversely affect future residents, employees, visitors, and other users of the project site. In particular, the following requirements from Mitigation Measure HAZ-2 are applicable to protection of future users:

- *Establish appropriate site-specific cleanup targets, which are protective of human health and the environment, based on the proposed future land uses(s). At a minimum, these targets shall be equal to, or more protective than the San Francisco Bay Regional Water Quality Control Board's (RWQCB) Environmental Screening Levels (ESLs) for Residential Use, or in the case of contaminants which have naturally occurring background levels that exceed the residential ESLs, the target shall be equal to, or more protective than, the regional background level for that contaminant.*

- *Delineate the extent of soil and/or groundwater contamination at levels exceeding the plans clean up targets. Identify and implement measures such as excavation, containment, or treatment of the hazardous materials to achieve the plan's cleanup levels. The site mitigation plan should include figures and drawings showing areas and depths of soil excavation or treatment, soil waste classifications, and any mitigating measures.*

- *Describe post-excavation confirmation sampling requirements. If residual contamination remains at the site above the site-specific cleanup targets, include appropriate controls, including institutional controls where and if necessary, to assure that activities by future users do not expose them to unacceptable health and safety risks. Such controls may include but are not limited to visual barriers over contaminated soil, followed by a cap of clean soil or hard surface materials; vapor barriers beneath buildings to prevent vapor intrusion; operation and maintenance protocols for any disturbance of contaminated soils; and recording of deed restrictions, such as activity and use limitations, with the Alameda County Recorder's Office to assure that the remedy is maintained.*

Implementation of Mitigation Measure HAZ-2 would mean that the majority of contaminated soils exceeding residential ESLs (or applicable cleanup targets) would be removed from the project site, and that if any residual contamination remained at the project site following construction, controls would be in place to prevent future users from contacting contaminated soils or being exposed to emissions. With implementation of Mitigation Measure HAZ-2, the impacts of the proposed project would be reduced to **less than significant with mitigation**.

Hazardous Materials:

It is not anticipated that significant quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of the proposed project. Households would be expected to use typical quantities of common commercially available household hazardous materials such as cleaning and maintenance supplies. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment.

The majority of commercial uses allowable under the project site's Town Center – Pedestrian zoning[7] would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[8] If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of a

[7] Allowable uses in the Town Center-Pedestrian zone are described in Table 18.45.060-1 of the Fremont Municipal Code.

[8] The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

Hazardous Materials Business Plan to the City of Fremont Fire Department, which is the Certified Unified Program Agency with jurisdiction over the project site.

The types and amounts of hazardous materials used at the project site under the proposed project would not pose any greater risk of upset or accident than the existing uses at the site or at other similar development elsewhere in the City. The proposed project would not involve industrial manufacturing or processing activities or research and development activities that would use large amounts of hazardous materials or acutely hazardous materials, which typically pose a health risk if accidentally released. Compliance with existing regulations will assure proper transportation, use, storage, and disposal of hazardous materials, and the operational impacts of the proposed project would be **less than significant**. These impacts will not be further addressed in the EIR.

Operation – Variant: **Less than Significant with Mitigation**

Hazardous Building Materials:
Operation of the variant would not expose future users to hazardous building materials, because all existing buildings would be removed from the project site prior to construction under the variant. There would be **no impact** from operation of the variant.

Soil and Groundwater Contamination:
Similar to the proposed project, soil contamination exceeding residential or commercial land use ESLs may exist at the project site, and if present and not adequately addressed during construction, then operation of the variant could expose future residents, employees, or visitors to contaminated soils, groundwater, or soil gas, particularly during ground-disturbing activities such as landscape maintenance, utility installation, or gardening (via direct contact or generation of fugitive dust), or potentially through vapor intrusion into proposed buildings. Such impacts could be potentially significant.

The analysis of the proposed project would also be applicable to the variant, and for the same reasons discussed therein, implementation of Mitigation Measure HAZ-2 would mean that the majority of contaminated soils exceeding residential ESLs (or applicable cleanup targets) would be removed from the project site, and that if any residual contamination remained at the project site following construction, controls would be in place to prevent future users from contacting contaminated soils or being exposed to emissions. With implementation of Mitigation Measure HAZ-2, the impacts of the proposed project would be reduced to **less than significant with mitigation**.

Hazardous Materials:
The variant would contain similar residential and retail uses as the proposed project, so that it is not anticipated that significant quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of the variant. The analysis of the proposed project would also be applicable to the variant, and for the same reasons discussed therein, the operational impacts of the variant would be **less than significant**. These impacts will not be further addressed in the EIR.

8c) 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?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

The closest public school to the project site is approximately 800 feet away (Centerville Junior High School at 37720 Fremont Boulevard), and several preschools and a private school are also located in the vicinity. The Holy Spirit School is immediately southeast of Parish Avenue, approximately 30 feet from the project site boundary, with the associated preschool slightly further to the southeast; Childs Hideaway Preschool on Fremont Boulevard is approximately 125 feet southeast from the project site boundary; and Genius Kids Preschool on Peralta Boulevard is approximately 500 feet northeast from the project site boundary.

As stated above under Impacts 8a-8b), construction of the proposed project or variant would involve handling of hazardous materials, substances, or waste; therefore, such activities would occur within a one-quarter mile of a school. Such activities, if not appropriately managed, could result in hazardous

emissions that would potentially impact nearby schools. However, as discussed in relation to those impacts, adherence to local, State, and federal regulations regarding the handling, storage, transportation, and disposal of hazardous materials, and implementation of Mitigation Measures HAZ-1 and HAZ-2 would reduce potential impacts from construction to construction workers and the public, including nearby school students. The construction impact would be **less than significant with mitigation** incorporated, and this impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

Once constructed, operation of the proposed project or variant would not involve the handling of substantial amounts of hazardous materials. As discussed under Impacts 8a-8b), such materials are anticipated to be limited to typical household or commercial cleaning and maintenance products. The types and amounts of hazardous materials used at the site under the proposed project or variant would not pose any greater risk of upset or accident than at other similar development elsewhere in the City. Adherence to local, State, and federal regulations would be sufficient to avoid potential impacts on nearby schools. The impact would be **less than significant**, and this impact will not be addressed further in the EIR.

8d) 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?

Construction and Operation – Proposed Project or Variant: **No Impact**

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code, Section 65962.5, commonly known as the Cortese list (CalEPA, 2018a; 2018b; DTSC, 2018; SWRCB, 2018a; 2018b).

The nearest Cortese list site, the former Panesar Beacon facility at 3740 Peralta Boulevard, is approximately 200 feet north of the project site. This LUST site has been subject to remediation activities dating back to 2002, including removal of over 16.8 tons of contaminated soil (Silicon Valley Engineering, 2016a). The site is still classified as “active,” due to the detection of benzene and total petroleum hydrocarbons (TPH) as diesel (TPH-d) and as gasoline (TPH-g) in groundwater during recent (April 2017) monitoring (IES, 2017). The extent to which the soil east and south of the site (i.e., towards the project site) is contaminated is unclear. The most recent groundwater monitoring for the site found levels of contamination in the groundwater wells closest to the project site that were less than the RWQCB’s Tier 1 ESL for groundwater of 100 mg/L (IES, 2017). Further discussion of potential contamination at the project site, including mitigation measures requiring further environmental investigation in the northern portion of the site close to the Panesar Beacon facility, is provided under Impacts 8a-8b), above.

Because the project site is not included on the Cortese list, construction and operation of the proposed project or variant would have **no impact** related to listed hazardous materials sites, and this impact will not be further addressed in the EIR.

8e- 8f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Construction and Operation – Proposed Project or Variant: **No Impact**

The project site is not within close proximity of an airport or airfield. Hayward Executive Airport, approximately 8.8 miles northwest, is the closest airport to the project site. Moffett Federal Airfield (9.3 miles west-southwest) and San Jose International Airport (13 miles south-southwest) are further from the project site. Due to the distance of the airports and airfield, no associated airport land use plans are relevant to the project site, and the proposed project or variant would not result in a safety hazard for people residing or working in the project area. Therefore, construction or operation of the proposed project or variant would have **no impact** with respect to airport hazards and these impacts will not be further addressed in the EIR.

8g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction – Proposed Project or Variant: **Less-Than-Significant Impact**

Construction of the proposed project or variant would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Several northern California counties and municipalities, with support of Homeland Security, have created a Regional Emergency Coordination Plan for the San Francisco Bay Area, an all-hazards framework for collaboration among responsible entities and coordination during emergencies (Governor's Office of Emergency Services et al, 2008). The plan establishes procedures for regional coordination, collaboration, decision-making, and resource sharing among emergency response agencies in the Bay Area, including within the City of Fremont and Alameda County. The Regional Emergency Coordination Plan and its subsidiary plans do not identify specific evacuation routes, but rather define responsibilities among the multitude of interested and affected agencies and organizations and identify general response strategies.

As discussed in Section 4.16, "Transportation and Traffic," construction activities at the project site could result in temporary lane closures, increased construction truck traffic, and other roadway effects that could impede emergency response or evacuations. However, these effects would be temporary and would dissipate once trucks have cleared the public right-of-way. Construction activities would not fundamentally alter emergency response and evacuation routes in the vicinity of the project site, which would generally remain unchanged from existing conditions. While these construction impacts would be less than significant with respect to emergency and evacuation plans, implementation of Mitigation Measure TRA-1, which requires development of a construction traffic management plan and is described below in Section 4.16, would further reduce these already **less-than-significant** impacts. This impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

As stated in the "Construction" analysis above, there are no identified evacuation routes within proximity of the project site. Prior to approval of the proposed project or variant, the project design would be reviewed by the Fremont Fire Department and Fremont Police Department so that the proposed project or variant would provide adequate access to the project site in the event of emergencies. Both emergency response departments will review ingress and egress and incorporate additional design features (setbacks, clearances, turning radii, etc.) to aid in emergency access. The *City of Fremont Standard Details for Improvements in Public Right of Way* (2014) provides guidelines for adequate access to the project site and individual residences for emergency response purposes. Compliance to these standards will be confirmed by the City of Fremont Department of Public Works prior to project approval. Therefore, the potential impact related to emergency and evacuation plans would be **less than significant** for both the proposed project and the variant. This impact will not be further addressed in the EIR.

8h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Construction or Operation – Proposed Project or Variant: **Less-Than-Significant Impact**

The project site is categorized by the state as being a "Local Response Area Urban Unzoned" on the California-Defined Fire Hazard Severity Zones Map (City of Fremont, 2007). The classification of "Urban Unzoned," specifies that the area is not within an area that would be subject to special development controls in order to minimize wildland fires. The project site is in a built up urban area that is served by the Fremont Fire Department. Design and construction of the proposed project or variant would be required to comply with applicable fire code and fire suppression requirements (including for the rehabilitated fire station building under the proposed project), which would minimize the potential adverse effects from fire. Therefore, the proposed project or the variant would not expose people or structures to significant risks associated with wildland fires. The impact would be **less than significant** and will not be further addressed in the EIR.

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4.9 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9.a. Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
9.b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
9.c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
9.d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a steam or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
9.e. 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?	☐	☐	☒	☐
9.f. Otherwise substantially degrade water quality?	☐	☒	☐	☐
9.g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
9.h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
9.i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
9.j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Setting:

The project site is within the Plummer Creek watershed, which drains a small urbanized area (approximately 2.6 square miles) in the cities of Fremont and Newark. The majority of the project site is impervious, with commercial buildings and surface parking lots covering most of the area. The soil is primarily made of silt and the site is flat, with a slight grade to the southeast. Stormwater drains from the site through overland flow, concentrates in the curb-and-gutter system on Peralta Boulevard and Fremont Boulevard, and discharges to the subsurface stormdrain on Parish Avenue. From there, stormwater is conveyed to stormdrains on Fremont Boulevard and Central Avenue south of the project site and then through a series of culverts, engineered channels, and flood control channels before discharging to South San Francisco Bay via Plummer Creek approximately 7 miles downstream of the site.

The project site is not within a designated floodplain area, although mapped floodplains are nearby. Special flood hazard areas are present approximately 1.6 miles downstream of the site at the Alameda County Flood Control Channel southwest of Hwy 880 (Zone 5, Line F-1). The project site is within the Calaveras/Turner/Del Valle dam inundation zone (City of Fremont, 2015).

The project site overlies the Santa Clara Valley Niles Cone groundwater subbasin. Niles Cone has a series of relatively flat lying aquifers separated by extensive clay layers. The Newark Aquifer, the shallowest aquifer in Niles Cone, is between 40 and 140 feet below ground surface. Its thickness ranges from less than 20 feet at the western edge of the basin to more than 140 feet at the Hayward Fault (Alameda County Water District, 2017). Depth to groundwater at the site is between 35 to 50 feet below ground surface (State Water Resources Control Board [SWRCB], 2018).

Regulatory Framework:

The SWRCB administers the statewide NPDES program. Stormwater discharges associated with construction activities are regulated under the Construction General Permit (Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended). This permit applies to projects that have one or more acres of soil disturbance. The permit requires that the project proponents develop and implement a construction site SWPPP that specifies BMP, erosion and sedimentation controls, run-on and runoff controls, and dewatering procedures for nuisance-water removal. Permit registration documents and a site-specific SWPPP are filed with the SWRCB for coverage under the Construction General Permit. Compliance with the Construction General Permit is overseen and enforced by the San Francisco Bay RWQCB.

The San Francisco Bay RWQCB also regulates stormwater discharges from municipalities and local agencies in the Bay Area under a single municipal regional stormwater permit (Order No. R2-2015-0049). NPDES permit provision C.3 requires source control, site design, and stormwater treatment measures to address stormwater pollutants and to prevent increases in flow rates from new development and redevelopment projects. Projects subject to C.3 provisions are required to evaluate opportunities for incorporating low impact development (LID) strategies such as self-treating/self-retaining landscape areas, stormwater re-use, and on-site infiltration. If these methods are not compatible due to specific site constraints, the permit allows for the use of landscape-based stormwater treatment measures as alternative means of providing stormwater management. Treatment measures must be hydraulically sized to treat the runoff and are required to be regularly maintained. The Alameda County Clean Water Program C.3 Stormwater Technical Guidance Manual (Clean Water Program, 2016) provides specifications for specific types of treatment measures, including bioretention areas.

The City of Fremont has design standards that address drainage, including provisions from the Fremont Municipal Code Chapter 18.210, Stormwater Management and Discharge Control, with guidance from the Alameda County Hydrology and Hydraulics Manual (Alameda County Flood Control and Water Conservation District [ACFCWD], 2016).

Discussion:

9a), 9f) Would the project violate any water quality standards or waste discharge requirements? Would the project otherwise substantially degrade water quality?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

Construction activities associated with the proposed project or variant would include sawing, cutting, and grinding for pavement removal; importing materials such as concrete, rebar, mortar, and pavement; excavating for foundations; trenching for utilities; and removal and disposal of materials. Total disturbed acreage at the construction site is estimated to be 4.6 acres and ground disturbance could occur up to 15 feet deep.

Construction activities such as clearing and grubbing, excavation, grading, and backfilling could result in disturbed soils being temporarily exposed to the erosive forces of wind, rain, and stormwater runoff and may cause the release of sediment to downstream stormdrains and drainage areas. Stormwater runoff could also be contaminated with chemicals typically used during construction (e.g., fuels, oils, and solvents) through the daily use, transportation, and storage of these materials, if not properly controlled,

which could provide new sources of polluted runoff to downstream drainage areas. Construction activities also have the potential to impact groundwater quality if groundwater is directly exposed to construction contaminants, such as after hazardous material spills.

Because disturbed areas within the project site would be greater than one acre, the proposed project or variant would need to obtain coverage under the SWRCB's Construction General Permit. As part of the Construction General Permit, the contractor would prepare and implement a SWPPP and BMPs to minimize wind- and water-related soil and sediment discharges at the construction site, minimize potential contamination of stormwater and non-stormwater discharges, and prevent hazardous material spills. The SWPPP would be developed in compliance with the permit (Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended) and would include the following and/or similar measures:

Minimize Active Construction Area. The number of access routes, size of staging areas, and the size of the active construction sites would be limited to the minimum necessary to achieve project objectives and the staging, storage, equipment laydown, access routes, and parking areas would be established on paved or previously disturbed areas to the extent feasible.

Implement Erosion Control. Standard construction site erosion control measures would be used where sediment from exposed slopes could erode and enter drainage facilities. Areas of disturbed soils that slope toward drainages would be stabilized when not actively in use to reduce erosion potential.

Implement Trash Control. Food-related trash items such as wrappers, cans, bottles, and food scraps would be disposed of in closed containers (trash cans) and would be removed from the construction site on a regular basis.

Hazardous Spill Prevention. Vehicles and equipment would be maintained in proper working condition to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Service/maintenance vehicles would carry materials to absorb leaks or spills. Servicing, refueling, and staging of construction equipment would take place only at designated areas where a spill would not flow to drainages. Equipment washing, if needed, would occur only in designated locations where water would not flow into drainage channels. Hazardous spills would be cleaned up immediately and contaminated soil would be properly disposed of at a licensed facility.

By implementing the SWPPP and associated BMPs, standard construction BMPs such as stormdrain inlet protection and linear sediment controls would substantially reduce potential sediment transport from the construction site. Construction-related contaminants, such as oil and greases, would be managed through appropriate material handling and good housekeeping practices. These BMPs would be maintained by the contractor in good and effective condition as required by the permit. These actions apply to construction of both the proposed project and the variant.

As discussed above in Section 4.8, "Hazards and Hazardous Materials," elevated concentrations of the heavy metals arsenic, chromium, and lead have been detected at the project site, but the area of contamination has not been well defined. The investigation did not encounter samples that exceeded human health screening levels for shallow soil exposure or exposure to construction workers for pesticides, hydrocarbons, PCBs, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and asbestos. However, the investigation did not include any soil samples from the northern portion of the project site (less than 100 feet hydraulically downgradient from a nearby Leaking Underground Storage Tank site), and only one sample near the suspected site of a former gasoline station on the project site. No groundwater sampling has been undertaken at the project site. Although groundwater elevations are currently below the expected excavation levels for the proposed project or variant (i.e., groundwater is expected to be 35 to 50 feet below ground surface, compared to maximum excavation depth of 15 feet), unanticipated contamination could be exposed during project excavations. If contaminated soils or groundwater are not handled and disposed of properly during construction, impacts to surface or groundwater quality could be potentially significant.

Mitigation Measure HAZ-2 requires additional environmental investigation to further delineate the extent and concentration of existing soil and groundwater contamination at the project site, as well as preparation and implementation of a site mitigation plan which includes procedures and protocols for minimizing worker exposure to contaminated materials, requires the contractor to inspect exposed soils

and groundwater for signs of unanticipated contamination, and specifies procedures for handling, excavating, characterizing and managing contaminated soils and dewatering effluent. Mitigation Measure HAZ-2 also requires confirmation that contaminated soils do not remain at the site following excavation, or that appropriate mitigations to protect human health and the environment are undertaken if they do. As a result of this mitigation measure, the handling and disposing of contaminated soils, groundwater, and dewatering effluent would be in accordance with federal and state hazardous waste disposal laws and state and local stormwater and sanitary sewer requirements. These actions would apply to both the proposed project and the variant.

In summary, with implementation of BMPs to reduce potential erosion impacts during construction in accordance with the aforementioned regulations, and implementation of Mitigation Measure HAZ-2, construction of the proposed project or variant would not substantially degrade water quality, and impacts related to the potential violation of water quality standards and substantial degradation of water quality would be **less than significant with mitigation** incorporated. This impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

By introducing new buildings and impervious surfaces in the watershed, the proposed mixed use development and site improvements could increase the volume of stormwater runoff at the site and affect downgradient areas. Hydromodification, which refers to the change in timing, peak discharge, and volume of runoff caused by land development, can contribute to faster flow rates and greater runoff volumes, potentially increasing erosion in downstream areas. Water quality can also be affected by common pollutants that are discharged from urban watersheds (e.g., sediment, trash, oil/grease, etc.).

