Initial Study

Alameda County Fire District (Department), Fire Training Center

Prepared by

COUNTY OF ALAMEDA CALIFORNIA

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

March 2023

COUNTY OF ALAMEDA

Mitigated Negative Declaration

Pursuant to Section 21000 et seq of the Public Resources Code, a Mitigated Negative Declaration is hereby granted for the following project:

1. Project Title:	Alameda County Fire District (Department), Fire Training Center
2. Lead Agency Name and Address:	General Services Agency – Capital Programs County of Alameda 1400 Lakeside Drive, Suite 800 Oakland, CA 94612
3. Contact Person and Phone Number:	Patrick Lam Senior Project Manager General Services Agency – Capital Programs County of Alameda (510) 208-9522 patrick.lam@acgov.org
4. Project Location and APN:	The 5.2-acre project site is located at 5053 Gleason Drive, adjacent to the East County Hall of Justice to the west and the Alameda County Fire Station 17 and California Highway Patrol to the east in the City of Dublin. 986-5-38-16
5. Project Sponsor's Name & Address:	Alameda County Fire Department 6363 Clark Avenue Dublin, CA 94568
6. General Plan Designation:	Planned Development (PD)
7. Zoning:	Planned Development (PD)

8. Description of Project: The project proposes to construct a new fire-training facility across 3.2 acres within an approximately 5.2-acre, County-owned parcel adjacent to the existing Fire Station 17 on Gleason Drive in the Dublin. The new fire-training facility would include an approximately 8,000 square foot (sf) classroom building, an approximately 5,500 sf, five-story training tower with Class A burn rooms, an approximately 304 sf self-contained breathing apparatus (SCBA) building and exterior restroom building, an approximately 576-sf covered utility yard, an approximately 2,856 sf concrete area, 43 public parking spaces, and open site training areas north and east of the training tower. As part of a future phase, the Department intends to construct an approximately 3,000 to 6,000 sf apparatus storage building. A wildland fire training area is also proposed within the larger 5.2-acre site.

FINDING

The County of Alameda Board of Supervisors finds the project described above will not have a significant effect on the environment in that the attached Initial Study identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this draft Mitigated Negative Declaration (MND), has made or agrees to make project revisions that clearly mitigate the effects to a less than significant level.

MITIGATION MEASURES INCLUDED IN THE PROJECT TO REDUCE POTENTIALLY SIGNIFICANT EFFECTS TO A LESS THAN SIGNIFICANT LEVEL

A. AESTHETICS - The project will not have a significant impact on this resource; therefore, no mitigation is required.

B. AGRICULTURE AND FOREST RESOURCES - The project will not have a significant impact on this resource; therefore, no mitigation is required.

C. AIR QUALITY

MM AIR-3.1: The following standard measures reflect BAAQMD best management practices and would be implemented by the project to reduce potential impacts from fugitive dust.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- 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.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 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.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

MM AIR-4.1: Implement a feasible plan to reduce DPM emissions by 35 percent such that increased cancer risk and annual PM2.5 concentrations from construction would be reduced below TAC significance levels as follows:

- All mobile construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for PM (PM10 and PM2.5), if feasible, otherwise,
    - If use of Tier 4 equipment is not available for mobile construction equipment, alternatively use equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 35 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination),
    - Use of electrical or non-diesel fueled equipment.

Alternatively, the County may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 35 percent or

greater. Elements of the plan could include a combination of some of the following measures:

- Implementation of No. 1 above to use Tier 4 for mobile equipment or alternatively fueled equipment,
- Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
- Use of electrically-powered equipment,
- Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,
- Change in construction build-out plans to lengthen phases, and
- Implementation of different building techniques that result in less diesel equipment usage.

Such a construction operations plan shall be subject to review by an air quality expert and approved by the County prior to construction.

D. BIOLOGICAL RESOURCES

MM BIO-1.1: Prior to the issuance of any demolition, grading, tree removal or building permits (whichever occurs first), the County shall confirm the initial site disturbance (demolition and/or construction activities) is scheduled to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1 through August 31 (inclusive).

MM BIO-1.2: If tree removal, demolition and construction cannot be scheduled between September 1 and January 31 (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1 through April 30 inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1 through August 31 inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.

MM BIO-1.3: If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist shall determine the extent of a construction free buffer zone to be established around the nest to ensure that bird nests shall not be disturbed during project construction.