Because the proposed project or variant would create or replace more than 10,000 square feet of impervious surfaces at the site, the project is required to comply with San Francisco Bay RWQCB's Municipal Regional Permit, with guidance from the Alameda County Clean Water Program C.3 Stormwater Technical Guidance Manual (Clean Water Program, 2016). Provision C.3 of the NPDES permit governs storm drain systems and regulates post-construction stormwater runoff. This provision requires new development and redevelopment projects to incorporate LID treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows. For projects that alter more than 50 percent of the existing impervious surfaces, stormwater treatment systems must account for stormwater runoff from the entire redevelopment project (including existing, new, and replaced impervious surfaces). In addition, certain land development projects characterized as smart growth, high density, or transit-oriented development can qualify as "special projects," where a portion of the project area can be treated using non-LID measures. The proposed project and variant were found to qualify for special project category "C" (i.e., transit-oriented development) due to unit density and proximity to Alameda County Transit bus routes and Capital Corridor commuter trains. According to the "special project worksheet" developed during project design, up to 70 percent of the site could be treated with non-LID treatment measures.

The storm drainage system for the proposed project and variant would be almost identical, and have been designed to mimic existing drainage patterns and treat stormwater runoff from the site prior to discharge to regional stormdrain systems through a variety of treatment measures including inlet filters, pervious pavement, and bioretention basins. Rooftop drainage from the residential/commercial building(s) would be treated using inlet filters such as those manufactured by Contech Engineered Solutions (a non-LID treatment measure) and discharged to the subsurface stormdrain on Parish Avenue. Rooftop drainage from the townhouses would drain towards pervious pavement in front of the townhouses or towards small bioretention basins near the rear of the units (both LID treatment measures). Water directed towards the pervious pavement would infiltrate, while water treated in the bioretention basins would discharge to the 24-inch stormdrain on Parish Avenue or the 15-inch stormdrain on Peralta Boulevard. Approximately 2.2 acres (48 percent) of the project site would be considered self-treating or self-retaining because stormwater is redirected to or falls directly on pervious pavement; 1.2 acres (26 percent) would be treated with inlet filters prior to discharge; and the remaining 1.2 acres (26 percent) would be treated by bioretention basins. These actions apply to both the proposed project and the variant.

Bioretention basins are landscape-based soil and plant filtration devices that remove pollutants through a variety of physical, biological, and chemical treatment processes. A bioretention basin distributes stormwater runoff evenly along a ponding area, allowing water velocities to slow and particulates (and particulate–bound contaminants) to settle. Stormwater then percolates through the soil to an underlying rock layer, and to the underdrain. This LID treatment measure provides an opportunity for soil bacteria to degrade trapped contaminants.

In summary, the applicant (and its contractors) would implement post-construction stormwater management in accordance with the aforementioned regulations under both the proposed project and variant. On-site infiltration and landscaped-based stormwater treatment systems have been emphasized in the project design. Stormwater infiltration would be increased locally, stormwater runoff volume would be minimized, and stormwater would be treated prior to discharge from the site. As a result, the proposed project or variant would represent an improvement over existing drainage and stormwater runoff conditions at the site. Therefore, operation of the proposed project or variant would not substantially degrade water quality and or result in the potential violation of water quality standards. As a result, water quality impacts from operation of the proposed project or variant would be **less than significant**. This impact will not be further addressed in the EIR.

9b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Water demands during construction would be met by existing service connections to Alameda County Water District or be imported by truck and stored at the site in temporary tanks. Construction of the proposed project or variant would not require new wells and would be associated with little to no increases in pumping at regional municipal wells. Construction of the proposed project or variant is not expected to involve groundwater extraction at the project site, because the proposed maximum depth of excavation would be 15 feet, and existing groundwater levels are anticipated to be approximately 35 to 50 feet below ground surface. If dewatering activities were required during construction, such dewatering would be temporary and localized, and would not result in a substantially lowering of the groundwater table. Construction-related impacts would therefore be **less than significant**, and this impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Operation of the proposed project or variant would not involve groundwater extraction, and would not result in a decrease in local infiltration rates. As described above under Impacts 9a) and 9f), both the proposed project and variant would include LID treatment measures (pervious pavement and bioretention basins) which would increase the amount of local infiltration and minimize stormwater runoff. These drainage design features would be implemented in accordance with C.3 provisions and Alameda County Clean Water Program guidelines. Therefore, operation of the proposed project or variant would not lower the groundwater table locally as a result of groundwater extraction or substantively reduce groundwater recharge at the site. These actions apply to both the project and the variant.

As discussed in Section 4.18, “Utilities and Services,” water demand from operation of the proposed project or variant would be minimal compared to the size of the Niles Cone Groundwater Basin, from which approximately 50 percent of the Alameda County Water District’s (ACWD’s) water supply is obtained (Niles Cone Subbasin 2.09.01). ACWD has demonstrated that the Niles Cone Subbasin operates within its sustainable yield over a 10-year period and, therefore, the California Department of Water Resources has determined that ACWD is exempt from preparing a Groundwater Sustainability Plan for management of the Niles Cone Subbasin under the Sustainable Groundwater Management Act (Alameda County Water District, 2017). The estimated water demand for the proposed project or variant would be less than 0.12 percent of ACWD’s average daily production. Therefore, a reduction in groundwater recharge, if any, would be minimal to the groundwater basin as a whole.

In summary, the proposed infiltration and bioretention areas would increase the amount of on-site infiltration compared to existing conditions, and, groundwater extraction to meet water demands of the

proposed project or variant would be minimal, therefore the potential impact of the proposed project or variant on groundwater levels would be **less than significant**. This impact will not be further addressed in the EIR.

9c-9d) 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, in a manner which would result in substantial erosion or siltation on or off-site? Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

There are no streams or rivers on the project site; therefore, construction of the proposed project or variant would not alter such water features. Construction activities would temporarily alter existing drainage patterns at the project site, due to demolition of existing structures and excavation/grading activities. These alterations would be temporary in nature, would likely involve additional on-site infiltration and/or detention, and, similar to existing conditions, surface drainage from the site would otherwise flow over land towards Peralta and Fremont boulevards. Construction activities would also replace impervious surfaces at the project site with more pervious materials, and therefore these activities are not expected to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Construction-related impacts of the proposed project and variant would be **less than significant** and will not be addressed further in the EIR.

Short-term impacts of project construction under the proposed project or variant as they relate to erosion and siltation are discussed previously under “Construction” in the analysis of Impacts 9a) and 9f) above.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

No streams or rivers exist on the project site; however, with the presence of new structures and other impervious surfaces, the proposed project or variant would change local drainage patterns, creating the potential to increase the rate or amount of surface runoff in a manner that could result in substantial erosion or siltation or flooding on- or off-site.

The development plan for the proposed project or variant are similar, and would alter the existing drainage patterns by increasing stormwater on-site infiltration and by discharging stormwater directly to the 24-inch stormdrain on Parish Avenue and the 15-inch stormdrain on Peralta Boulevard via underdrains rather than overland flow.

Drainage control features at the site would be implemented in accordance with Municipal Regional Permit and Alameda County Clean Water Program requirements. Additional landscaping features, pervious pavement, and bioretention basins would encourage on-site infiltration and reduce the amount of stormwater runoff from the site. The bioretention areas would also drain over an extended period of time (possibly a couple of days), instead of immediately releasing water from the site in direct response to precipitation. This would reduce the magnitude of, and change the timing of, peak runoff from the site. Although the project would continue to contribute flows to the existing Alameda County Flood Control Channel southwest of Hwy 880, the total volume of stormwater would be reduced and the peak flow would be delayed. These actions would apply to both the project and the variant, and would represent an improvement over existing drainage conditions at the project site.

In summary, although changes in drainage patterns would occur due to the proposed layout of the buildings and location of roof drains under either the proposed project or variant, implementation of drainage control features would not substantially alter drainage patterns such that erosion, siltation, or flooding on- or off-site would occur. Impacts would be **less than significant** and this impact will not be further addressed in the EIR.

9e) 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?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

During construction, stormwater runoff would likely be managed through temporary drainage controls such as sandbag barriers or gravel bag berms to redirect run-on away from the project site. Similar to existing conditions, this off-site drainage would concentrate in the curb-and-gutter system on Peralta Boulevard and Fremont Boulevard and discharge to the subsurface stormdrain on Parish Avenue. Construction activities would not contribute additional runoff to on- or off-site areas. Water used during construction, e.g., for dust control, would not be applied in amounts that would generate runoff from the construction site; and water applications would be suspended during storm events. Construction activities that replace impervious surfaces at the project site with more pervious materials would increase on-site infiltration and/or detention. Because the proposed project and variant would not increase runoff during storm events, changes due to construction activities would not contribute additional water that exceeds the capacity of the existing drainage system. Impacts would be **less than significant,** and this impact will not be further addressed in the EIR.

Short-term impacts of construction under the proposed project or variant as they relate to pollutants entering stormwater runoff are discussed above under “Construction” in the analysis of Impacts 9a) and 9f) above.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

As discussed above under Impacts 9a) through 9d), potential impacts associated with the capacity of drainage infrastructure would be reduced through adherence to drainage control requirements. As such, stormwater runoff would be managed through permanent stormwater controls such as pervious pavement, bioretention areas, and landscape areas. These actions apply to both the proposed project and the variant, and would result in an improvement over existing conditions.

Implementation of the drainage controls required by Municipal Regional Permit and Alameda County Clean Water Program would avoid or minimize potential effects related to the contribution of substantial amounts of additional runoff, or pollution, to the municipal storm drain system. Thus, operational impacts of the proposed project or variant would be **less than significant,** and this impact will not be further addressed in the EIR.

9g-9h) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Construction and Operation – Proposed Project or Variant: **No Impact**

According to Federal Emergency Management Agency (FEMA) flood insurance rate maps, the project site is not in a special flood hazard area (FEMA, 2009). Therefore, construction or operation of the proposed project or variant would not place housing in a FEMA designated-flood hazard area, nor would project structures impede or redirect flood flows. There would be **no impact** from the proposed project or variant with respect to these flood hazard areas, and these impacts will not be further addressed in the EIR.

9i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Construction and Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The project site is within the Calaveras/Turner/Del Valle dam inundation zone (City of Fremont, 2015). In the unlikely event of dam failure, inundation depths at the project site are anticipated to be a few feet or less, as flows would spread out and attenuate after passing through Niles Canyon and reaching the valley floor. The EIR prepared for the City’s General Plan Update (City of Fremont, 2011) states:

> *It is anticipated that inundation by dam failure is unlikely and a relatively low risk due to the structural engineering of the dams in the vicinity of Fremont and compliance with federal and state laws enacted to enhance dam safety… The proposed Policies of the Draft General Plan Update* [since finalized]*, together with other existing flood prevention strategies and policies, would reduce potential inundation hazards from dam and levee failure to existing and future development to a level considered less than significant.*

The proposed project or variant would be consistent with the type and density of development envisioned for the site by the General Plan; therefore, construction or operation of the proposed project or variant would not exacerbate the existing inundation hazard related to potential dam failure. Impacts from the proposed project or variant would therefore be **less than significant**. This impact will not be further addressed in the EIR.

9j) Would the project result in inundation by seiche, tsunami, or mudflow?

Construction and Operation – Proposed Project or Variant: **No Impact**

Seiche waves or tsunami are not considered a hazard to the project site because it is more than 2,000 feet away from any large enclosed bodies of water, and is not within a tsunami inundation zone (California Emergency Management Agency, 2009). The project site is relatively flat, and it is not anticipated that nearby drainages would contribute large volumes of water resulting in mudflows. Construction or operation of the proposed project or variant would not exacerbate the risk of such inundation hazards at the project site. There would be **no impact** with respect to these hazards, and this impact will not be further addressed in the EIR.

References:

Alameda County Flood Control & Water Conservation District (ACFCWD), 2016. Alameda County Hydrology & Hydraulics Manual.

Alameda County Water District, 2017. Groundwater Monitoring Report 2016. Water Resources Department, Groundwater Resources Division. February 9, 2017.

California Emergency Management Agency, 2009. Tsunami Inundation Map for Emergency Planning, State of California ~ County of Alameda, Newark Quadrangle, Redwood Point Quadrangle. July 31, 2009.

City of Fremont (City), 2011. Fremont DRAFT General Plan Update Draft EIR.

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Clean Water Program, 2016. C.3 Stormwater Technical Guidance. A handbook for developers, builders, and project applicants, Version 5.1. May 2, 2016.

Federal Emergency Management Agency (FEMA), 2009. Map number 06001C0442G. Flood Insurance Rate Map, Panel 442 of 725. Alameda County, California and Incorporated Areas. Effective date: August 3, 2009.

State Water Resources Control Board (SWRCB), 2018. GeoTracker search results for 3740 Peralta Boulevard, Fremont, CA. Available: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600151640&mytab=esidata#esidata, accessed on February 5.

4.10 Land Use and Land Use Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10.a. Physically divide an established community?	☐	☐	☐	☒
10.b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
10.c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Setting:

The project site consists of 13 existing parcels containing predominantly commercial buildings and associated surface parking, an abandoned single-family residence, and a decommissioned fire station. Areas to the north and west of Peralta Boulevard and south of Fremont Boulevard in the vicinity of the project site are predominantly commercial, while areas to the north of Jason Way are predominantly residential. Land to the southeast of Parish Avenue is occupied by the Holy Spirit Church and Holy Spirit School and associated uses.

The project site is zoned by the City of Fremont as Town Center-Pedestrian (TC-P) (City of Fremont, 2017a). The TC-P defines areas that were initially developed before Fremont's incorporation. These areas are characterized by small parcels, a mix of older and newer structures, and mixed-use development. The TC-P zoning district is intended to provide areas for mixed retail, service, office, and residential uses in a pedestrian-oriented setting (FMC Section 18.45, "Commercial and Mixed Use Districts"). Permitted uses within the TC-P zoning district include commercial and office uses and residential uses that are a component of mixed-use projects.

The project site is also zoned within a Transit-Oriented Development (TOD) overlay district (City of Fremont, 2017a). The purpose of the TOD overlay district is to create a compact and high intensity mix of residential, office, retail, service, and public uses to promote areas of the city that have a high potential for pedestrian activity, generally within one-half mile of existing and planned transit stations. Increased development potential and higher allowances for building intensity are permitted in the TOD overlay to promote economic potential, pedestrian activity, and transit access; improve urban form and design; and reduce vehicle miles traveled (FMC Section 18.152, "Transit-Oriented Development Overlay District,"). The TOD overlay district requires a minimum residential density of 30 dwelling units per acre (City of Fremont, 2017b).

As shown in Figure 4.10-1, the project site is designated as Commercial-Town Center in the City's General Plan (City of Fremont, 2011). This designation corresponds to the original business districts of Niles, Irvington, Centerville, and Mission San Jose, and a cluster of established neighborhood shopping centers in the Warm Springs District. This designation provides for pedestrian-oriented development with an attractive and distinct identity, along with amenities such as small parks, public art, and plazas that create a Main Street ambiance. Typical uses in the Commercial-Town Center designation include local services, retail, eating and drinking establishments, civic facilities, and mixed-use development. Mixed use developments within a Commercial-Town Center are subject to a maximum FAR of 1.5, unless they are also within a TOD overlay district, in which case they are permitted to have a Floor Area Ratio (FAR) between 0.5 and 2.5. A minimum residential density of 30 residential dwelling units per acre also applies within a TOD overlay.

The project site is identified in the Community Plans Element of the General Plan as being within the Centerville Community Plan Area, which covers approximately 6.2 square miles of Fremont, roughly

bound by Mowry Avenue, Interstate 880, Decoto Road, the Alameda Creek/Quarry Lakes area. Policies within the Community Plan integrate recommendations of the Centerville Framework Plan (City of Fremont, 2010) and other previous studies and planning documents.

Regulatory Setting:

Plan Bay Area 2040

The Plan Bay Area 2040 (Plan Bay Area) was adopted by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) on May 26, 2017. It provides a strategy for accommodating projected household and employment growth in the nine-county Bay Area by 2040 as well as a transportation investment strategy for the region. The Plan Bay Area describes where and how the region can accommodate 666,000 new projected households and 668,000 new jobs between 2015 and 2040; details a regional transportation investment strategy; and complies with Senate Bill 375, the state's Sustainable Communities Strategy law, which integrates land use and transportation planning and mandates both a reduction in greenhouse gas emissions from passenger vehicles and the provision of adequate housing for the region's 24-year projected population growth.

Plan Bay Area largely reflects the foundation and regional growth pattern and its core strategy is "focused growth" in existing communities along the existing transportation network. It builds upon existing community characteristics, efficiently leverages existing infrastructure, and mitigates impacts on areas with less development. Key to implementing the focused growth strategy are Priority Development Areas (PDAs) that have been identified as appropriate for additional, compact development (MTC & ABAG, 2017). Plan Bay Area provides policies to increase development potential in PDAs and influence the overall regional growth pattern, including policies that assign higher densities than currently allowable by cities to PDAs.

In addition, Plan Bay Area directs funding to neighborhood active transportation and complete streets projects, climate initiatives, lifeline transportation and access initiatives, safety programs, and PDA planning. These programs directly support Plan Bay Area 2040 goals by assisting PDAs, emphasizing connections to high-quality transit, and reducing greenhouse gas emissions and vehicle miles traveled (MTC & ABAG, 2017).

City of Fremont General Plan

The *City of Fremont General Plan* (General Plan) was adopted by the City Council on December 13, 2011. The City's General Plan functions as a high-level statement of the community's vision as well as an on-the-ground tool used by the City to make development decisions over a 25-year period. The General Plan aims to establish a flourishing downtown, increase jobs to match an increasing resident workforce, provide a variety of housing types, and provide pedestrian-oriented commercial districts. The General Plan also addresses the overarching vision of Fremont as a "green" city through goals and policies to meet climate change objectives, reduce solid waste, and enhance the pedestrian and cycling network. Ten Guiding Principles are embodied within the City's General Plan that collectively provide a framework for the goals and policies laid out in the Plan.

Table 4.10-1 outlines the goals and policies from the Land Use Element (Chapter 2) of the General Plan that are applicable to the proposed project.

Project Site
Land Use Category
COM General
COM Town Center
OS General
OS Park
OS RCP
Public Facillity
RES Low
RES Low-Med
RES Medium
RES Urban

Bill Ball Civic Park
Peralta/Dusterberry Park

0 500
Feet

Imagery: ESRI, 2017
Landuse: City of Fremont, 2017

AECOM
City of Fremont
Fremont Blvd Mixed Use

FIGURE 4.10-1
City of Fremont General Plan Land Use Designations

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Table 4.10-1 Applicable Goals and Policies from the Land Use Element of the General Plan

Goal 2-1: City Form and Structure. A city transformed from an auto-oriented suburb into a distinctive community known for its walkable neighborhoods, dynamic city center, transit-oriented development at focused locations, attractive shopping and entertainment areas, thriving work places, and harmonious blending of the natural and built environments.

Policy 2-1.6: Town Centers. Recognize Fremont's five original towns—Centerville, Irvington, Mission San Jose, Niles, and Warm Springs—as important and unique places that contribute to Fremont's identity. Plans for these districts should address the preservation of historic resources; appropriate areas for new commercial, residential, and mixed-use infill development; parking and transportation strategies which foster a pedestrian-oriented shopping environment; and provisions to ensure that future development helps enhance and define each area's character.

In Centerville, Irvington, Mission San Jose, and Niles, development should build on the strengths of the existing historic towns, retaining their basic form and encouraging infill. In Warm Springs, where the historic town no longer exists, the challenge is to re-create it—building a more pedestrian-friendly center that serves as a focal point for the southern part of Fremont.

Policy 2-1.8: Mixed-Use Emphasis. Encourage mixed-use development combining residential and commercial uses in transit-oriented development areas and also in selected commercial areas as indicated on the General Plan Land Use Map. Mixed use is encouraged in these areas to increase vitality and activity, provide housing opportunities, and advance sustainable development principles.

In the context of the General Plan, "mixed use" refers to housing with commercial uses, rather than office/ retail, industrial/office, or other combinations of uses. There are two principal forms of mixed use. "Vertical" mixed-use refers to multi-story projects where residential uses are located above ground floor commercial space. "Horizontal" mixed-use usually refers to projects where commercial and residential uses occupy the same site, but in different buildings.

Policy 2-1.10: Pedestrian Scale. Create a more pedestrian-oriented environment in Fremont's City Center, its five Town Centers, and the other Transit-Oriented Development areas shown on the General Plan Land Use Map. These areas should be characterized by:

- Convenient and continuous sidewalks, crosswalks, and walkways;
- Easy access to transit;
- Comfortable outdoor spaces for pedestrian use; and
- Parking that is located in structures or in shared lots to the rear of buildings rather than between buildings and the streets they face.

Goal 2-2: Directing Change. Growth and development that is orderly and efficient, leverages public investment, ensures the continued availability of infrastructure and public services, reduces adverse impacts on adjacent properties, and protects the natural environment.

Policy 2-2.4: Use of the General Plan Land Use Map. Ensure that future land use decisions are fully consistent with the General Plan Land Use Map. Each General Plan land use category shall have at least one corresponding zoning district. More than one zoning district per General Plan category may be established for categories which accommodate a wide range of densities or development types. Residential zoning districts should generally be differentiated by the number of units allowed per net acre (or square feet of lot area per dwelling unit).

Policy 2-2.5: Zoning and Subdivision Regulations. Use zoning and subdivision regulations to direct the city's growth, ensure sufficient opportunities for new development, improve Fremont's quality of life, create complete neighborhoods, reduce nuisances, achieve compatibility between adjacent properties and uses, address land use conflicts, and protect the health and safety of residents, visitors, and workers.

Source: City of Fremont, 2011. City of Fremont General Plan.

Discussion:

10a) Would the project physically divide an established community?

Construction and Operation – Proposed Project or Variant: **No Impact**

The proposed project and variant would develop townhomes, apartments, and retail uses, and for the proposed project only, would rehabilitate the existing fire station for adaptive re-use. These proposed uses are compatible with the existing development in the community of Centerville and would not introduce a use or physical feature that would create a barrier, divide, or separate adjacent uses. The proposed development is of a height and scale consistent with the proposed vision for the site under the General Plan, and includes streetscape improvements that would unify and connect adjacent areas. In particular, both the proposed project and variant would include publically accessible pedestrian connections both north-south and east-west through the project site, which would maintain community connectivity to Fremont and Peralta Boulevards from adjacent neighborhoods.

The proposed project or variant would not close any publicly accessible roadway that exists today. Rather, the proposed project and variant would result in a new connection between the existing Jason Way and Peralta Boulevard along the northern boundary of the site. All the existing residences in the vicinity of the project site can be accessed by Jason Way, Parish Avenue, and by roadways within those neighborhoods, which would not be affected by the proposed project or variant.

Therefore, **no impact** associated with physical division of an established community would occur due to construction or operation of the proposed project or variant, and this impact will not be further addressed in the EIR.

10b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project, adopted for the purpose of avoiding or mitigating an environmental effect?

Construction and Operation – Proposed Project or Variant: **No Impact**

Zoning

The proposed project and variant would establish a transit-oriented, mixed-use development that combines residential and commercial uses, consistent with the current zoning of the site as Town Center-Pedestrian with TOD overlay district. proposed project would include 136 residential units, resulting in a residential density of 30dwelling units per acre[9]; the variant would include 165 residential units, resulting in 38 dwelling units per acre[10]. Both the proposed project and variant would therefore meet or exceed the minimum residential density of 30 dwelling units per acre required for the site's zoning district. Conformance with other requirements of the City's Zoning Ordinance would be addressed in the City's staff report, outside of the CEQA process.

Land Use Designation

The proposed project and variant would establish a transit-oriented, mixed-use development that combines residential and commercial uses, consistent with the General Plan's Commercial-Town Center land use designation. The General Plan requires a minimum residential density of 30 residential dwelling units per acre for properties designated Town Center and located within a TOD overlay zoning district; as noted above, both the proposed project and variant would meet or exceed this minimum density. Both the proposed project and variant would also meet the FAR requirements of the General Plan. The FAR for the proposed project would be 1.17, and for the variant would be 1.416, both of which are within the required 0.5 to 2.5 range for sites designated as Commercial-Town Center that are also within a TOD overlay district.

[9] Based on 136 dwelling units (72 townhomes and 64 apartments), and a net project site area of 4.5457 acres (excludes public street dedications and revised fire station site, ownership of which would be retained by the City of Fremont), the residential density of the project would be 29.92 DU/acre, which rounds to 30 DU/acre.

[10] Based on 165 dwelling units (72 townhomes and 93 apartments), and a net project site area of 4.608 acres (excludes public street dedications, but includes fire station site which would be annexed into overall project site under the variant), the residential density of the variant would be 35.81 DU/acre, which rounds to 36 DU/acre.

City General Plan Policies

Both the proposed project and variant would provide transit-oriented, mixed-use development that combines residential and commercial uses consistent with the project site's land use designation and zoning and would, therefore, support Policies 2-1.8 and 2-2.4 of the General Plan, which promote consistency of land use decisions with the General Plan Land Use Map. As discussed above, the proposed project and variant are consistent with the City's TC-P zoning district and TOD overlay district, and are therefore consistent with Policy 2.2-5.

In addition, both the proposed project and variant would support Policies 2-1.8, and 2-1.10 of the General Plan, which promote the development of the Centerville Community Plan Area as a walkable, transit-oriented mixed-use district. The proposed project would redevelop an aging, underutilized commercial site with a new mixed-use project, consistent with the visions of the Centerville Community Plan and Centerville Framework Plan and develop housing at higher densities within a Transit-Oriented Development Overlay District. As discussed in Section 4.16, "Traffic and Transportation," the proposed project would improve pedestrian safety through the provision of new street improvements and various traffic-calming measures and reduce vehicle miles traveled by locating housing near regional transit and by providing a pedestrian-oriented environment.

As discussed in Section 4.1, "Aesthetics," the proposed project would improve urban form and design that would meet provisions in the Place Type Manual of the General Plan and provide development that is compatible in scale and design with existing development located along Fremont Boulevard.

Plan Bay Area 2040

Both the proposed project and variant would be consistent with the Plan Bay Area, which calls for focused growth in Priority Development Areas (PDAs) along the existing transportation network. The proposed project and variant would provide transit-oriented, mixed-use development that combines residential and commercial uses in the Centerville PDA. Further, the proposed project would develop higher density housing within a Transit-Oriented Development Overlay District which would contribute towards meeting the City's Regional Housing Needs Allocation[11] and encourage transit ridership by locating new housing within walking distance of the Centerville Train Depot and several AC Transit bus lines.

Conclusion

For the reasons described above, the proposed project and variant would be consistent with General Plan policies, the General Plan land use designation, and the City's zoning for the project site, as well as the Plan Bay Area. Therefore, **no impact** associated with conflicts with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would occur as a result of construction or operation of the proposed project, and this impact will not be further addressed in the EIR.

10c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Construction and Operation – Proposed Project or Variant: **No Impact**

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans covering the project area. Therefore, the proposed project or variant would have **no impact** on or conflict with habitat conservation plans in the area, and this impact will not be further addressed in the EIR.

References:

City of Fremont, 2010. *Centerville Framework Plan*. Fremont, CA.

[11] The State of California requires every city to accommodate its fair share of regional growth through a process called the Regional Housing Needs Allocation (RHNA), administered by ABAG. Further discussion of the RHNA process and the City's allocation is contained in the Housing Element of the General Plan (City of Fremont, 2014).

_____, 2011. *City of Fremont General Plan*. Land Use Element. Adopted December 2011. Available: https://fremont.gov/398/General-Plan.

_____, 2014. City of Fremont General Plan. 2015-2023 Housing Element. Adopted December 2, 2014 (Resolution 2014-60). Available: https://www.fremont.gov/DocumentCenter/View/4668.

_____, 2017a. City of Fremont Municipal Code, Chapter 18, "Planning and Zoning." Available: http://www.codepublishing.com/CA/Fremont/. Accessed February 8, 2018.

_____, 2017b. SICGISA. Fremont Mapping. Available: http://egis.fremont.gov/apps/public/. Accessed: February 8, 2018.

Metropolitan Transportation Commission and Association of Bay Area Governments (MTC & ABAG). 2017. Plan Bay Area 2040. Available: http://2040.planbayarea.org/. Accessed April 30, 2018.

4.11 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11.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?	☐	☐	☐	☒
11.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?	☐	☐	☐	☒

Discussion:

11a-11b) 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? 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?

Construction and Operation – Proposed Project or Variant: **No Impact**

The project site is not within close proximity to or on a known and regionally valuable mineral resource (USGS, 2018); therefore, there would be no loss of a known or locally important mineral resource. Accordingly, the proposed project or the variant would cause **no impact** to mineral resources, and these impacts will not be addressed further in the EIR.

References:

United States Geological Survey (USGS), 2018, Mineral Resources On-Line Spatial Data, Available at https://mrdata.usgs.gov/general/map.html, Accessed February 2, 2018.

4.12 Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12.a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
12.b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
12.c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
12.d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
12.e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
12.f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting:

Fundamentals of Noise

Decibels (dB) are the standard unit of measurement of the sound pressure generated by noise sources and are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale for earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; and, a halving of the noise energy would result in a 3 dB decrease. The human ear is not equally sensitive to all frequencies within the audible sound spectrum. To accommodate this phenomenon, the A-weighted scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. Noise levels using A-weighted measurements are written as A-weighted decibels (dBA). All noise levels presented below are A-weighted unless described otherwise.

Although dBA may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of frequencies from distant sources that create a relatively steady background noise in which no particular source is identifiable. Average noise levels over a period of minutes or hours are usually expressed as equivalent noise levels (L_{eq}), which means the total sound energy of noise that varies in level with time is logarithmically averaged to result in a comparable constant sound level for the defined period. For instance, and as used in this Initial Study, hourly L_{eq} is a typical community noise metric. The maximum noise level (L_{max}) is the highest root mean squared (RMS) sound level occurring during a specific period. The Community Noise Equivalent Level (CNEL) is similar to the 24-hour L_{eq}, but adds a 5 dB “penalty” to hourly L_{eq} for the evening noise-sensitive hours from 7 p.m. to 10 p.m. and a 10 dB penalty applied to hourly L_{eq} during nighttime noise-sensitive hours from 10 p.m. to 7 a.m. The day-night average noise level (L_{dn} or DNL) is similar to the CNEL but with no adjustment (penalty) during evening hours; that is, daytime is defined as 7 a.m. to 10 p.m.

It is widely accepted that the average healthy ear can barely perceive changes of 3 dB (increase or decrease) and that a change of 5 dB is readily perceptible (California Department of Transportation [Caltrans] 2013). A noise level that increases by 10 dB is perceived as being twice as loud as what was previously heard, and a noise level that decreases by 10 dB is perceived as being half as loud.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several methods are typically used to quantify the amplitude of vibration including Peak Particle Velocity (PPV) and RMS velocity. PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. RMS velocity is defined as the average of the squared amplitude of the signal. Ground-borne vibration related to human annoyance is generally related to RMS velocity levels expressed in VdB. PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Low-level vibrations transmitted through a building's structure frequently cause irritating secondary vibration, such as slight rattling of windows, doors, or stacked dishes. The rattling sound draws attention to the vibration and can thus give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where ground-borne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows. Ground vibration levels in buildings can be reduced due to coupling losses at the interface between the ground and the foundation, and amplified by resonances in the floor.

Existing Noise Environment

To quantify the existing noise environment, three multi-day monitors continuously measured noise levels at the site between August 9 and 14, 2017, as described further in Appendix B-1, Noise Assessment (Charles M. Salter Associates, 2018). In addition, short-term "spot" measurements were conducted on June 20, 2017 at additional locations and compared with corresponding time periods of the multi-day monitors to determine how existing noise levels vary with location and elevation. Table 4.12-1 summarizes measured noise levels. A map showing monitoring locations is provided in Appendix B-1.

Table 4.12-1 Existing Noise Measurements near the Project Site

Location	Existing Noise Measurements	
	L_{dn} [1]	$L_{eq(h)}$ [2]
Multi-Day Monitoring Locations:		
L1: Peralta Boulevard	72 dB [3]	76 dB
L2: Fremont Boulevard	74 dB [3]	74 dB
L3: Parish Avenue	66 dB	70 dB
Spot Measurement Locations:		
S1: Corner of Fremont and Peralta boulevards	73 dB	n/a
S2: Fremont Boulevard	69 dB	n/a

Source: Charles M. Salter & Associates, 2018 (Appendix B-1).

NOTES:

[1] *Day-Night Sound Level.*

[2] *Obtained during the nighttime (10 p.m. to 7 a.m.). The Hourly Equivalent Sound Level ($L_{eq(h)}$) is used throughout the U.S. for environmental impact assessment, and describes a receiver's cumulative noise exposure from all events over a one-hour period. (FTA, Noise and Vibration Manual, 2006)*

[3] *Siren noise events excluded from the data during the 5:00 p.m. and 10:00 p.m. hours on August 10, 2017.*

The major noise sources affecting the project site are train horns from the Union Pacific Railroad Niles Subdivision utilized by the Altamont Corridor Express (ACE), Amtrak, and Capitol Corridor passenger services, approximately 300 to 400 feet north of the site, and vehicular traffic along Fremont Boulevard and Peralta Boulevard adjacent to the site. Noise monitoring data support this description of noise sources affecting the project, because higher noise levels were measured at locations L1 and L2 along Fremont and Peralta boulevards (which have heavier traffic) than at location L3 on Parish Avenue.

According to the Noise Assessment (Appendix B-1 to this Initial Study), approximately 84 scheduled passenger trains passed the project site during the measurement period. In addition, measurement data suggest that 3 to 4 unscheduled freight trains passed the project site each night. At the corner of Fremont Boulevard and Peralta Boulevard spot location (S1), observed noise levels from train horns ranged from 83 to 89 dB. During daytime and nighttime hours at the Peralta Boulevard location (L1), the typical maximum instantaneous noise level due to trains was 88 and 93 dB, respectively.

Sensitive Receptors

Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to noise. Examples include schools, daycare centers, parks, elderly-care facilities, hospitals, and residential areas. The closest residential buildings to the project site are to the north of Jason Way, approximately 45 feet from the project site boundary or 150 feet from the center of the project site. The Holy Spirit Church, School and Preschool are to the southeast of Parish Avenue, approximately 45 feet from the project site boundary. Childs Hideaway Preschool on Fremont Boulevard is approximately 125 feet southeast from the project site boundary, and the Genius Kids Preschool on Peralta Boulevard is approximately 500 feet northeast from the project site boundary. Nearby parks and open space areas include Centerville Community Park approximately 0.70 mile to the east, and Alameda Creek Regional Trail approximately 0.55 mile to the north.

Regulatory Setting:

Applicable Noise Regulations

The City of Fremont General Plan Safety Element (adopted in 2011) includes policies related to the protection of existing residential neighborhoods from noise, and requires evaluation of mitigation measures for new projects if that project:

1. Would cause the L_{dn} to increase by 5 dBA or more but would remain below 60 dBA;
2. Would cause the L_{dn} to increase by 3 dBA or more and exceed 60 dBA; or
3. Has the potential to generate significant adverse community response due to unusual character of the noise.

In addition, for commercial noise sources generated by new projects, the General Plan states that exterior noise levels at any affected residential land use property line should not exceed 50 dB(A) hourly L_{eq} and 70 dBA L_{max} from 7 a.m. to 10 p.m. and not exceed 45 dBA hourly L_{eq} and 65 dBA L_{max} from 10 p.m. to 7 a.m.; (City of Fremont, 2011, Table 10-1).

The General Plan also includes acceptable exterior and interior noise standards for new development, to ensure that the existing noise environment is compatible with the proposed future land uses. The General Plan states that the goal for maximum acceptable noise levels in residential areas is an L_{dn} of 60 dBA, and should be applied in areas where outdoor use is a major consideration, e.g., backyards in single-family developments and outdoor recreation areas in multifamily developments. The outdoor standard is not normally applied to small decks associated with apartments and condominiums. Where an outdoor L_{dn} of 60 dBA or lower cannot be achieved after the application of feasible mitigations, an L_{dn} of 65 dBA may be permitted at the discretion of the City Council. The General Plan states that interior noise levels should not exceed 45 dBA L_{dn} in new housing. Typical instantaneous noise levels should not exceed 50 dBA in bedrooms during the nighttime or 55 dBA in any other rooms and bedrooms during the daytime (City of Fremont, 2011, Policy 10-8.1 and associated implementation measures, and Table 10-4).

The General Plan Safety Element states that the City controls construction noise through limitations on construction hours. Fremont Municipal Code (FMC) Chapter 18.160 limits weekday construction hours for activities within 500 feet of a noise-sensitive receptor to between 7:00 a.m. and 7:00 p.m. on weekdays, and between 9:00 a.m. and 6:00 p.m. on Saturdays and holidays; Sunday construction is not allowed.

Applicable Vibration Regulations

The City of Fremont does not have standards regarding vibration; therefore, the Federal Transit Administration (FTA) guidelines are used in this Initial Study to assess the significance of vibration produced by transportation sources and construction activity. To address human response (annoyance) to ground-borne vibration, FTA has established maximum acceptable vibration thresholds for different land uses. These guidelines recommend 65 vibration velocity decibels (VdB) for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, and laboratory facilities), 80 VdB for residential uses and buildings where people normally sleep, and 83 VdB for institutional land uses with primarily daytime operations (e.g., schools, places of worship, clinics, and offices). Also, according to FTA guidelines, a vibration-damage criterion of 0.20 inches per second (in/sec) PPV should be considered for non-engineered timber and masonry buildings. Furthermore, structures or buildings constructed of reinforced concrete, steel, or timber have a vibration-damage criterion of 0.50 in/sec PPV pursuant to the FTA guidelines (FTA, 2006).

Discussion:

12a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

Discussion of construction-related noise impacts is presented under Impact 12d) below.

Operation – Proposed Project or Variant: **Potentially Significant Impact**

As noted above under the regulatory setting, the General Plan contains standards pertaining to protection of existing neighborhoods from increased noise generated by new developments, as well as to exposure of new developments to excessive noise levels. Operational impacts of the proposed project or variant on existing development are presented below under Impact 12c). The exposure of the proposed project or variant to indoor and outdoor noise levels in excess of local standards and ordinances (such as instantaneous noise levels from train horns) could be **potentially significant**. These impacts and potential mitigations will be further analyzed in the EIR.

12b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

Ground-borne vibration from construction activities at the project site under the proposed project or variant could produce vibration at nearby sensitive receptors. Pile driving, blasting, and other special construction techniques which typically cause ground vibration and ground-borne noise are not proposed for demolition or construction of the proposed project or variant.

Typical reference vibration levels for a large bulldozer are 0.089 in/sec PPV and 87 VdB at 25 feet (Federal Transit Administration, 2006). With the nearest neighboring sensitive receptor building at least 45 feet away from the project site, construction activities would not expose the nearby residential buildings to significant building vibration (exceeding 0.2 in/sec PPV or 94 VdB). Additionally, construction activities would not exceed the human annoyance standard[12] (exceeding 80 VdB) at 45 feet. Hence, the

[12] The level at which vibration causes annoyance to humans is variable and complex. A vibration velocity level of 65 VdB is typically regarded as the threshold of perceptibility for many humans. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible. For infrequent events (less than 30 vibration events per day) in residences

construction vibration impact would be considered **less than significant** and will not be addressed further in the EIR. Potential impacts of vibration on the integrity of the former fire station building that would be rehabilitated as part of the proposed project will be addressed in the EIR.

Operation – Proposed Project or Variant: **No Impact**

Long-term operation of the proposed project or variant would involve typically expected stationary equipment for residential, parking garage, and commercial retail purposes, with pool, clubhouse and tot-lot spaces that would not result in any major sources of vibration. Stationary noise sources, typified by HVAC and other electromechanical systems, would also not be expected to generate substantial levels of vibration or ground-borne noise. Such equipment, like an air handling unit or pump, is typically designed, manufactured, and operated with reciprocating or rotational moving parts that are well balanced and create negligible vibration—in fact, the monitored occurrence of excessive vibration on such mechanical equipment is usually a fault indicator that would prompt service and restoration of normal operating conditions and associated low vibration levels. Hence, there would be **no impact** with respect to vibration from operation of the proposed project or variant, and this impact will not be further addressed in the EIR.