MM BIO-1.4: Prior to any tree removal, or approval of any grading or demolition permits (whichever occurs first), the ornithologist shall submit a report indicating the

results of the survey and any designated buffer zones to the County General Services Agency.

MM BIO-1.5: Preconstruction Burrowing Owl Survey. Preconstruction surveys shall be conducted for burrowing owl within 30 days of project-related ground disturbing activities throughout the year to determine whether any nesting owls are present and to provide for their protection during the active breeding season or passive relocation during the non-breeding season if nests are encountered. The surveys shall be conducted by a qualified biologist and shall comply with Burrowing Owl Protocol and Mitigation Guidelines. If burrowing owls are found on site, the Mitigation Guidelines generally require the creation of other suitable habitat for burrowing owls nearby, relocating any burrowing owls that are found on site and filling all onsite burrows once they have been vacated.

If avoidance is not feasible, mitigation shall be developed in consultation with the CDFW and shall meet with the approval of the County General Services Agency prior to any construction or grading. The results of the preconstruction survey and any required mitigation monitoring shall be submitted to the CDFW and County General Services Agency.

MM BIO-1.6: Focused Botanical Surveys. Prior to construction, a focused botanical survey will be conducted by a qualified plant biologist to ascertain the presence or absence of Congdon's tarplant on the project site during the initial blooming period (June).

MM BIO-1.7: Prior Congdon's Tarplant Mitigation Program. A detailed off-site mitigation program shall be prepared to address the potential loss of Congdon's tarplant on the site in the event that the focused surveys determine that the project site supports the species. The program shall be prepared by a qualified botanist or plant ecologist, and shall at minimum provide for seed collection and reseeding, and creating replacement habitat at secure locations. The program shall include identification of appropriate areas(s), including shallow depressions designed with a suitable hydrologic regime for Congdon's tarplant to be sown with seed collected from the site. Seed shall be collected from the site in early fall prior to initiation of construction activities. This seed collection and re-establishment may be combined with other mitigation plans for the vicinity, such as the mitigation being developed for impacts associated with the Dublin Transit Center. Any mitigation plan shall include monitoring for a minimum of five years to determine success of reseeding and habitat creation.

MM BIO-3.1: Prior to construction, a qualified biologist shall conduct a site assessment during the Spring to determine whether the prior conditions documented in the ECHJ EIR still exist. In the event that wetlands are present on the project site, mitigation measure MM BIO-3.2 shall be implemented.

MM BIO-3.2 Wetland Delineation and Possible Replacement. The preliminary wetland delineation shall be submitted to the Army Corps of Engineers for verification, if this site is selected for the project. If the identified wetlands and detention basin to be filled are not considered jurisdictional then no additional mitigation is considered necessary. If the Corps and/or Regional Water Quality Control Board determine these features are jurisdictional and must be filled, then a mitigation program shall be prepared by a qualified wetland specialist, and shall at minimum provide for no net loss of wetlands. This mitigation program will be required to provide for the creation of replacement habitat with an increase in acreage and value at a secure location to meet the "no net loss" standard. Any mitigation program shall include monitoring and management for a minimum of five years to ensure success of wetlands creation; specify success criteria, maintenance, monitoring requirements, and contingency measures; and define site preparation and revegetation procedures, along with an implementation schedule, and funding sources to ensure long-term management. If required, the detailed mitigation program shall be prepared in consultation with the Corps and/or Regional Water Quality Control Board and meet with the approval of the County General Services Agency prior to any construction on the site.

E. CULTURAL RESOURCES

MM CUL-2.1: Pursuant to CEQA Guidelines 15064.5 (f), if potentially significant cultural resources are discovered during ground-disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with Alameda County, and other appropriate agencies and interested parties. A qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and locational information to the California Historical Resources Information Center office (Northwest Information Center). The consulting archaeologist shall also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (Public Resources Code Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that the find does not meet the CEQA standards of significance, construction shall proceed. In the event the archaeologist determines that further information is needed to evaluate significance, the County General Service Agency shall be notified and a data recovery plan shall be prepared.

MM CUL-3.1: If human remains are encountered, the County shall halt work in the immediate area and contact the Alameda County coroner. The coroner will determine whether the remains are Native American. If the remains are believed to be Native American, the coroner will contact the Native American Heritage Commission (NAHC) which will designate the Most Likely

Descendants (MLD). The MLD will inspect the remains and make a recommendation for the respectful treatment of the remains and related burial goods.