12c) Would the project result in exposure of persons to a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction – Proposed Project or Variant: **No Impact**

Construction of the proposed project or variant would involve temporary and short-term construction activities, as described in Impact 12d) below, and would not introduce permanent construction noise sources. Therefore, this threshold is not applicable to construction of the proposed project or variant.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

Potential sources of permanent noise associated with operation of the proposed project or variant would include traffic noise from motor vehicle trips generated by the proposed development, and mechanical noise from equipment and machinery operating at the site. These project-generated operational noise sources are each addressed in turn below. The applicable standards within the General Plan require mitigation measures to be evaluated for projects that would increase ambient noise levels by more than 3 dBA if exceeding 60 dBA, or by more than 5 dBA if under 60 dBA.

Traffic Noise:

Traffic generated by occupants of the proposed residential units, and staff or visitors to the proposed retail uses would generate traffic noise. As stated in the City's General Plan (City of Fremont, 2011), traffic volumes generally must increase by 100 percent for their noise level to increase by 3 dBA. An increase in average noise levels of 3 dBA or less is not considered a significant change, while an increase of 5 dBA is considered readily perceptible to most people.

As discussed in Section 4.16, "Traffic and Transportation," the proposed project would generate 125 net new trips in the a.m. peak hour and 12 net new trips in the p.m. peak hour resulting in a minimal increase (i.e., up to 19 percent) in traffic on the surrounding roadway network. This corresponds with an increase in environmental noise of less than 1 dB. The variant would generate similar or slightly less peak hour traffic than the proposed project, and would also be anticipated to result in an increase of environmental noise of less than 1 dB.

The noise from traffic generated by the proposed project or variant would not result in an increase in noise of more than 3 dBA and would therefore not represent a substantial permanent increase in ambient noise levels above levels existing without the proposed project or variant.

Mechanical Noise:

Sources of mechanical noise associated with operation of the mixed use component of the proposed project or variant would include equipment such as trash compactors at retail loading areas, HVAC units

and buildings where people normally sleep, an impact criteria of 80 VdB is typically used as the standard for human annoyance (FTA, 2006).

for retail spaces, and parking garage fans and gate motors. Mechanical noise sources from the townhomes would be limited to individual residential heat pump/AC units.

Retail HVAC units, parking garage fans, trash compactors, and other commercial equipment would primarily be located within or adjacent to the mixed use portion of the site that is approximately 200 feet from sensitive receptors outside the project site. Noise impacts from commercial equipment would be required to adhere to the City's Noise Level Standards for New Industrial and Commercial Noise Sources (received at residential properties) as follows (City of Fremont, 2011):

- Daytime (7 a.m. to 10 p.m.) = 50 dBA hourly L_{eq}, 70 dBA L_{max}; and
- Nighttime (10 p.m. to 7 a.m.) = 45 dBA hourly L_{eq}, 65 dBA L_{max}

Anticipated noise generated by retail HVAC units on existing sensitive receptors (i.e., at a distance of approximately 200 feet) would range from 28.1 dBA hourly L_{eq} to 30.6 dBA hourly L_{eq}, which is below both the City's standards for new commercial noise sources and below existing noise levels at the project site (refer Table 4.12-1). Similarly, anticipated noise generated by parking garage mechanical equipment would range from 40.7 dBA hourly L_{eq} to 42.6 dBA hourly L_{eq} on existing sensitive receptors (see Appendix B-2), which is also below the City's noise level standards and existing noise levels. Other commercial equipment is anticipated to generate similar less-than-significant noise impacts on existing sensitive receptors.

Residential AC units on the proposed townhouses could be approximately 55 feet from existing single-family residential properties to the north of Jason Way. Anticipated noise generated by typical residential AC units at a distance of 50 feet would be approximately 49.1 dBA L_{eq} (see Appendix B-2) which translates into less than 56 dBA L_{dn} assuming 24/7 operation, and is thus below the City's General Plan standard of 60 dBA L_{dn} for exterior noise levels at backyards of single family residences and below existing noise levels.

Based on the above assessment, noise impacts from mechanical equipment would comply with relevant noise level standards and would not represent a substantial increase in ambient noise levels.

Conclusion

Traffic-related and mechanical noise sources associated with operation of the proposed project or variant would comply with the City of Fremont General Plan noise standards and would not result in substantial permanent increase of ambient noise levels. Permanent noise impacts associated from sources generated by the proposed project or variant would, therefore, be **less than significant**. These impacts will not be further addressed in the EIR.

12d) Would the project result in exposure of persons to a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction– Proposed Project or Variant : **Less than Significant with Mitigation**

As noted in the regulatory section above, noise generated from temporary construction activities is controlled via limitations on construction hours. Construction for both the proposed project and variant would comply with FMC Chapter 18.160 limits on construction hours; therefore, construction activities would not result in the exposure of persons to or generation of noise levels in excess of applicable noise standards. However, construction-related noise levels would temporarily exceed existing ambient conditions and may affect nearby sensitive receptors.

Sources of construction noise would include construction equipment and machinery, vehicular traffic noise from workers commuting to and from the project site, and haul trips for construction-related materials or soil import/export, and are anticipated to be similar for both the proposed project and variant. While construction of the variant may include additional haul trips due to a larger volume of soil to be exported from the site than the proposed project, this difference would affect the duration of the noise, not the noise level generated by construction activities.

Construction phases for both the proposed project and variant would include demolition, site preparation/grading, and building construction/civil utilities. Noise levels for each construction phase were estimated (see Appendix B-2) based on the types and number of construction equipment anticipated to be used on the project site, and the distance to the nearest sensitive receptors. The analysis assumed all pieces of equipment associated within each phase might operate simultaneously, and at a fraction of full power as indicated by equipment type "acoustical usage factor" (AUF) appearing in the Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide (FHWA, 2006), and from a single acoustic point representing the geographic center of the construction zone or area.

Based on this analysis, the building construction/civil utilities phase would generate the most substantial noise levels, estimated at 82.2 L_{eq} at a distance of 150 feet, which as noted above is the distance from the center of the project site to the nearest residence. The demolition and site preparation/grading phases would use construction equipment similar to and potentially as intensely as the building construction/civil utilities phase. Construction noise during the demolition phase would be 79.9 L_{eq} at a distance of 150 feet, and during the site preparation/grading phase, construction noise would be 77.5 L_{eq} at a distance of 150 feet.

Construction noise would therefore be greater than existing noise levels at nearby sensitive receptor locations (approximately up to 12 dBA more), and would be perceived by healthy human hearing as more than a doubling of the sound loudness [City of Fremont, 2013]). This increase in ambient noise conditions would be a significant impact unless mitigated to a level where the increase over ambient noise would be less than 5 dBA for such temporary noise generated by construction activity.

Construction noise can be mitigated through both noise control methods, which aim to reduce the sound generated by the construction equipment or process, and sound path abatement measures—such as barriers—that reduce noise by inserting a physical structure between the noise source and the receiver. Application of proper exhaust mufflers on fuel-burning engines are examples of the former (makes the noise source quieter), while field-erected curtains typify the latter technique by interfering with the sound path without changing the noise level of the equipment. The EPA indicates that feasible noise controls can reduce noise levels at nearby receptors from trucks by up to 16 dBA, and jackhammers by up to 13 dBA (EPA, 1971). Table 4.12-2 provides examples of typical mitigation measures and/or alternative construction methods that can be used to reduce construction equipment noise.

Table 4.12-2 Typical Construction Equipment and Possible Mitigation Measures To Reduce Noise

Construction Equipment	Source(s) of noise	Possible mitigation measures (may need to be discussed with equipment manufacturer)		Possible alternative construction methods
Bulldozer Compactor Crane Dump truck Excavator Grader Loader Scraper Shovel	Engine	Install more efficient exhaust silencer. Apply acoustical damping and protected internal noise absorption layers to vibrating panels and covers. Enclosure panels should be kept closed. Operate without excessive engine revving.		
Compressor Generator	Engine	Install more efficient exhaust silencer.	Locate the compressor or generator within an acoustical enclosure or behind an absorptive, three-sided sound wall.	Use electric motors instead of diesel or gasoline engines to drive compressors. If there is no electrical supply, use a reduced noise compressor or generator. A remote electrical generator can be used to supply power to several pieces of equipment.
	Compressor or generator	Apply acoustical damping and protected noise absorption layers to internal of vibrating panels and covers. Enclosure panels should be kept closed		

Mitigation Measure NOI-1 is proposed for both the proposed project and variant, to reduce noise impacts during construction by requiring use of noise-reduction devices on construction equipment, and selecting and/or locating construction noise sources to minimize impacts on surrounding sensitive receptors.

> ***Mitigation Measure NOI-1: Modification, Placement and Operation of Construction Equipment.***
>
> *To reduce noise impacts during construction, the applicant shall include the following measures in contractor specifications for the project, and such measures shall be implemented during construction:*
>
> - *Construction equipment shall be well maintained and operated in a manner to reduce or avoid high levels of noise emission. (By way of example, and to the extent practical, lower—rather than drop—loads into containers or onto platforms, thus reducing opportunity for noise-generating impacts of contacting surfaces.)*
> - *Construction activities, including the loading and unloading of materials and truck movements, shall be limited to the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No construction activities shall be permitted on Sundays or holidays.*
> - *Excavating, grading, and filling activities, including warming of equipment motors, shall be limited to between the hours of 7:00 AM to 7:00 PM on weekdays and between the hours of 9:00 AM and 6:00 PM on Saturdays. No excavation, grading or filling activities shall be permitted Sundays or holidays.*
> - *All internal combustion engine-driven equipment shall be equipped with mufflers, which are in good condition and appropriate for the equipment.*
> - *The contractor shall utilize "quiet" models of air compressors, electrical generators, pumps and other stationary noise sources where options for such off-the-shelf technology exist.*
> - *Loading, staging areas, stationary noise-generating equipment, etc. shall be located as far as feasible from sensitive receptors, and/or shielded with temporary noise barriers if necessary.*
> - *The contractor shall comply with Air Resource Board idling prohibitions of unnecessary idling of internal combustion engines.*
> - *Wherever possible, noise-generating construction equipment shall be shielded from nearby residences by on-site positioning of noise-attenuating barriers, such as structures or truck trailers. Temporary barriers, composed of field-erected curtains or panels, may also be used to occlude direct airborne sound paths between construction activity noise sources and, if designed and installed properly, could be expected to yield at least 7 to 12 dBA of noise reduction in the field.*
> - *Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for the project sponsor in the event of noise complaints. The applicant shall designate an on-site complaint and enforcement manager to track and respond to noise complaints.*

With implementation of Mitigation Measure NOI-1, which might rely solely on the erection of a temporary barrier to reduce noise (or a combination of the barrier with the effects of one or more listed measures), construction of the proposed project or variant would not result in substantial temporary or periodic increase of ambient noise levels that exceed an allowable 5 dBA increment over ambient noise conditions. Construction noise impacts associated with project development would, therefore, be **less than significant with mitigation**. These impacts will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **No Impact**

Operation of the proposed project or variant would not introduce any substantial sources of temporary or periodic noise to the project area. Noise from vehicular traffic generated by residents and users of the project site, and mechanical noise from residential or retail equipment such as HVAC, are considered a permanent noise source, not temporary or periodic, and are discussed above under Impact 12c. Temporary noise sources associated with residential and retail uses at the project site, such as intermittent vehicle noises (tire squeals, garage doors, etc.), landscape maintenance noises or typical recreational/backyard noises (music, laughing, children playing, etc.), would be typical of similar developments within the City, and would not be considered substantial. As such, there would be **no impact** from operation of the proposed project or variant that would result in substantial temporary or periodic increases in ambient noise levels.

12e-12f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Construction and Operation – Proposed Project or Variant: **No Impact**

There are no public or private airports within two miles of the project site, and the project site is not within an airport land use plan. Therefore, there would be **no impact** from the proposed project or variant in relation to airports and exposing people residing or working in the project area to excessive noise levels. This impact will not be further addressed in the EIR.

References:

California Department of Transportation (Caltrans), 2013. (September). Technical Noise Supplement to the Traffic Noise Analysis Protocol. Available online at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf

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4.13 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13.a. Induce substantial 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)?	☐	☐	☐	☒
13.b. Displace substantial numbers of existing housing, necessitating the construction of replacement house elsewhere?	☐	☐	☐	☒
13.c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Setting:

Population

Since 2000, the City of Fremont's rate of growth has been approximately 0.5 percent per year, or approximately five percent for the 10-year period (2000 to 2010) (City of Fremont, 2014). This growth rate was comparable to growth in Alameda County as a whole, but was less than that of individual cities such as Santa Rosa, Pleasanton, San Jose, Sunnyvale, and Milpitas (City of Fremont, 2014). As of January 1, 2017, the California Department of Finance (DOF) estimates the City of Fremont's total population was 231,664 persons, which is an 8.2 percent increase from the City's 2010 population of 214,089 persons (DOF, 2017).

The Association of Bay Area Governments (ABAG) has projected that the population of Fremont will grow to 256,200 by 2035 (City of Fremont, 2011). However, the City of Fremont has estimated that the local population will grow to 259,000 by 2035, and this estimate is considered by the City as the highest level of potential growth that could reasonably be expected to be accommodated under the General Plan (City of Fremont, 2011).

The Centerville Priority Development Area had a total population of 30,096 in 2010 (ABAG, 2013), and is expected to increase to 38,969 by 2040. This represents a 29 percent increase over the 30-year period (ABAG, 2013).

Housing

The City of Fremont has consistently had a higher household size than Alameda County as a whole (City of Fremont, 2014). The average household size in the city was 3.11 persons, compared to an average household size of 2.81 persons in Alameda County (DOF, 2017). As of January 1, 2017, the number of housing units in the city was 75,763, with approximately 72 percent of these housing units attached and detached single-family homes (DOF, 2017). ABAG estimates that by the year 2040, the number of households will increase to 89,090, or an approximate 18 percent increase (City of Fremont, 2014). Of these households, 12,986 are anticipated within the Centerville Priority Development Area (ABAG, 2013).

Employment

The project site currently contains approximately 51,000 SF of retail and restaurant uses, as well as a small mini-warehouse facility (approximately 1,000 SF). While the exact number of employees currently employed by these businesses is unknown, similarly sized commercial facilities would typically be expected to provide employment opportunities for approximately 130 persons.[13] The California

[13] Using Keyser Marston Associates, Inc. estimate of 400 SF per employee and the existing 52,000 SF of commercial space, the existing site is estimated to provide employment opportunities for approximately 130 employees.

Employment Development Department indicated that in 2017 the estimated total workforce in the City of Fremont was approximately 120,900 people, with an unemployment rate of 2.8 percent (Employment Development Department, 2018).

Discussion:

13a) Would the project induce substantial 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)?

Construction – Proposed Project or Variant: **No Impact**

Construction of the project is estimated to require an average of 100 construction workers on a typical work day. Up to 400 construction workers per day may be required periodically. Construction would begin in February 2019 and would require a total of approximately 18 months to complete. The source of the construction labor force is unknown at this time, but workers would be expected to come from the local labor pool and not relocate to the City from other areas for the relatively short construction period. The U.S. Census Bureau estimates there are 3,856 persons employed in the construction industry in the City (U.S. Census Bureau, 2016). Based on the availability of nearby construction workers and the duration of the construction period, there would be **no impact** due to a substantial influx of construction personnel for the proposed project or variant. This impact will not be addressed further in the EIR.

Operation – Proposed Project: **No Impact**

Land use projects have the potential to induce population growth both directly, through the introduction of land uses that allow increased residential density or employment, and indirectly, through the extension of roads or other infrastructure that would also serve future development in the area. These are addressed in turn below.

Population and Housing:

The project would not directly induce substantial unplanned population growth in the City of Fremont through development of new unplanned homes. As discussed above in Section 4.10, "Land Use and Land Use Planning," the land use designation for the project site under the City General Plan is Commercial-Town Center and the project site is zoned with a Transit-Oriented Development overlay district. The General Plan specifies a minimum residential density of 30 residential dwelling units per acre in the Commercial-Town Center land use designation where a site is within a TOD overlay zoning district. The project's proposed residential density would be 30 dwelling units per acre[14]; therefore, residential density is consistent with that prescribed for the property as envisioned under the City's General Plan. The proposed project would increase the population in the City of Fremont by approximately 423 new residents.[15] The City determined that implementation of the General Plan would not induce unplanned population growth, since new residential development under the General Plan would accommodate the City's share of regional population growth between 2010 and 2035 (City of Fremont, 2011). Therefore, the estimated project-related increase in population and housing would not result in population and housing growth not anticipated in the General Plan.

Employment:

The proposed project would include 25,000 SF of retail space, plus the 3,300-SF fire station, for which future uses are currently unknown, but are most likely to be retail. Based on average employment rates for typical retail facilities, the project would be expected to provide employment opportunities for approximately 71 people,[16] which is less than estimated for the existing uses at the project site. The California Employment Development Department indicated that in 2017, the average number of

[14] Based on 136 dwelling units (72 townhomes and 64 apartments), and a net project site area of 4.5457 acres (excludes public street dedications and revised fire station site, ownership of which would be retained by the City of Fremont), the residential density of the project would be 29.92 dwelling units per acre, which rounds to 30 dwelling units per acre.

[15] Based on the DOF's 2017 estimate of 3.11 persons per dwelling unit and 136 proposed dwelling units, the proposed project is estimated to accommodate 423 new residents at buildout.

[16] Using Keyser Marston Associates, Inc. estimate of 400 SF per employee and the proposed 28,300 SF of retail space, the proposed project is anticipated to provide employment opportunities for approximately 71 employees.

unemployed persons in the City of Fremont was 3,100 (Employment Development Department, 2018). The availability of a local labor force to be employed at the project-related retail uses suggests that workers would likely come primarily from the city and that new jobs generated by the proposed project would not result in substantial indirect population growth.

Extension of Roads and Infrastructure:
The proposed project would not induce substantial population growth indirectly (through the extension of roads or other infrastructure into undeveloped areas). The project site is an infill site surrounded by existing development. Proposed site access would be from Fremont Boulevard, Peralta Boulevard, Parish Avenue, and Jason Way through improvements to these roadways, including formal extension of Jason Way to connect with Peralta Boulevard. The proposed project would not require extensions of other existing roadways or construction of new roadways in the vicinity of the project site. Any new utility infrastructure required to serve the proposed project would be sized to accommodate project-related demands and would not be intended to serve any development on lands other than the project site.

Conclusion:
For these reasons, the proposed project would not directly (i.e., proposing unplanned homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure) induce substantial growth in the City of Fremont. Therefore, the proposed project would have **no impact** related to population and housing, and this impact will not be further addressed in the EIR.

Operation – Variant: **No Impact**

Population and Housing:
Under the variant, the residential density would be 36 dwelling units per acre[17] ; therefore, the residential density would comply with the 30 dwelling unit per acre minimum density envisioned for the project site under the City's General Plan. The variant would increase the population in the City of Fremont by approximately 513 persons.[18]

Employment:
The variant would include 26,000 SF of retail uses that would provide employment opportunities to approximately 65 persons. [19] Similar to the proposed project, workers would likely come from the available local labor pool and new jobs generated by the variant would not result in substantial indirect population growth.

Extension of Roads and Infrastructure:
The proposed roads and infrastructure for the variant would be identical to the proposed project, and would not include extensions of infrastructure or oversized infrastructure beyond what is needed to serve the variant.

Conclusion
For these reasons, the variant would not directly (i.e., proposing unplanned homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure) induce substantial growth in the City of Fremont. Therefore, the variant would have **no impact** related to population and housing, and this impact will not be further addressed in the EIR.

[17] Based on 165 dwelling units (72 townhomes and 93 apartments), and a net project site area of 4.608 acres (excludes public street dedications, but includes fire station site which would be annexed into overall project site under the variant), the residential density of the variant would be 35.81 dwelling units per acre, which rounds to 36 dwelling units per acre.

[18] Based on the DOF's 2017 estimate of 3.11 persons per dwelling unit and 165 proposed dwelling units, the variant is estimated to accommodate 513 new residents at buildout.

[19] Using Keyser Marston Associates, Inc. estimate of 400 SF per employee, and the proposed 26,000 SF of retail space, the variant is estimated to provide employment opportunities for approximately 65 employees.

13b-13c) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Construction and Operation – Proposed Project or Variant: **No Impact**

The property contains one unoccupied house, which would be demolished under the proposed project or variant. As such, the proposed project or variant would not involve displacement of a substantial number of existing houses or people that would necessitate construction of replacement housing elsewhere. There would be **no impact** from construction or operation of the proposed project or variant, and these impacts will not be further addressed in the EIR.

References:

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City of Fremont, 2011. Environmental Impact Report for the City of Fremont Draft General Plan Update. Available: https://www.fremont.gov/DocumentCenter/Home/View/5810. Accessed April 8, 2018.

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4.14 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14.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?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

Setting:

Fire Protection Services

Fire protection services for the project site are provided by the City of Fremont Fire Department. The department has 11 fire stations that are responsible for providing fire, medical, rescue and life safety emergency services within the City of Fremont. Additionally, the department is responsible for reviewing plans of new commercial and residential developments and conducting inspections to ensure buildings comply with the fire code. In 2016, the department responded to 434 fire and 10,216 medical emergencies. According to their 2015 Annual Report, the average response time in town is 3:59 minutes (City of Fremont, 2016). The nearest fire station to the project site is Station 6 at 4355 Central Avenue, approximately 0.5 mile away (City of Fremont, 2017).

Police Protection Services

The Fremont Police Department provides law enforcement services to the project site. The department deploys patrol officers from three separate zones; the project site is in Zone 2. The department has one police station at 2000 Stevenson Boulevard, which is approximately 3 miles southeast of the site.

Schools

The project site is within the service boundaries of Fremont Unified School District (FUSD). In enrollment year 2016-2017, the student enrollment exceeded the District's capacity at all school levels, by 323 students at elementary level, 305 students at junior high level, and 224 students at high school level (Cooperative Strategies, 2017). The total student enrolment in the district (all levels combined) exceeded available capacity by approximately 2.5 percent. The project site is in an unassigned area (FUSD, no date). Unassigned areas are typically those with crowded schools; the District creates more flexibility by allowing students in these areas to attend nearby schools that are not impacted. Students living near overcrowded schools were assigned to the nearest schools with available capacity. Thus, the nearest schools in FUSD that have available capacity would serve the project site (FUSD, 2018). As of the 2016-17 school year, the closest schools to the project site (Parkmont Elementary, Centerville Junior High, and Washington High School) had available capacity (California Department of Education, 2018).

Parks and Other Public Facilities

Parks in the project vicinity include Los Cerritos Community Park, approximately 0.7 mile to the north; Centerville Community Park, approximately 0.9 mile to the southeast; Plaza Park, approximately 1 mile to the southwest; and Westridge Park, approximately 1 mile to the northwest. The City maintains a parkland standard of 5 acres of parkland per 1,000 residents, and development impact fees for new residential development are levied based on maintaining this ratio (General Plan Policy 8-1.2) (City of Fremont, 2011). Other public facilities in the vicinity include the California Department of Motor Vehicles at 4287 Central Avenue, approximately 0.5 mile to the south, and the Fremont Main Library at 2400 Stevenson Boulevard, approximately 2.5 miles to the south.

Discussion:

14a.i-14a.ii) 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 fire or police services?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Construction of the proposed project or variant could result in a small, temporary increase in the demand for fire suppression, emergency medical, and police services, due the temporary presence of construction personnel in the area. Construction is anticipated to occur over approximately 18 months, between February 2019 and October 2020. Project staffing levels for construction would vary with on-site activities; an estimated average of 100 construction employees would be on the site at any one time, with up to 400 workers during peak periods. As discussed in Section 4.13, “Population and Housing,” existing uses at the project site are estimated to employ approximately 130 people, therefore construction of the project or variant would not be expected to substantially increase the number of people or the service demands for fire, medical emergency, and police services from existing conditions.

Federal and State worker safety regulations would be adhered to, in order to minimize the likelihood of workplace injuries and accidents requiring emergency medical attention. Typical fire and safety precautions would be taken, such as prohibiting on-site fires; reporting any fires, even if they have been extinguished; discarding any smoking materials in approved containers; maintaining access to emergency vehicles; and maintaining access to fire hydrants, emergency water tanks, and emergency turnouts. Construction of the proposed project or variant would not require new or physically altered fire or police facilities to maintain acceptable service ratios, response times, or other performance objectives for any of the public services. Thus, construction-related impacts of the proposed project or variant would be **less than significant**, and these impacts will not be further addressed in the EIR.

Operation - Proposed Project: **Less-than-Significant Impact**

As discussed in Section 4.13, “Population and Housing,” the proposed project would increase the number of residents in the area by an estimated 423 persons[20] and would be expected to employ approximately 71 people.[21] The project site is an infill site with existing services available, and as discussed in Section 4.10, “Land Use and Planning,” the proposed density of development for the proposed project is consistent with that envisioned under the General Plan. Because the proposed project is not expected to generate an increase in demand for fire suppression, medical emergency, or police services, and existing public services are available to serve the area, the proposed project would not require the construction of new or altered fire protection or police facilities that could, in turn, result in physical environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for fire and police services. Fire hazards are not expected to increase as a result of the proposed project, since it would be required to comply with the California Building Code, Fire Code, Electrical Code, and

[20] Calculated using DOF estimate of 3.11 people per household average. 3.11 (64 apartments + 72 townhouses) equals 423 persons. Sum of components may not equal the total value due to rounding.

[21] Calculated using Keyser Marston Associates, Inc. estimate of 400 SF per employee. 28,300 SF divided by 400 SF equals 71 persons. Sum of components may not equal the total value due to rounding.

Mechanical Code. All proposed development would be reviewed by the Fire Department to ensure adequacy of access for fire and emergency vehicles and apparatus, appropriateness of design features (setbacks, clearances, etc.), and compliance with technical code requirements (City of Fremont, 2011). Operation of the proposed project would not require new or physically altered fire or police facilities to maintain acceptable service ratios, response times, or other performance objectives for any of the public services. Thus, impact of the proposed project would be **less than significant**, and this impact will not be further addressed in the EIR.

Operation – Variant: **Less-than-Significant Impact**

As discussed in Section 4.13, "Population and Housing," the variant would increase the number of residents by approximately 504 persons,[22] and would provide employment for approximately 65 employees.[23] Similar to the proposed project, development under the variant would be consistent with the General Plan and would not be expected to generate an increase in demand for fire suppression, medical emergency, or police services that would necessitate the construction of new or altered fire protection or police facilities that could, in turn, result in significant physical environmental impacts.

The variant would be subject to the same code requirements and design review process as the proposed project, and therefore would not be expected to increase fire hazards at the site. The operational impact of the variant would be **less than significant**, and this impact will not be further addressed in the EIR.

14a.iii) 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 schools?

Construction – Proposed Project or Variant: **No Impact**

As described in Impacts 14a.i) and 14a.ii), construction activities for the proposed project or variant are anticipated to take approximately 18 months. Workers would likely come from the local labor pool and not relocate to the City from other areas, and therefore would not increase enrollment in local schools. As such, there would be **no impact** on school facilities from construction of the proposed project or variant that would trigger the need for new or modified school facilities, and this impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The proposed project would develop the site with 72 townhouses and 64 apartments, for a total of 136 residential units. Based on the FUSD's student generation rates, the estimated future demand for schools as a result of the proposed development under the proposed project would be approximately 54 students over all grade levels. The variant would develop the site with 72 townhouses and 93 apartments, for a total of 165 residential units. The estimated future demand for schools as a result of the proposed development under the variant would be approximately 63 students over all grade levels. Table 4.14-1 shows the breakdown by grade level for both the proposed project and the variant.

[22] Calculated using DOF (2017) estimate of 3.11 people per household average. 3.11 (90 apartments+ 72 townhouses) equals 504. Sum of components may not equal the total value due to rounding.

[23] Calculated using Keyser Marston Associates, Inc. (2016) estimate of 400 SF per employee. 26,000 SF divided by 400 SF equals 65 persons. Sum of components may not equal the total value due to rounding.

Table 4.14-1 Estimated Generation of School Students

Grade Level	Student Generation Rates[1]		Estimated Number of New Students	
	For Multi-Family Attached Units	For Single-Family Attached Units	From Proposed Project	From Variant
K-6 (Elementary)	0.1767	0.3048	33	38
7-8 (Middle)	0.0500	0.0706	8	10
9-12 (High)	0.0533	0.1338	13	15
Total Estimated Student Generation[2]:			**54**	**63**

[1] *Student Generation Rates taken from /Cooperative Strategies, 2017.*

[2] *Sum of components may not equal the total value due to rounding.*

The project site is within an unassigned area (FUSD, no date). According to FUSD, the students generated by the proposed project or variant would be accommodated by the nearest school in the district with available space (FUSD, 2018).

Senate Bill 50 (Chapter 407, Statutes of 1998) instituted a school facility program by which school districts can levy fees for the purpose of construction or reconstruction of school facilities. The FUSD levies Level III developer fees (Association of California School Administrators, 2018). Effective May 1, 2017, the Level III fees will be $21.11 per square foot for residential construction (FUSD, 2017). The applicant would pay the State-mandated school impact fees to the FUSD that are levied at the time of development. The California Legislature has declared that payment of the State-mandated school impact fee is deemed to be full and adequate mitigation under CEQA (California Government Code Section 65996).

Because the applicant would pay State-mandated school impact fees, the operational impact of the proposed project or variant on school facilities would be **less than significant**, and this impact will not be further addressed in the EIR.

14a)(iv)-14a)(v) 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 parks or other public facilities?

Construction – Proposed Project or Variant: **No Impact**

The average number of construction workers estimated to implement project improvements would be relatively small (approximately 100), and construction activities would occur over a limited period (approximately 18 months). It is not anticipated that workers would relocate to the project area from other areas in the county, so that there would be no increase in the use of existing parks or other public facilities. In addition, construction of the proposed project would not increase the population of the project area such that construction of new parks is required to meet the County's parkland standard.

Thus, there would be **no impact** on the physical environment associated with the provision of public parks or other public facilities. This impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The City requires all new residential development to dedicate or develop parkland or pay in-lieu fees consistent with State law and the City's impact fee program (City of Fremont, 2011). The City's goal for park acreage is to have 5 acres of parkland per 1,000 residents. Based on the estimated 423 new residents generated by the proposed project, approximately 2 acres of parkland would be required to

maintain the City's parkland standard. Based on the estimated 504 new residents generated by the variant, approximately 2.5 acres of parkland would be required to maintain the City's parkland standard.

Both the proposed project and variant would include common open space/park areas for the residents in the form of a children's play area, outdoor space at the community center, and community gardens. In addition, the applicant would also pay fees in-lieu of developing additional new recreational facilities. Because the proposed project and variant would meet the parkland standard through provision of recreational facilities and payment of fees, there would not be a significant increased demand for other nearby public recreational facilities.

Therefore, operation of the proposed project or variant would have a **less-than-significant impact** on parks or other public facilities, and these impacts will not be further addressed in the EIR.

References:

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4.15 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15.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 be accelerated?	☐	☐	☒	☐
15.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?	☐	☐	☒	☐

Setting:

The City of Fremont's Recreation Services Division provides City of Fremont residents and visitors with parks and recreational facilities and services. Recreational facilities throughout the city include four community centers, three program centers, various parks, a sports complex, tennis center, Fremont Park Golf Club, and Olive Hyde Art Gallery. Throughout the year, the Recreation Services Division provides classes for residents and summer camps for children (City of Fremont, 2018a). The Park Maintenance and Urban Forestry Division is responsible for maintaining the City's parks (City of Fremont, 2018b). The following recreational facilities are within close proximity to the proposed project:

- Los Cerritos Park and the Los Cerritos Community Center are approximately 0.5 mile northwest of the project site. The park is classified as a Neighborhood Park by the City of Fremont and offers basketball courts, baseball diamonds, playground area, and picnic areas. The community center houses a multi-purpose room and meeting room available for event rental (City of Fremont, 2018c).
- Alameda Creek Regional Trail is approximately 0.6 mile north of the project site. The trail parallels Alameda Creek and runs westward about 12 miles. The southern part of the trail is used for biking, running and walking, while the northern trail is used by equestrian riders (East Bay Regional Park District, 2018a).
- Quarry Lakes Regional Recreation Area is approximately 0.6 mile north of the project site. This area provides aquatic recreation (e.g., swimming, boating, fishing, etc.), picnicking, and hiking (East Bay Regional Park District, 2018b).

Discussion:

15a) 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?

Construction – Proposed Project or Variant: **No Impact**

The number of workers required to construct the proposed project or variant would be approximately 100 workers on most days, up to a maximum of 400 at peak periods, over a construction period of approximately 18 months. Workers would likely come from the local labor pool and would not be expected to relocate to the City from other areas, and therefore, there would be no increase in ongoing and frequent use of existing parks or recreational facilities during construction that might cause or accelerate substantial physical deterioration of these facilities. There would be **no impact** from construction of the proposed project or variant and this impact will not be addressed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

As discussed in Section 4.13, "Population and Housing," the proposed project would house approximately 423 residents and provide employment opportunities for approximately 71 people. The variant would house approximately 504 persons and 65 employees (Keyser Marston Associates, 2016).

The anticipated population density under both the proposed project and variant are within the envelope envisioned by the General Plan, and would not result in a substantial increase in the use of existing parks and recreational facilities such that physical deterioration would be accelerated, or additional recreational facilities would need to be built (City of Fremont, 2011). In addition, the City requires new residential development to dedicate or develop parkland or pay in-lieu fees consistent with State law and the City's impact fee program, which would be used to maintain the City's goal of 5 acres of parkland per 1,000 residents (City of Fremont, 2011), which would decrease the likelihood of a substantial increase in use of existing parks and facilities.

Therefore, physical deterioration of existing recreational facilities would not be accelerated by the population increase at the project site under the proposed project or variant. Because the population growth would be consistent with the General Plan, the proposed project and variant would have a **less-than-significant** impact on parks and recreational facilities, and these impacts will not be discussed further in the EIR.

15b) 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?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Both the proposed project and variant would include construction of open space areas and recreational facilities for use by residents and their visitors, including a community garden, children's playground, and community pool/clubhouse area. The impacts of construction activities, including construction of these recreational facilities, are addressed throughout this Initial Study as part of the proposed project or variant. These impacts will not be discussed further in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

As discussed above under Impacts 14.a.iv) and 15a), the anticipated population density under both the proposed project and variant are within the envelope envisioned by the General Plan, and the applicant would dedicate or develop parkland, or pay in-lieu fees consistent with State law and the City's impact fee program. As such, operation of the proposed project or variant would not result in a substantial increase in demand for parks and recreational facilities that would require the construction or expansion of recreational facilities. The impact would be **less than significant**, and will not be addressed further in the EIR.

References:

City of Fremont, 2011. City of Fremont General Plan, adopted December, 201.1

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_____, 2018b, City of Park Maintenance, Available at https://fremont.gov/1254/Park-Maintenance, Accessed February 7, 2018.

_____, 2018c, Los Cerritos Community Center, Available at https://fremont.gov/307/Los-Cerritos-Community-Center, Accessed February 7, 2018.

East Bay Regional Park District, 2018a. Alameda Creek Regional Trail. Available at: http://www.ebparks.org/parks/trails/alameda_creek, Accessed February 7, 2018.

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4.16 Transportation and Traffic

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16.a. Conflict with an applicable plan, ordinances or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
16.b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
16.c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
16.d. Substantially increase hazards due to design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
16.e. Result in inadequate emergency access?	☐	☒	☐	☐
16.f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒	☐	☐

Setting:

The project site is in the Centerville area of Fremont at the east corner of Fremont and Peralta boulevards. The site has its primary frontage along Fremont Boulevard, with secondary frontages along Parish Way, Peralta Boulevard, and Jason Way. The site is on Centerville's main commercial strip along Fremont Boulevard near Fremont (Centerville) Station, and the surrounding area is characterized by a variety of uses including residential, retail/services, institutional, light industrial, and other uses.

Street Network

Primary local roadway access for the site is provided by Fremont Boulevard and Peralta Boulevard, segments both of which (together with Thornton Avenue) comprise the portion of State Route (SR) 84 through most of Fremont. Additional regional roadway access is provided by I-880 (via SR 84/Thornton Avenue and Mowry Avenue), I-680 (via Washington Boulevard/Fremont Boulevard), and SR 238/Mission Boulevard. In the vicinity of the project site, the City of Fremont General Plan classifies Fremont Boulevard and Paseo Padre Parkway, as well as Thornton Avenue west of Fremont Boulevard, as "Primary Arterial" roadways; Peralta Boulevard and Central Avenue, as well as Thornton Avenue east of Fremont Boulevard, are classified as "Minor Arterial" roadways (City of Fremont, 2011a). Average daily traffic (ADT) along Fremont Boulevard adjacent to the project site (between Peralta Boulevard and Central Avenue) is approximately 22,500 vehicles (City of Fremont, 2015).

Transit Services

The project site is approximately 300 feet southeast of the Fremont (Centerville) Station, which is along the northeast side of Fremont Boulevard between Peralta Boulevard and Bonde Way. The station is served by regional/intercity trains on Amtrak's *Capitol Corridor* service and commuter trains on the ACE. The nearest San Francisco Bay Area Rapid Transit District (BART) station is Fremont Station, approximately 1.5 miles east of the project site in Central Fremont and accessible by local bus service operated by the Alameda–Contra Costa Transit District (AC Transit).

Fremont Boulevard is a key corridor for AC Transit service, with base service provided by the following three routes, all of which have their nearest stops to the project site along Fremont Boulevard at Peralta Boulevard (in the southbound direction) and Parish Avenue (in the northbound direction).

- Line 99 connects BART stations at Hayward, South Hayward, Union City, and Fremont, with a route via Mission Boulevard, Decoto Road, Fremont Boulevard, and Walnut Avenue, operating seven days a week with 20-minute headways.
- Line 210 connects Ohlone College and Union Landing Transit Center via Fremont Boulevard and Washington Boulevard, operating seven days a week with 30-minute headways.
- "AllNighter" Line 801 provides late night and early morning service, paralleling BART's Fremont line and connecting Oakland, San Leandro, Hayward, Union City, and Fremont via 11th Street/12th Street, East 14th Street/International Boulevard, Mission Boulevard, Decoto Road, Fremont Boulevard, and Walnut Avenue. The route operates with hourly headways seven days a week.

AC Transit also operates a weekday, commute-only Transbay route, Line U, along Fremont Boulevard, connecting BART's Fremont Station and Stanford University in Palo Alto via the Dumbarton Bridge, operating in the westbound direction during the morning commute period and in the eastbound direction during the afternoon/evening commute period, generally at headways of 30–60 minutes. The nearest stops to the project site are near Fremont (Centerville) Station, at Bonde Way (in the eastbound direction) and just east of the station crossing (in the westbound direction).

One additional local route, Line 251, operates within walking distance of the project site along Paseo Padre Parkway and Thornton Avenue, connecting BART's Fremont Station with Ohlone College's Newark Campus with hourly service seven days a week. The nearest stops to the project site are along Thornton Avenue at Fremont Boulevard.[24] There are no other existing transit services or specific planned transit improvements in the immediate vicinity of the project site (AC Transit, 2015; 2016; 2018).

Bicycle and Pedestrian Facilities

In the vicinity of the project site, Class II bikeways (bicycle lanes) are provided along Fremont Boulevard (transitioning to Class III bikeways [shared lanes] north of Peralta Boulevard), Central Avenue, Thornton Avenue, and Paseo Padre Parkway.[25] Other Class III bikeways near the project site include Peralta Boulevard, Dusterberry Way, and Post Street/Bonde Way. Curbs and sidewalks are present along all site frontages, but are discontinuous on some street segments in the surrounding area, such as Parish Avenue and Peralta Boulevard east of the site. There are moderate levels of pedestrian activity due to the project site's location within the town center and main commercial strip of Centerville and the proximity of Centerville Station and other nearby transit services.

[24] AC Transit also operates one nearby Service to Schools route, Line 625, serving Centerville Junior High School and Washington High School. The service is primarily intended for students attending these schools, however, and only operates on weekdays, with one roundtrip daily serving Centerville Junior High School (to the school in the morning and from the school, beginning at Central Avenue, in the afternoon).

[25] Includes buffered Class II facilities on some segments, including Fremont Boulevard south of Peralta Boulevard and Paseo Padre Parkway north of Peralta Boulevard.

Regulatory Setting:

Congestion Management Plan:

The Alameda County Transportation Commission's (ACTC) Congestion Management Program (CMP) describes performance measures related to the circulation system (ACTC, 2017), as summarized below, although only some of these would be directly applicable to the project. These performance measures are described in further detail in the CMP.

- Multimodal accessibility and transportation/land use integration (mode share – walk trips, mode share – school trips, mode share – work trips, land use approvals in priority development areas (PDAs), land use approvals within half-mile of transit);
- Roadways (travel times, vehicle throughput, person throughput, travel speeds / levels of service, high occupancy vehicle (HOV) or high occupancy toll (HOT) lane travel time competitiveness, person-hours of delay, bottlenecks and queues, pavement condition index, collisions and collision rate, travel reliability index, and intelligent transport system (ITS) infrastructure);
- Transit service (corridor-level transit speed, systemwide travel speed, transit system reliability, ridership, service utilization, load factor, on-time performance, cost effectiveness, service interruptions, transit fleet age, and public transit accessibility);
- Bicycling (counts at multiple locations, collisions involving bicyclists, bicyclist collision severity, local master plan adoption, miles of network built, community members participating in programs, and cyclist comfort and safety);
- Pedestrians/walking (counts at multiple locations, collisions involving pedestrians, pedestrian collision severity, local master plan adoption, number of pedestrian projects complete, and pedestrian comfort and safety);
- Goods movement (GHG emissions, air quality, equity, travel-time delay, buffer time index, truck-involved crashes, rail collisions, freight infrastructure conditions, resiliency, use of innovative technology, multimodal connectivity and redundancy, compatibility with land-use decisions, jobs and economic impact, and truck route accommodation index); and,
- Environment, equity, and health (activity center accessibility, physical activity, GHG emissions, and $PM_{2.5}$ emissions).

Standard practice exercised by the City of Fremont typically requires a detailed transportation impact analysis (TIA) for projects generating 100 vehicle-trips or more during the weekday PM peak hour. This threshold is also consistent with the threshold used by ACTC for determining whether a land use project requires preparation of a TIA to evaluate potential impacts to regional roadways in the surrounding area that are designated as part of the CMP network. In the vicinity of the project site, Fremont Boulevard, Paseo Padre Parkway (south of Peralta Boulevard), and SR 84 (Peralta Boulevard/Fremont Boulevard/Thornton Avenue) are designated as part of the CMP roadway network.

The CMP also identifies a transit monitoring network, a subset of the CMP roadway network intended for monitoring transit vehicle performance standards. Fremont Boulevard is the only portion of the transit monitoring network in the vicinity of the project site.

General Plan:

The General Plan establishes variable level of service (LOS) standards for traffic speed and travel delay based on street function, land use, and existing modes of transportation (City of Fremont, 2011). The City of Fremont's LOS standard for signalized intersections is generally LOS D. However, for signalized intersections on CMP routes of regional significance and those located within the City Center, Town Centers, Irvington and Warm Springs/South Fremont BART Station areas, and Priority Development Areas (PDAs), a level of service standard for signalized intersections of LOS E or F may be acceptable when balancing efficient vehicular operations with the goal of increasing transit use, bicycling, and walking. All four of the signalized intersections evaluated in the TIA are CMP intersections, and two of

them (Fremont Boulevard/Thornton Avenue, and Fremont Boulevard/Peralta Boulevard) are also located within a Town Center, therefore LOS E is the acceptable LOS standard for these four intersections.

According to City of Fremont standards, for signalized intersections, a project is considered to create a significant adverse impact on traffic conditions if for either peak hour:

1. The level of service at the intersection degrades from its LOS standard or better under no project conditions to an unacceptable LOS under project conditions, or
2. The intersection is already operating below its LOS standard under no project conditions, and the addition of the project causes the intersection average control delay to increase by more than 4 seconds per vehicle.

For unsignalized intersections, the City uses a threshold of significance[26] based on percentage of project's traffic contribution and whether the project meets a peak-hour signal warrant. For unsignalized intersections, a project would create a significant adverse impact on traffic conditions if the project traffic contributes at least five percent of the total traffic volume at the intersection and if the addition of project traffic results in the intersection meeting the California Manual on Uniform Traffic Control Devices (MUTCD) peak-hour signal warrant.

Pedestrian Master Plan:

In addition to the performance measures described above, the City of Fremont Pedestrian Master Plan has specific quantifiable goals related to the effectiveness and performance of the pedestrian circulation system, including increasing pedestrian trips (as a percentage of all trips) from nine percent in 2007 to 15 percent by 2025, and reducing annual reported collisions between pedestrians and motor vehicles from 44.4 (five-year average for 2003–2007) to 22 by 2025 (City of Fremont, 2016).

Draft Bicycle Master Plan:

The City of Fremont Draft Bicycle Master Plan (City of Fremont, 2017) includes goals, policies, and actions that create the foundation for a safe, comfortable, convenient, and connected bicycle network for people of all ages and abilities. The plan describes a vision for the City's bikeway network—the All Ages and Abilities (AAA) Vision Network—that proposes several bikeway improvements in the vicinity of the project site, including Class IV facilities (separated bikeway) along Fremont Boulevard, Peralta Boulevard (east of Fremont Boulevard), Thornton Avenue, and Paseo Padre Parkway; Class II facilities along Peralta Boulevard (west of Fremont Boulevard) and Dusterberry Way; and Class III "neighborhood bikeway" facilities along Eggers Drive and several other streets. In particular, the plan identifies new and/or improved bikeways along several of these corridors as part of the 16 priority projects to be implemented over the next five years as the backbone of the AAA Vision Network:

- Fremont Boulevard between Paseo Padre Parkway and Blacow Road, and Washington Boulevard between Fremont Boulevard and Starr Street;
- Peralta Boulevard/Fremont Boulevard/Central Avenue between Mowry Avenue and I-880; and
- Paseo Padre Parkway between Peralta Boulevard and Driscoll Road.

Standard Details for Improvements in Public Right of Way:

The City's Standard Details for Improvements in Public Right of Way (City of Fremont, 2014) provides guidance and specifications for projects within public right of way, including for sidewalks, driveways, signs, landscaping, and streetlights.

[26] The Traffic Impact Analysis (Appendix D) acknowledges that the City of Fremont does not have formally adopted impact criteria to apply to unsignalized intersections and that this is common for many jurisdictions because it is generally not the unsignalized intersections that limit the overall capacity of a roadway. However, the study indicates that the analysis of unsignalized intersections is typically evaluated by considering overall level of service, approach delay, and movement delay, availability of alternate routes, intersection spacing, and an analysis of traffic signal warrants. The use of this threshold of significance for unsignalized intersections, although not a formally adopted impact criteria, is used by the City of Fremont within this document, and other CEQA documents.

Discussion:

16a-16b) Would the project exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Would the project conflict with an applicable congestion management program, including, but not limited to a level of service standard standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

The average daily traffic generated by construction activities is anticipated to be less than the estimated daily traffic generated by the project upon completion of construction and full occupancy of the site. On an average day, there would be approximately 100 construction workers at the site, increasing to a maximum of approximately 400 workers on peak days. The proposed project would include 136 residential units, which would result in approximately 423 residents, as well as various retail and commercial uses. The variant would include 165 residential units (approximately 513 residents) with slightly more retail/commercial uses. In either case, however, the expected population of the site at full occupancy—including residents (accounting for household size including parents/guardians, children, and others), employees, customers, and other regular users of the site—would likely be substantially larger than the estimated number of construction workers. For reference, and as discussed further below, the completed project and variant at full occupancy would each generate over 2,000 daily person-trips across all land uses on a typical weekday.

Construction activities at the site would also generate heavy vehicle trips, including trucks for off-site soil export (maximum of 50 daily trips), heavy equipment transport, or materials deliveries. It is expected that trucks would use a combination of major arterial roadways (e.g., Fremont Boulevard, Thornton Avenue) and freeways (e.g., I-680, I-880) when traveling to and from the site, and would be spread out over the course of the work day. Therefore, the majority of construction-related traffic during the weekday AM and PM peak periods (typically, 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., respectively) would be associated with construction worker trips. The impact of construction-related traffic would be a temporary and intermittent lessening of the capacities of streets in the project site vicinity because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. This impact would be potentially significant; however, Mitigation Measure TRA-1 is proposed to reduce the impacts of construction-related traffic.

Mitigation Measure TRA-1: Construction Traffic Management Plan.

The applicant and its construction contractor shall prepare and implement a traffic management plan for construction activities that may affect road rights-of-way during construction, to reduce traffic congestion during construction and facilitate emergency vehicle access along affected roadways. The traffic management plan must follow applicable City of Fremont Standard Details and Specifications (whichever editions are current as of the date of construction), which include minimum requirements for:

- *Conformance with the most current California Manual on Uniform Traffic Control Devices and State Standard Plans;*
- *No lane closures during weekends and weekdays before 8:30 am or after 4:00 pm;*
- *72-hour notice prior to start of work to all affected parties (businesses, residents, agencies, schools, etc.);*
- *Removal/coverage of all conflicting signs, striping, or pavement markings when work is completed.*
- *Maintaining access to private property at all times;*
- *Minimum of one paved traffic lane no less than 10-feet wide; and*
- *All hauling on City streets shall be on adopted truck routes.*

The plan shall be in effect throughout the duration of project-related construction activities. The traffic management plan shall be submitted to the City of Fremont Department of Public Works for review and approval prior to approval of improvement plans and issuance of building permits where roadway improvements may cause impacts on traffic. The plan shall include the following items to address requirements above:

- *A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours; detour signs (if required); traffic coning and other lane closure devices; warning signs; use of flag persons to direct traffic flows (when needed); and designated construction access routes.*
- *Identification of haul routes for movement of construction vehicles that would minimize impacts on traffic, transit, bicycle, and pedestrian circulation and safety, specifically along those streets in the project area.*
- *Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur.*
- *Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to haul trucks can be identified and corrected by the applicant.*
- *Methods to maintain emergency vehicle access, as well as local access to/from surrounding properties, at all times during project construction, with detours as necessary during road closures.*

Implementation of Mitigation Measure TRA-1 would reduce the potentially significant impacts associated with construction-related traffic to a **less-than-significant** level by requiring preparation and implementation of a construction traffic management plan. These impacts will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The applicable plans, ordinances, policies, and congestion management programs relating to the proposed project or variant are summarized under “Regulatory Setting,” above. The following discussion analyzes the impacts of the proposed project and variant related to travel demand and impacts on the circulation system, as well as site access.

Travel Demand

The transportation impact analysis (TIA), included as Appendix C to this Initial Study, assessed traffic generation from the proposed project and variant, based on trip generation rates and assumptions published by the Institute of Transportation Engineers (ITE). The TIA found that the proposed project would generate approximately 2,017 weekday daily vehicle-trips (including 170 vehicle-trips during the weekday AM peak hour and 155 vehicle-trips during the weekday PM peak hour), while the variant would generate approximately 2,093 weekday daily vehicle-trips (including 154 vehicle-trips during the weekday AM peak hour and 143 vehicle-trips during the weekday PM peak hour). The proposed project generated more peak-hour trips than the variant, due to the ‘worst case’ assumption that the future use of the fire station under the proposed project may include a children’s daycare facility.

Taking into account net traffic generation at the project site (i.e., new trips less those that would be removed with demolition of the existing uses), both the proposed project and variant would result in a net reduction of approximately 96 weekday daily vehicle-trips and 20 weekday daily vehicle-trips, respectively. During the weekday peak hours, the proposed project and variant would each result in a modest net increase in vehicle traffic compared to existing conditions: 125 AM peak hour vehicle-trips and 12 PM peak hour vehicle-trips for the proposed project and 109 AM peak hour vehicle-trips and 0 PM peak hour vehicle-trips for the variant (Appendix C).

Therefore, both the proposed project and variant would result in a net number of vehicle trips below the City and ACTC thresholds for requiring a detailed TIA to evaluate potential transportation-related impacts (100 vehicle-trips during the PM peak hour).

Although not explicitly required for compliance with City and ACTC thresholds, the TIA for the project included an analysis of intersection LOS during the weekday AM peak hour at the following eight intersections in the vicinity of the project site:

1. Fremont Boulevard/Thornton Avenue;
2. Fremont Boulevard/Peralta Boulevard;
3. Fremont Boulevard/Central Avenue;
4. Paseo Padre Parkway/Peralta Boulevard;
5. Fremont Boulevard/Parish Avenue;
6. Jason Way/Peralta Boulevard;
7. Parish Avenue/Peralta Boulevard; and
8. Jason Way/Parish Avenue.

The analysis considered three main analysis scenarios—existing conditions, background conditions (existing conditions with the addition of approved, but not yet constructed projects), and cumulative conditions (year 2035, with buildout of the City of Fremont General Plan)—both with and without the project/variant. The results of this analysis are summarized in Table 4.16-1.

Table 4.16-1 Intersection Level of Service Summary

Intersection	Existing						Background						Cumulative					
	No Project		With Project: Proposed Project		With Project: Variant		No Project		With Project: Proposed Project		With Project: Variant		No Project		With Project: Proposed Project		With Project: Variant	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Signalized Intersections																		
1 Fremont/Thornton	D	37.9	D	38.0	D	38.0	D	38.1	D	38.2	D	38.2	C	28.6	C	29.4	C	29.2
2 Fremont/Peralta	C	27.0	C	27.2	C	27.3	C	27.3	C	27.5	C	27.5	C	32.7	C	32.9	C	32.9
3 Fremont/Central	C	34.8	C	34.8	C	34.8	D	35.1	D	35.5	D	35.5	E	71.3	E	75.5	E	75.3
4 Paseo Padre/Peralta	D	46.4	D	46.7	D	46.6	D	46.8	D	47.5	D	47.3	**F**	**81.9**	**F**	**83.3**	**F**	**83.0**
Unsignalized Intersections																		
5 Fremont/Parish	A	4.2	B	14.8	C	15.5	A	6.1	C	21.0	C	21.7	C	15.7	E	44.2	E	45.6
	F	54.9	F	152.2	F	156.6	F	77.7	F	--	F	--	F	--	F	--	F	--
6 Jason/Peralta	A	0.1	A	0.4	A	0.5	A	0.1	A	0.4	A	0.5	A	0.1	A	0.3	A	0.3
	B	13.8	C	16.1	C	16.4	B	14.0	C	16.3	C	16.6	B	14.1	C	17.0	C	17.4
7 Parish/Peralta	A	4.5	A	4.8	A	4.7	A	4.7	A	5.0	A	5.0	A	2.7	A	2.8	A	2.8
	D	33.0	E	35.2	D	34.6	E	35.4	E	38.0	E	37.3	D	32.2	D	33.4	D	33.1
8 Jason/Parish	A	0.3	A	0.7	A	0.8	A	0.3	A	0.7	A	0.8	A	0.3	A	0.7	A	0.8
	B	10.3	B	10.3	B	10.2	B	10.4	B	10.4	B	10.2	B	10.5	B	10.5	B	10.3

Source: Hexagon Transportation Consultants, Inc., 2018. Transportation Impact Analysis (contained in Appendix C).
Intersections analyzed according to the Highway Capacity Manual (HCM) methodology. Reported delay for signalized intersections represents average control delay for the entire intersection; reported delay for unsignalized intersections represents intersection average delay (top value) and average delay for the worst-performing approach (bottom value).
For oversaturated LOS F conditions, delay value is not meaningful or reflective of actual conditions and has not been reported.
***Bold** indicates conditions in excess of the acceptable LOS standard (for signalized intersections only) established by the City. The City has not established formal LOS significance criteria for unsignalized intersections.*

As shown in Table 4.16-1, all signalized study intersections currently operate (under existing conditions) or would operate (under background conditions) at the City of Fremont's acceptable LOS standard of LOS E or better during the weekday AM peak hour, even with the proposed project or variant. Under cumulative conditions with and without the proposed project or variant, the Paseo Padre Parkway/Peralta Boulevard intersection would operate at LOS F during the weekday AM peak hour, which is considered unacceptable by City standards. However, neither the proposed project nor the variant would cause the intersection average delay to increase by more than four seconds. Therefore, the proposed project or variant would not contribute to a significant impact at this intersection (refer to Appendix C). It should also be noted that LOS at the Fremont Boulevard/Thornton Avenue intersection during the weekday AM peak

hour would improve under cumulative conditions relative to existing and background conditions due to planned improvements that would offset future increases in vehicle traffic.

Among unsignalized intersections, the westbound Parish Avenue approach at the Fremont Boulevard/Parish Avenue intersection currently operates at LOS F during the weekday AM peak hour and would continue to do so under background and cumulative conditions, with or without the proposed project or variant. The City considers that a project would have a significant impact if project traffic would contribute at least five percent of the total traffic, and if the intersection would meet the peak-hour signal warrant. Applying these significance criteria to the project, the Fremont Boulevard/Parish Avenue intersection would meet the MUTCD peak hour volume signal warrant during the weekday AM peak hour with the proposed project or variant under existing, background, and cumulative conditions, but neither the proposed project nor the variant would contribute more than five percent of the total peak hour traffic[27] at this intersection. Although the impact at this intersection would therefore be less than significant, the TIA (Appendix C) recommends installation of a traffic signal at this intersection, as described in further detail below under "Site Access." The applicant has agreed to a condition of approval to install the signal as recommended in the TIA for safety considerations, for both the proposed project and variant (see Section 2.5, "Access and Circulation"). Separately, the Parish Avenue/Peralta Boulevard intersection would operate at LOS E during the weekday AM peak hour under existing conditions with the proposed project (but not with the variant) and under background conditions with the proposed project or the variant. However, the impact at this intersection would be less than significant because the intersection would not meet the peak-hour signal warrant under any of these three scenarios.

The proposed project or variant would also be subject to the City of Fremont's traffic impact fee, which would be directed towards funding various intersection and roadway improvements identified in the General Plan and would further reduce any potential effects of the project on the circulation system (City of Fremont, 2018).

Site Access:

As described in Section 2.5, "Access and Circulation," and illustrated in Figure 2-4, proposed site access would primarily be provided by a main driveway along Fremont Boulevard and a secondary driveway along Parish Avenue, the latter of which would continue through the site as the primary internal roadway running parallel to Fremont Boulevard behind (north of) the proposed mixed-use buildings. This internal roadway would intersect the main driveway and provide access to the below-grade garage and outdoor surface parking spaces serving Building A and Building B. Several smaller internal roadways would intersect the primary internal roadway, providing direct access to the townhomes in the interior of the project site and continuing through to Jason Way, which would be extended through the site (with full public access) to intersect Peralta Boulevard. A separate gated access for waste collection would be provided at the northwest corner of the site along Peralta Boulevard.

The proposed project and variant include the following measures to improve site access and circulation, which were recommended by the TIA prepared for the project (Appendix C):

- Installation of a traffic signal at Fremont Boulevard/Parish Avenue, with appropriate signal interconnects and coordination with the existing traffic signals along Fremont Boulevard at Peralta Boulevard and Central Avenue and pedestrian treatments such as high-visibility crosswalk striping.
- Restriction of the main driveway along Fremont Boulevard to right-in, right-out access only (including installation of a median island to channel traffic) and implementation of design treatments such as

[27] Under existing conditions without the project, there are approximately 1,944 vehicles passing through the Fremont Boulevard/Parish Avenue intersection during the weekday AM peak hour. The proposed project would result in a net increase of 83 vehicle movements through the intersection, resulting in a total of approximately 2,027 vehicles and a project contribution of approximately 4.1 percent under existing conditions with the proposed project. Similarly, the variant would result in a net increase of 76 vehicle movements through the intersection, resulting in a total of approximately 2,020 vehicles and a project contribution of approximately 3.8 percent under existing conditions with the variant. Under background and cumulative conditions, project contributions for the proposed project and the variant would be lower because traffic volumes without the project would be higher under those scenarios than under existing conditions without the project.

corner bulb-outs, high-visibility crosswalk striping, a median pedestrian refuge, and/or a flashing beacon/signal.

- Prohibition of parking along the south side of Peralta Boulevard 240 feet west and 60 feet east of the new intersection with Jason Way, with appropriate landscape design and maintenance to provide adequate sight distance.

The City of Fremont Department of Public Works would review site access for consistency with applicable policies and standards, including the City's Standard Details for Improvements in Public Right of Way (City of Fremont, 2014).

Conclusion

Overall, the proposed project and variant would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, nor with an applicable congestion management program. The operational impacts of the proposed project and variant would, therefore, be **less than significant,** and these impacts will not be further addressed in the EIR.

16c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Construction and Operation – Proposed Project or Variant: **No Impact**

There are no airports within the City of Fremont. The closest airports by approximate distance from the project site are Hayward Executive Airport (8.8 miles), Moffett Federal Airfield (9.3 miles), and San Jose International Airport (13 miles). The project does not include any features that would affect air traffic patterns or otherwise affect air traffic operations or safety. Therefore, construction or operation of the project would have **no impact** on air traffic patterns**,** and this impact will not be further addressed in the EIR.

16d) Would the project substantially increase hazards due to a design feature or incompatible uses?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

Construction of the proposed project or variant would not substantially increase hazards from design features or incompatible uses. Construction activities are temporary in nature and common throughout the City, and therefore do not represent an incompatible use. The construction site layout and design are not yet known, therefore it is unknown if design features would substantially increase traffic hazards. Impacts could be **potentially significant**. However, the development and implementation of the construction traffic management plan required by Mitigation Measure TRA-1 (detailed in Impacts 16a and 16b, above), would reduce potential safety impacts of construction site design by requiring use of traffic control measures such as warning signs or flag persons, detours, lane closures, or other measures as needed, to maintain traffic safety during construction.

With implementation of Mitigation Measures TRA-1, the impact would be **less than significant with mitigation**, and will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The proposed project and variant would consist of mixed-use development of residential, retail, and service uses, and would be consistent with existing uses in the surrounding area and the designated Town Center Pedestrian (TC-P) zoning district for the site. Therefore, the proposed project and variant would not result in incompatible uses or activities that could create traffic safety hazards as discussed in detail below.

Road Hazards

In terms of design features, City General Plan Policy 3-3.6 (Road Hazards) calls for minimizing road hazards associated with overgrown vegetation, structures blocking sight lines, and other visual obstructions, and requires that new development be reviewed to ensure that ingress and egress locations, driveways, crosswalks, and other circulation features are sited to reduce accident hazards. As

described under Impacts 16a) and 16b), the proposed project and variant include several features that would reduce such potential hazards, including a new traffic signal, on-street parking restrictions, landscape design and maintenance, and pedestrian treatments such as high-visibility crosswalk striping. The City of Fremont Department of Public Works would review site access and roadway improvements for consistency with applicable policies and standards, including the City's Standard Details for Improvements in Public Right of Way (City of Fremont, 2014).

Grade Crossing:

There is an existing grade crossing at Centerville Station, where the Union Pacific Railroad Centerville/Niles Cutoff railroad intersects Fremont Boulevard approximately 300 feet northwest of the project site. The crossing is equipped with typical safety and warning devices, including crossbuck signage, flashing red lights (including an overhead mast structure), audible bells, and automatic dual crossing gates. Train movements at the crossing can result in substantial vehicle queues along Fremont Boulevard and connecting streets, particularly during periods with high vehicle activity, such as the weekday AM and PM peak periods. During the weekday PM peak period, for example, queues in the northbound direction may extend past the project site and as far as Centerville Junior High School (over 2,000 feet upstream of the crossing) and further to a distance of one half-mile. As detailed in Appendix C, the proposed project would result in a net increase of approximately 27 vehicle-trips heading northbound along Fremont Boulevard at the grade crossing during the weekday AM peak hour (the increase during the weekday PM peak hour would be on the order of less than five vehicle-trips and would, therefore, be negligible). This level of added traffic is the equivalent of a vehicle every two minutes on average. In comparison, the existing traffic volume along northbound Fremont Boulevard at the crossing is approximately 700 vehicles and is expected to increase to over 1,000 vehicles under future cumulative conditions in 2035. Given these considerations and the existing safety and warning devices present at the crossing, the proposed project and variant would have a negligible effect on safety conditions at the grade crossing.

Neighborhood Traffic:

Although the City of Fremont has not established significance criteria related to speeding or cut-through traffic on local neighborhood streets, the TIA for the project considered potential project effects with respect to neighborhood traffic. Existing traffic levels along Parish Avenue east of Jason Way (total across both directions) are on the order of 400 vehicles during the weekday AM peak hour and 260 vehicles during the weekday PM peak hour, with the proposed project resulting in a net increase of approximately 13 vehicles and five vehicles (the approximate equivalent of a vehicle every five minutes and every 12 minutes), respectively. The variant would result in a similar increase, within one to two vehicles during each peak hour of the expected increase under the proposed project. The installation of a traffic signal at the intersection with Fremont Boulevard may also attract additional ambient traffic, resulting in an overall increase of anywhere from zero to 50 vehicles during each of the weekday AM and PM peak hours. As detailed in Appendix C, a potential speed table at the Jason Way/Parish Avenue intersection (as illustrated in Figure 2-4) and/or other traffic calming measures (such as speed humps west of Jason Way), in combination with traffic calming devices proposed east of Jason Way as part of other nearby development projects, would likely reduce speeds on Parish Avenue and potentially discourage cut-through traffic.

Conclusion

Given these considerations, impacts associated with increased hazards due to a design feature or incompatible uses would be **less than significant,** and these impacts will not be further addressed in the EIR.

16e) Would the project result in inadequate emergency access?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

Heavy vehicle traffic, such as haul trucks or flatbed trailers carrying equipment or materials, would be expected to use specified truck routes with adequate capacity and accommodations to handle such vehicles. As described under Impacts 16a) and 16b), construction trucks would be expected to use major

arterial roadways and freeways when traveling to and from the site. Construction is expected to last approximately 18 months.

Ongoing construction activities could result in temporary lane closures along the frontages of the project site (Fremont Boulevard, Parish Avenue, Peralta Boulevard, and Jason Way), increased construction truck traffic, and other effects on roadways in the vicinity of the project site. While these effects could impede emergency access and result in a potentially significant impact, Mitigation Measure TRA-1, described above under Impacts 16a) and 16b), would require preparation and implementation of a construction traffic management plan that would provide for adequate emergency access to the project site and surrounding area during construction activities. Implementation of Mitigation Measure TRA-1 would reduce the significant impact of the proposed project or variant associated with inadequate emergency access during construction to **less than significant with mitigation incorporated.** This impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The proposed project and variant would be reviewed by the Fremont Fire Department and Fremont Police Department prior to approval to confirm that the project would have adequate ingress and egress, incorporate requisite design features (setbacks, clearances, turning radii, etc.), and not impede emergency access. The City of Fremont Department of Public Works would review site access and roadway improvements for consistency with the City of Fremont Standard Details for Improvements in Public Right of Way (2014), which would ensure adequate emergency access to the project site.

As described under Impacts 16a) and 16b), the estimated net travel demand generated by the proposed project or variant would be similar to existing conditions and are not expected to result in substantial amounts of new vehicle traffic that could conflict with or impede emergency vehicle access. Furthermore, the proposed project and variant would not substantively alter the existing street network (aside from the extension of Jason Way to Peralta Boulevard), and emergency access to the site and surrounding area would generally be similar to existing conditions. Therefore, operational impacts on emergency access would be **less than significant,** and these impacts will not be further addressed in the EIR.

16f) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Construction – Proposed Project or Variant: **Less than Significant with Mitigation**

The City's Pedestrian Master Plan includes goals to increase pedestrian trips (as a percentage of all trips) and to reduce annual reported collisions between pedestrians and motor vehicles (City of Fremont, 2016). Similarly, the City's Bicycle Master Plan includes goals to prioritize bicycle safety, maintain zero fatalities, and continue to reduce severe injuries. As discussed above in relation to Impacts 16a and 16b, construction activities could result in temporary lane closures, increased construction truck traffic, and other effects on roadways in the vicinity of the project site and could result in temporary disruptions to transit, bicycle, and pedestrian circulation along these streets, which could discourage the use of these routes by cyclists and pedestrians, or provide increased potential for collisions.

While this impact would be potentially significant, Mitigation Measure TRA-1, described above under Impacts 16a) and 16b), would require preparation and implementation of a construction traffic management plan, including identification of haul routes that would minimize impacts on transit, bicycle, and pedestrian circulation and safety, and implementation of comprehensive traffic control measures. Implementation of Mitigation Measure TRA-1 would reduce the impacts of construction-related traffic from the proposed project or variant on transit, bicycle and pedestrian facilities, and therefore reduce the conflict with policies and plans supporting alternative transportation, to **less than significant with mitigation incorporated**. This impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The proposed project and variant would generate bicycle and pedestrian activity on surrounding streets and transit ridership on nearby transit services, but are unlikely to result in substantial crowding that would affect the performance or safety of bicycle and pedestrian facilities or exceed the available capacity

on transit vehicles, as existing bicycle and pedestrian facilities in the vicinity of the project site generally operate at free-flow conditions, with available capacity to handle additional bicyclists and pedestrians. Likewise, existing transit services in the vicinity of the project site generally have available capacity to accommodate additional riders.

In addition, the net increase in vehicle traffic associated with the proposed project and variant, as described in "Project Travel Demand" under Impacts 16a) and 16b), would not present a barrier to bicycle or pedestrian circulation or substantially affect transit operations. In particular, this vehicle traffic would be spread across multiple access points along all four frontages of the project site (Fremont Boulevard, Parish Avenue, Peralta Boulevard, and Jason Way), such that the magnitude of potential conflicts at any one location would be minimized. The proposed project and variant would also dedicate right-of-way along the north side of Parish Avenue adjacent to the project site to allow for sidewalk widening; extend Jason Way through the project site to Peralta Boulevard as a through-street with sidewalks, improving bicycle and pedestrian access and connectivity; and consolidate the number of driveways along Fremont Boulevard—a key transit, bicycle, and pedestrian route—from five existing driveways to a single proposed driveway, reducing potential conflict points.

For the existing northbound far-side bus stop along Fremont Boulevard at Parish Avenue, AC Transit also requested that the project install a bench and bike rack and provide an unimpeded ADA-accessible path to/from the stop. These features would improve pedestrian access to/from the stop, provide amenities for waiting passengers, and facilitate bicycle travel to/from the project site and surrounding area. The TIA for the project (Appendix C) recommends that the applicant coordinate with the City of Fremont and AC Transit staff on the desirability of these suggested improvements.

As described under "Setting," there are no specific planned transit improvements in the immediate vicinity of the project site. While the City of Fremont Draft Bicycle Master Plan identifies future bikeway improvements along Fremont Boulevard and Peralta Boulevard adjacent to the project site, the proposed project and variant would not preclude these improvements. Curb cut and driveway consolidation as described above would be consistent with the overall goals of providing Class IV (separated) bikeways along these streets by reducing potential conflict points and increasing bicyclist safety and comfort.

As described under Impacts 16a) and 16b), the proposed project and variant include several features that would reduce potential effects on the performance and safety of transit, bicycle, and pedestrian facilities, including a new traffic signal, on-street parking restrictions, landscape design and maintenance, and pedestrian treatments such as high-visibility crosswalk striping. The City of Fremont Department of Public Works would review site access and roadway improvements for consistency with applicable policies and standards such as the City's Standard Details for Improvements in Public Right of Way (City of Fremont, 2014), which include design standards for street geometrics such as travel lane width and sidewalk width. As described under the discussion of Impacts 16d, General Plan Policy 3-3.6 (Road Hazards) calls for minimizing road hazards and requires that new development be reviewed to ensure that circulation features are sited to minimize accident hazards, including hazards for bicyclists and pedestrians.

Overall, given the project's estimated travel demand and the other considerations described above, the project would not include design features or uses or substantially increase traffic activity, transit ridership, bicycle activity, or pedestrian activity such that it could conflict with the performance or safety of existing or planned transit, bicycle, or pedestrian facilities. Therefore, this operational impact of the proposed project or variant would be **less than significant,** and this impact will not be further addressed in the EIR.

References:

Alameda-Contra Costa Transit District (AC Transit), 2015 (December 8). *Short Range Transit Plan: Fiscal Years 2014/15 through 2023/24*. Available online: http://www.actransit.org/wp-content/uploads/SRTP-2016_Jan_Final.pdf.

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Alameda County Transportation Commission (ACTC), 2017 (December). *Congestion Management Program*. Available online: https://www.alamedactc.org/files/managed/Document/22576/2017_Alameda_County_CMP.pdf.

City of Fremont, 2011. *City of Fremont General Plan* (Adopted December 2011). Available online: https://fremont.gov/398/General-Plan.

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_____, 2017 (October). *City of Fremont Draft Bicycle Master Plan*. Prepared by Fehr & Peers. Available online: https://www.fremont.gov/DocumentCenter/View/36860.

_____, 2018. *Fee Schedule (With Developer Deposit Schedule); Master Resolution No. 8672 (Fees as amended through January 1, 2018)*. Available online: https://fremont.gov/DocumentCenter/View/25240.

4.17 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17.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 size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: (i). Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or (ii). A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Setting:

Section 4.5, “Cultural Resources” contains a more detailed description of the environmental setting for the project site, relating to cultural and tribal resources. Pertinent details relating to tribal cultural resources are repeated below.

Context:

The following brief context statement is derived from a cultural resources review prepared for the Centerville Redevelopment Plan Environmental Impact Report (Basin Research Associates, Inc., 1997) unless otherwise cited.

There are no known indigenous settlements within or adjacent to the project area, although the project site’s general setting near seasonal and perennial watercourses, the marshlands of the Bay, and the nearby hills would have been a favorable location. CA-ALA-21, a prehistoric village/mound site, is the nearest recorded archaeological site, approximately 0.25 mile to the southwest. This site was noted on J.D. Whitney’s 1873 “Map of the Region Adjacent to the Bay of San Francisco” and recorded in 1950 based on the map (William Self Associates, 1997).

Ethnographic literature indicates that the project site is near the territorial border of the Alson and Tuibun tribes, who occupied the Fremont Plain of southwest Alameda County. Although precise territorial boundaries are not known, the Alson may have controlled the area along the Bay shoreline from near today’s Highway 84 south to Scott Creek, while the Tuibun were located just to the north (Milliken, 1995). The Alson and Tuibun tribes spoke a dialect of Ohlone, one of the five mutually unintelligible language families that existed in the San Francisco Bay Area that also included Bay Miwok, Plains Miwok, Patwin, and Wappo (Milliken, 1995).

Sacred Lands File Search:

On March 5, 2018, AECOM requested a Sacred Lands File (SLF) search and Native American contact list for the project site from the Native American Heritage Commission (NAHC). On March 27, 2018 (in a letter dated March 21, 2018), the NAHC responded that the SLF search was "negative… [h]owever, the absence of site specific information in the SLF does not preclude the presence of cultural resources in any project area."

Discussion:

17a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource?

Construction – Proposed Project or Variant: **Less-Than-Significant Impact**

As discussed in Section 4.5, "Cultural Resources", above, no tribal cultural resources that are listed or eligible for listing in the CRHR or local register of historical resources were identified during background research at the NWIC or NAHC or during the archaeological field survey. However, records maintained by the NWIC and NAHC are not exhaustive and negative results do not preclude the presence of tribal cultural resources at the project site. The project would be required to implement the City of Fremont's standard development requirements (codified in FMC Section 18.218.050), which include the City's notification of Native American tribes that might have knowledge of tribal cultural resources within the project site:

> ***Notification, Affiliated California Native American Tribes.*** *Prior to preparation of an environmental assessment and within 14 days of determining that an application for a project is complete, the City shall provide formal notification to the designated contact or a tribal representative of traditionally and culturally affiliated California Native American tribes that have requested to receive such notice from the city. The written notification shall include a brief description of the proposed project and its location, project contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to AB 52.*

Notice of the proposed project was sent to the local California Native American Tribes named on the Native American Contacts list for Alameda County provided by the NAHC on October 24, 2017, to allow early consultation (City of Fremont, 2017). No requests for such consultation were received by the City and no tribal cultural resources have been identified on the proposed site. Thus, construction of the proposed project or variant would have a **less-than-significant impact** on tribal resources and these impacts will not be further addressed in the EIR.

In addition, it is noted that implementation of Mitigation Measure CUL-1, requiring an archaeological monitoring plan to be developed and implemented during construction as detailed in Section 4.5, "Cultural Resources," would further reduce the potential for these already less-than-significant impacts.

Operation – Proposed Project or Variant: **No Impact**

Operation of the proposed project or variant, once constructed, would not require disturbance of additional areas outside of the construction footprint. As such, operation of the proposed project or variant would have **no impact** in relation to tribal resources and will not be further addressed in the EIR.

References:

Basin Research Associates, Inc., 1997. Cultural Resources Review. Centerville Redevelopment Plan Environmental Impact Report, City of Fremont, Alameda County, California. Prepared for David J. Powers & Associates, San Jose, California. Prepared by Basin Research Associates, Inc., San Leandro, California. Study (S-21145) on file at the NWIC, Sonoma State University, Rohnert Park, California.

City of Fremont (City), 2017. Re: Assembly Bill 52 Consultation for SiliconSage Centerville Mixed-Use Project 37358-37494 Fremont Blvd. and 3768-3820 Peralta Blvd., Fremont, CA 94536 (City of Fremont Planning Application No. PLN2017-00229). Sent to: Indian Canyon Mutsun Band of

Costanoans, Torres Martinez Desert Cahuilla Indians, North Valley Yokuts Tribe, Amah/Mutsun Tribal Band, Costanoan Rumsen Carmel Tribe, The Ohlone Indian Tribe, Muwekma Ohlone Indian Tribe of the SF Bay Area, and Ione Band of Miwok Indians. October 24, 2017.

Milliken, Randall, 1995. A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769-1810. Ballena Press, Menlo Park, California.

William Self Associates, Inc. 1997. Cultural Resources Assessment Report: Alameda County Water District Pipeline and Desalination Plant Project, Fremont, Alameda County, California. Report (S-20036) on file at the NWIC, Sonoma State University, Rohnert Park.

4.18 Utilities and Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18.a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
18.b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
18.c. Require or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
18.d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
18.e. Result in 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?	☐	☐	☒	☐
18.f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
18.g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting:

Wastewater

The Union Sanitary District (USD) operates Alvarado Treatment Plant, and provides wastewater collection, treatment and disposal services to over 347,000 people in Fremont, Newark and Union City. The Alvarado Treatment Plant has a capacity of 33 million gallons per day (mgd), and in 2015 treated an average of 21.85 mgd (USD, 2016a). The treatment plant provides both primary and secondary treatment. The District maintains over 800 miles of sewer lines and has 110,151 connections for residential units and 1,771 commercial connections (USD, 2016b). There are a total of seven pump stations in USD's service area. Most of Fremont's wastewater goes to the Irvington Pump Station first, and is then conveyed to the Alvarado Treatment Plant (USD, 2016a).

Water Supply and Treatment

ACWD provides water supply services to the project site through existing water infrastructure. ACWD serves a population of approximately 351,000 people over 104.8 square miles in Fremont, Newark and Union City (ACWD, 2018). ACWD has developed an Integrated Resource Plan to manage water supply and ensure that current and future demands are met. The Plan analyzes long-term water needs of the Tri-City area (Fremont, Newark, Union City) and identifies the most efficient ways to meet them. Through water saving strategies, demand has dropped by more than 25 percent from 1995, despite continued growth. ACWD set a target of reducing demand by 2.9 million gallons per day by 2025, by implementing a number of conservation programs (ACWD, 2014).

The State of California's Urban Water Management Planning Act, Water Code Sections 10610 through 10656, requires that every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually to prepare and adopt an urban

water management plan (UWMP) (ACWD, 2016). ACWD developed its UWMP 2015-2020 in 2016, which includes growth projections for the Tri-City up to the year 2040, based on current City plans (general and specific) as well as forecast development included in ABAG regional projections. Table 4.18-1 shows ACWD's estimated future water demands by land use category.

Table 4.18-1 Estimated Future Water Demands for Alameda County Water District

Land Use Category	Estimated Future Water Demands (AF/yr)		
	Year 2020	Year 2030	Year 2040
Single Family Residential	22,700	22,900	22,600
Multi-Family Residential	10,700	11,700	12,200
Commercial	7,100	8,000	8,800
Industrial	4,400	5,300	5,500
Institutional	4,400	5,400	5,400
Other	300	300	300
Total Distribution System Demand (without losses)	**49,600**	**53,500**	**54,700**

Source: adapted from Alameda County Water District 2015.

Approximately 50 percent of the water production is obtained from Niles Cone Groundwater Basin and 50 percent from Del Valle Reservoir (ACWD, 2014). Approximately 70 percent of the water produced is for residential use and 16 percent for business use. In 2016-2017 the average daily production was 34.8 mgd and the maximum day production was 527.4 million gallons. Water treatment is provided by the ACWD Water Treatment Plant Number Two (WTP2). The sustainable production rate at WTP2 is 26 mgd (ACWD, 2018).

Storm Drainage

The Alameda County Flood Control and Water Conservation District (ACFCWCD) provides flood protection to the project site and surrounding areas via planning, designing, constructing and maintaining flood control projects, including natural creeks, channels, levees, pump stations, dams and reservoirs to Alameda County residents and businesses (ACFCWCD, 2017a). The project site is located in the neighborhood Zone 5, which includes pump stations Station J2, Station J3, Quail Run; 6 miles of concrete channels; 33 miles of earth channels; and 34 miles of natural creeks (ACFCWCD, 2017b). The City of Fremont manages the municipal stormwater system.

The existing stormwater system contains curb gutters along Fremont Boulevard, Peralta Avenue, Jason Way and Parish Avenue and underground stormdrain inlets at the southwest, southeast, and northwest corners of the project site.

Solid Waste

Republic Services provides recycling and solid waste pickup services to the project site and surrounding areas. Waste is delivered to the Fremont Recycling and Transfer Station facility located at 41149 Boyce Road, where waste is sorted and recyclable materials are recovered. Waste is transferred to Altamont Landfill at 10840 Altamont Pass Road in Livermore. The Altamont Landfill has a maximum permitted capacity of more than 124 million cubic yards, and a maximum permitted throughput of 11,150 tons per day (tpd) (CalRecycle, 2017). The landfill is anticipated to have disposal capacity through 2045 at current disposal rates because of municipal programs to recover and divert waste in landfill.

The Alameda County Waste Management Authority, now known as Stopwaste.org, is responsible for developing and implementing a Countywide Integrated Waste Management Plan. This plan includes a Source Reduction and Recycling Element, a Nondisposal Facility Element and a Household Hazardous Waste Element (City of Fremont, 2011). According to data supplied by the Alameda County Waste Management Authority, the 2011 diversion rate for Fremont is 73 percent. This rate is above the diversion

rate required by AB 939, which mandates jurisdictions to divert 50 percent of their landfill waste. The Fremont Recycling and Transfer Station facility has diverted more than 250,000 tons of recyclable materials since 2006, at the time of its opening. Alameda County is planning to establish a countywide composting facility, which would further improve Fremont's diversion rate (City of Fremont, 2011).

Discussion:

18a, 18e) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? 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?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Construction of the proposed project or variant would not generate significant volumes of wastewater that would exceed the capacity of the wastewater treatment provider or exceed applicable treatment requirements. Anticipated groundwater levels at the project site are below the proposed maximum depth of construction; therefore, construction dewatering is not anticipated. Water quality impacts of construction are addressed further in Section 4.9, "Hydrology and Water Quality." Construction impacts from the proposed project or variant relating to wastewater would therefore be **less than significant**, and this impact will not be further addressed in the EIR.

Operation – Proposed Project: **Less-than-Significant Impact**

Operation of the proposed project would generate wastewater from toilets, sinks, washing machines, dishwashers, and leaks associated with the 136 proposed residential units. Additional, wastewater would be generated from toilets, sinks, dish washer(s) and leaks from the restaurant and other retail businesses within the mixed use buildings. New sanitary sewer lines serving the proposed buildings would connect to the existing sanitary sewer infrastructure to accommodate the project's wastewater generation. Per capita rates for wastewater generation are typically around 100 gallons per day;[28] therefore, the proposed residential uses under the proposed project[29] would generate approximately 42,300 gallons per day of wastewater, which is approximately 0.13 percent of the Alvarado Treatment Plant's existing capacity. The density of the proposed project is consistent with the City's General Plan designation and zoning for the site. The proposed project would include approximately 25,000 SF of retail uses, which is substantially less than the existing 51,000 SF of retail uses currently at the project site, therefore commercial wastewater generation would be expected to decrease compared to the existing wastewater flows from the project site. Wastewater generation from the proposed project would therefore not be expected to result in a determination by the Union Sanitation District that it has inadequate capacity to serve the project.

Additionally, wastewater generated by the proposed project would be typical of residential and commercial developments in the area and would not require special treatment or otherwise exceed wastewater treatment requirements of the San Francisco Bay RWQCB.

Operational impacts of the proposed project related to wastewater would be **less than significant**, and these impacts will not be further addressed in the EIR.

Operation – Variant: **Less-than-Significant Impact**

Operation of the variant would generate wastewater from the 162 proposed residential units and from the 26,000 SF of proposed retail businesses. Due to the slightly greater area of retail space and greater number of residential units under the variant, the amount of wastewater generated would be slightly more

[28] Based on a per capita wastewater generation rate of 100 gallons per day per capita, which is the highest average daily wastewater flow recorded for the years 1998 and 2007 at the San Jose/Santa Clara Water Pollution Control Plant, the closest wastewater facility for which per capita generation rates were available (City of San Jose, 2009).

[29] Based on the DOF's 2017 estimate of 3.11 persons per dwelling unit and 136 proposed dwelling units, the proposed project is estimated to accommodate 423 new residents at buildout.

than for the proposed project. Residential wastewater generation from the variant would be approximately 50,400 gallons per day,[30] or approximately 0.15 percent of the Alvarado Treatment Plant's capacity. The density of the variant would be consistent with the City's General Plan designation and zoning for the site. Commercial wastewater generation would be expected to decrease compared to existing conditions, due to a substantial reduction in commercial floor space. Wastewater generation from the variant would therefore not exceed the capacity of existing wastewater infrastructure and treatment facilities.

Wastewater generated by the variant would be typical of residential and commercial developments in the area and would not require special treatment or otherwise exceed wastewater treatment requirements of the San Francisco Bay RWQCB.

For these reasons, operational impacts of the variant related to wastewater would be **less than significant**, and these impacts will not be further addressed in the EIR.

18b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

As discussed under Impacts 17a) and 17f) above in relation to wastewater, and under Impact 17d) below for water, construction of the proposed project or variant would not generate substantial volumes of wastewater, or generate substantial demand for water supplies. Anticipated groundwater levels at the project site are below the proposed maximum depth of construction; therefore, construction dewatering is not anticipated. Water demands during construction (for dust control, concrete mixing, etc.) would be short term, and would be met by existing service connections to municipal suppliers or would be imported by truck.

Therefore, expansion of existing or construction of new water or wastewater treatment facilities to serve construction of the proposed project or variant would not be required. Construction impacts would therefore be **less than significant**, and this impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

As discussed under Impacts 17a) and 17f) above in relation to wastewater, and under Impact 17d) below for water, operation of the proposed project or variant would not generate substantial volumes of wastewater, or generate substantial demand for water supplies.

For both the proposed project and variant, retail wastewater generation is anticipated to decrease compared to existing conditions, and residential wastewater generation would be less than 0.15 percent of the available treatment capacity of the Alvarado Treatment Plant. Similarly, for both the proposed project and variant, retail water demand is anticipated to decrease compared to existing conditions, and residential water demand would be less than 0.2 percent of the sustainable production rate of ACWD's water treatment plant.

Therefore, expansion of existing or construction of new water or wastewater treatment facilities to serve operation of the proposed project or variant would not be required. Operational impacts would therefore be **less than significant**, and this impact will not be further addressed in the EIR.

[30] Based on the DOF's 2017 estimate of 3.11 persons per dwelling unit and 162 proposed dwelling units, the proposed project is estimated to accommodate 504 new residents at buildout. Wastewater generation rate of 100 gallons per day per capita, as described in footnote 18.

18c) Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

The proposed project and variant would construct new stormwater drainage facilities, including bioretention basins, inlet filters, and pervious pavement. Physical impacts associated with construction of stormwater facilities are evaluated throughout this Initial Study in sections such as Section 4.3, "Air Quality," Section 4.5, "Cultural Resources," Section 4.8, "Hazards and Hazardous Materials," Section 4.9, "Hydrology and Water Quality," and other sections, which specifically analyze the potential impacts of project construction. Mitigation measures are identified for potentially significant impacts throughout this Initial Study so that those construction impacts of the proposed project or variant would be reduced to **less than significant,** and these impacts will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

As discussed in Section 4.9, "Hydrology and Water Quality," the proposed storm drainage system for the proposed project and variant are similar, and would increase stormwater infiltration on site through the use of bioretention basins and pervious pavement. Because the proposed project or variant would create and/or replace more than 10,000 square feet of impervious surface area, stormwater drainage control features in accordance with the National Pollution Discharge Elimination System (NPDES) C.3 requirements of the Municipal Regional Permit (MRP) and the Alameda County Clean Water Program (California Water Boards, 2009) would be required.

Stormwater from the proposed project or variant would be infiltrated on site and/or be conveyed to bioretention planters and stormwater filtration units before being discharged to the municipal drainage system. New subdrains, roof drain downspouts, and pervious pavers would be constructed to provide stormwater control, on-site infiltration and reduced the magnitude of peak runoff from the site.

Implementation of the drainage controls required by the MRP and Alameda County Clean Water Program would reduce the magnitude of, and change the timing of, peak runoff from the site. Although the project site would continue to contribute flows to the existing Alameda County flood control channel southwest of I-880, the total volume of stormwater would be reduced and the peak flow would be delayed. As such, the proposed project or variant would not contribute substantial amounts of additional runoff to the municipal storm drain system that would necessitate the construction or expansion of storm drainage facilities. Therefore, the impacts of the proposed project or variant would be **less than significant**, and these impacts will not be further addressed in the EIR.

Impacts associated with changes in existing drainage patterns, increased stormwater runoff that could exceed the capacity of stormwater drainage systems, and other water quality effects are addressed in Section 4.9, "Hydrology and Water Quality."

18d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Construction of the proposed project or variant would not generate significant demand for new water supplies. Water demands during construction (for dust control, concrete mixing, etc.) would be met by existing service connections to municipal suppliers or water would be imported by truck by the construction contractors. Construction demands for water supplies would be short term and small compared to the existing water supply demands within AWCD. Consequently, construction of the proposed project or variant would not substantially affect water supplies or result in new or expanded water supply entitlements. The impact would be **less than significant**, and will not be addressed further in the EIR.

Operation – Proposed Project: **Less-than-Significant Impact**

The proposed project would utilize water for landscaping, commercial, and residential purposes. As identified in the City's General Plan EIR, in order to minimize additional demands on potable water supplies, new development would be required to install the latest technology in water efficient plumbing fixtures, irrigation systems, and landscaping according to the California Green Building Code (CALGreen). The landscaping of the proposed project would be required to comply with the Water Efficient Landscape Ordinance (State ordinance enforced through the building permit plan review process).

Demand for water from commercial uses would be expected to decrease compared to existing conditions, due to the substantial reduction in retail floor space proposed by the project (25,000 SF) compared to current conditions (approximately 52,000 SF).

Residential water demand would be estimated at approximately 42,300 gallons per day or 15.4 million gallons per year[31]. This equates to approximately 47.4 acre-feet per year, or less than 0.15 percent of the ACWD's total estimated residential demand in 2020. Similarly, the estimated residential water demand for the proposed project would be approximately 0.12 percent of ACWD's average daily production. In addition, the residential density of the proposed project is consistent with the City's General Plan, and future land use envisioned by the General Plan has been incorporated into the UWMP water demand projections.

The UWMP predicts that under normal year water supply conditions, ACWD will have sufficient supplies to meet projected future water demands, but could face shortages during severe or prolonged drought conditions. It is anticipated that ACWD water conservation programs, in combination with the City's water conservation efforts, would ensure adequate water supply to meet projected future demands. Additionally, ACWD has a water supply shortage contingency plan that would address a water supply shortage of up to 50 percent (ACWD, 2016). Sufficient water supplies are therefore available to serve the proposed project from existing entitlements, and no new or expanded entitlements would be required to accommodate the proposed project's water supply demand. Therefore, the impact of the proposed project would be **less than significant** and this impact will not be further addressed in the EIR.

Operation – Variant: **Less-than-Significant Impact**

Similar to the proposed project, the variant would utilize water for landscaping, commercial, and residential purposes, and would be subject to the same requirements for water efficiency. Residential water use for the variant would be approximately 50,400 gallons per day[32] or 18.4 million gallons per year (56.5 acre-feet per year). This equates to less than 0.17 percent of the estimated residential demand in 2020 and less than 0.15 percent of ACWD's average daily production. The density of the variant is consistent with the General Plan's designation, and water projections for the ACWD include planned development envisioned by the General Plan. Sufficient water supplies are therefore available to serve the variant from existing entitlements, and no new or expanded entitlements would be required to accommodate the variant's water supply demand. Therefore, the impact of the variant would be **less than significant** and this impact will not be further addressed in the EIR.

18f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

During construction, solid waste such as asphalt, concrete, scrap wood, scrap metal, brick, mortar, sheet rock, packaging, and rubble would be generated from the demolition of existing on-site structures and unused construction materials used to build the new townhomes, mixed use buildings, and community

[31] Calculation is based on a projected project population of 423 residents and 100 gallons per day per capita water use (water use rates adjusted from ACWD, 2016. Urban Water Management Plan 2015-2016).
[32] Calculation is based on a projected project population of 504 residents and 100 gallons per day per capita water use (water use rates adjusted from ACWD, 2016. Urban Water Management Plan 2015-2016).

facilities. The USEPA has calculated average debris generation rates for residential and non-residential construction and demolition activities, as summarized in Table 4.18-2 below.

Table 4.18-2 Average Debris Generation Rates for Construction and Demolition

	Average Debris Generation Rates (pounds per square foot)	
	Construction	**Demolition**
Residential	4.38	111 (for single family homes)
Non-Residential	3.89	155

Adapted from USEPA 1998. Characterization of Building-Related Construction and Demolition Debris in the United States.

Based on these average rates and the proposed type and size of structures to be demolished and constructed under the proposed project or variant, the total amount of debris generated during construction would be on the order of approximately 5,000 tons, the majority of which would be generated during the demolition phase (approximately two months). Averaged over the 2-month demolition period, daily generation of solid waste from project would equate to less than 0.75 percent of the Altamont Landfill's permitted daily capacity.

Construction of the proposed project or variant would be required to comply with the City's Construction and Demolition Debris Recycling Ordinance (No. 11-2008, Section 2, 9-2-08). The Ordinance requires 100 percent of asphalt and concrete and 50 percent of all remaining debris to be reused or recycled (City of Fremont, 2010). A Waste Handling Plan must be approved before permits are issued and work commences. Additionally, a Debris Diversion and Disposal report must be submitted within 30 days of completion and receipts to show that recycling requirements were met. As such, the total amount of construction-related debris requiring landfill disposal would be substantially less than the estimate provided above, and would therefore be well within the capacity of the Altamont Landfill. With adherence to the City's Construction and Demolition Debris Recycling Ordinance, impacts during construction on landfill capacity would be **less than significant**, and this impact will not be further addressed in the EIR.

Operation – Proposed Project: **Less-than-Significant Impact**

According to CalRecycle, the solid waste generation rate for the City of Fremont is 4.2 pounds/capita/day (Cal Recycle, 2015). The proposed project's anticipated population of 423 residents would therefore be expected to generate approximately 1,777 pounds per day of solid waste. The solid waste generation rate for typical retail stores is estimated at 4.7 lb/employee/day, whereas restaurants are estimated at 12.1 lb/employee/day (Cascadia Consulting Group, 2006). As discussed in Section 4.13, "Population and Housing," the proposed project is estimated to create approximately 71 jobs. Retail generation of solid waste could therefore vary from approximately 334 to 859 pounds per day, depending on the mix of retail and restaurant uses. The total estimated amount of solid waste generation by the proposed project would therefore be approximately 2,100 to 2,600 pounds per day or approximately 1.05 to 1.32 tons per day, which is less than 0.012 percent of Altamont landfill's daily maximum permitted throughput. Therefore, the landfill would be able to accommodate waste generated by the proposed project, and operational impacts related to landfill capacity would be **less than significant.** This impact will not be further addressed in the EIR.

Operation – Variant: **Less-than-Significant Impact**

Operation of the project would increase the amount of solid waste being produced and disposed in Altamont Landfill. Using the same generation rates as for the proposed project, discussed above, and the proposed residential and employee population under the variant,[33] the total estimated amount of solid waste generation by the variant would be approximately 2,400 to 2,900 pounds per day, or 1.21 to 1.46 tons per day, which is less than 0.014 percent of the landfill's daily maximum permitted throughput.

[33] The variant would have approximately 504 residents and 65 employees, as discussed in Section 4.13, "Population and Housing."

Therefore, the landfill would be able to accommodate waste generated by the variant, and operational impacts related to landfill capacity would be **less than significant**. This impact will not be further addressed in the EIR.

18g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Construction – Proposed Project or Variant: **Less-than-Significant Impact**

Construction of the proposed project or variant would not conflict with or interfere with the City's ability to implement its adopted solid waste management programs and policies. As discussed above under impact 17f), construction of the project or variant would comply with the City's Construction and Demolition Debris Recycling Ordinance (No. 11-2008, Section 2, 9-2-08) requiring 100 percent of asphalt and concrete and 50 percent of all remaining debris to be reused or recycled (City of Fremont, 2010), approval of a Waste Handling Plan, and submission of a Debris Diversion and Disposal report within 30 days of completion. Impacts of construction would be **less than significant**, and this impact will not be further addressed in the EIR.

Operation – Proposed Project or Variant: **Less-than-Significant Impact**

The proposed project or variant would not conflict with or interfere with the City's ability to implement its adopted solid waste management programs and policies, including Alameda County's Measure D. Waste collection services for the proposed project or variant would be provided weekly by Republic Services and would be subject to existing requirements regarding recycling and waste disposal. Since waste disposal in Fremont complies with federal, State and local requirements, the proposed project or variant would not violate any federal, State or local regulations related to solid waste. Thus, the impact would be **less than significant**, and this impact will not be further addressed in the EIR.

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4.19 Mandatory Findings of Significance

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
19.a. Does the project have the potential to 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, 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?	☒	☐	☐	☐
19.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 pas projects, the effects of other current projects, and the effects of probably future projects)?	☒	☐	☐	☐
19.c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion:

19a) Does the project have the potential to 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, 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?

Construction and Operation – Proposed Project or Variant: **Potentially Significant Impact**

Based upon background research, site visits, and the analysis in this Initial Study, the proposed project or variant would not have the potential to 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, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 4.4, "Biological Resources," compliance with standard development regulations codified in the FMC Chapter 18.218 would reduce such impacts on biological resources to a less-than-significant level.

The Initial Study has identified that the proposed project or variant would have **potentially significant** impacts to historical architectural resources, as discussed above in Section 4.5, "Cultural Resources." Impacts to historical architectural resources will be analyzed in the EIR.

19b) 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 pas projects, the effects of other current projects, and the effects of probably future projects)?

Construction and Operation – Proposed Project or Variant: **Potentially Significant Impact**

Cumulative impacts, other than those related to noise and historical architectural resources, would be less than significant, or the proposed project or proposed variant would result in a less than cumulatively considerable contribution to cumulative impacts. These impacts will not be further addressed in the EIR.

However, cumulative impacts related to noise and historical architectural resources would be **potentially significant** and will be analyzed in the EIR.

19c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Construction and Operation – Proposed Project or Variant: **Potentially Significant Impact**

Based upon background research, site visits, and the analysis in this Initial Study, the proposed project or variant would potentially cause substantial impacts on human beings because of the impacts identified with respect to hazardous materials, water quality, and traffic. However, mitigation measures designed to minimize environmental effects for these impacts to a less-than-significant level are listed in the relevant sections of this Initial Study.

The Initial Study has identified that the proposed project or variant would have **potentially significant** impacts related to noise, as discussed above in Section 4.12, “Noise.” Impacts related to noise will be analyzed in the EIR.

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Appendix A-1: Air Quality and Greenhouse Gas Analysis for Proposed Project

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Appendix A-2: Air Quality and Greenhouse Gas Analysis for Variant

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Appendix B-1: Environmental Noise Assessment

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Appendix B-2: Construction and Mechanical Noise Assessment

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Appendix C: Transportation Impact Analysis

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AECOM
100 West San Fernando, Suite 200
San Jose
CA, 95113
USA
aecom.com