F. ENERGY - The project will not have a significant impact on this resource; therefore, no mitigation is required.

G. GEOLOGY AND SOILS

MM GEO-6.1: Should a unique paleontological resource be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet would cease and the County General Services Agency notified immediately. A qualified paleontologist would be retained to evaluate the find and prescribe action measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while action for paleontological resources is implemented. Upon completion of the paleontological assessment, a report would be prepared and submitted to the County and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology would also be submitted to the County.

H. GREENHOUSE GAS EMISSIONS - The project will not have a significant impact on this resource; therefore, no mitigation is required.

I. HAZARDS AND HAZARDOUS MATERIALS

MM HAZ-2.1: Prior to issuance of demolition or grading permits, Alameda County shall notify their grading and excavation contractor(s) of the potential presence of contaminants below the native ground surface and shall prepare and implement a Soil Handling/Management Plan (SHMP). The SHMP shall address worker notification, dust control, and include a contingency plan for unexpected conditions. Effective implementation of an SMP would reduce the potential impact associated with exposure to soil contaminants to a level of less than significant.

J. HYDROLOGY AND WATER QUALITY - The project will not have a significant impact on this resource; therefore, no mitigation is required.

K. LAND USE AND PLANNING - The project will not have a significant impact on this resource; therefore, no mitigation is required.

L. MINERAL RESOURCES - The project will not have a significant impact on this resource; therefore, no mitigation is required.

M. NOISE

MM NOI-1.1: A Construction Noise Management Plan shall be prepared by the construction contractor and implemented prior to the start of and throughout construction to reduce noise impacts on the nearby CHP building and fire station. The plan shall establish the procedures the contractor shall take to reasonably minimize construction noise at the nearby existing land uses. The plan shall include, but not be limited to, the following measures to reduce construction noise levels as low as practical:

- Construct a temporary noise barrier along the east boundary of the site to reduce noise levels at the California Highway Patrol and Fire Station 17. An eight-foot plywood noise barrier could reduce noise levels by at least 5 dBA.
- Construction equipment shall be well-maintained and used judiciously to be as quiet as practical;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Utilize “quiet” models of air compressors and other stationary noise sources where technology exists;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, away from noise-sensitive receptors;
- Locate staging areas and construction material areas away from noise-sensitive receptors;
- Prohibit all unnecessary idling of internal combustion engines;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

N. POPULATION AND HOUSING - The project will not have a significant impact on this resource; therefore, no mitigation is required.

O. PUBLIC SERVICES - The project will not have a significant impact on this resource; therefore, no mitigation is required.

P. RECREATION - The project will not have a significant impact on this resource; therefore, no mitigation is required.

Q. TRANSPORTATION/TRAFFIC - The project will not have a significant impact on this resource; therefore, no mitigation is required.

R. **TRIBAL CULTURAL RESOURCES -** In the event that an inadvertent discovery of a tribal cultural resource is made, mitigation measures MM CUL-2.1 and MM CUL-3.1 will be implemented, as stated in Section 4.5 Cultural Resources of this Initial Study.

S. **UTILITIES AND SERVICE SYSTEMS** - The project will not have a significant impact on this resource; therefore, no mitigation is required.

T. **WILDFIRE –** The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Accordingly, the project would not result in wildfire impacts.

U. **MANDATORY FINDINGS OF SIGNIFICANCE** – With the implementation of the mitigation measures identified above, the project would not degrade the quality of the environment, substantially affect the biological resources, or eliminate important examples of California history or prehistory. The mitigation measures would also ensure that the project's contribution to cumulative impacts would not be cumulatively considerable, and the project would not cause substantial adverse effects on human beings, either directly or indirectly.

PUBLIC REVIEW PERIOD

Before 5:00 p.m. on **April 10, 2023** any person may:

1. Review the Draft MND as an informational document only; or

2. Submit written comments regarding the information and analysis in the Draft MND. Before the MND is adopted, County staff will prepare written responses to any comments, and revise the Draft MND, if necessary, to reflect any concerns raised during the public review period. All written comments will be included as part of the Final MND.

_____

Date

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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The County of Alameda (County), as the Lead Agency, has prepared this Initial Study for the Alameda County Fire District (Department) Fire Training Center (project) in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the County of Alameda, California.

This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of both the initial and future phase of the proposed project.

1.1 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

Patrick Lam, Senior Project Manager
General Services Agency – Capital Programs
County of Alameda
1400 Lakeside Drive, Suite 800
Oakland, CA 94612
(510) 208-9522
patrick.lam@acgov.org

1.2 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

The County shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the County may proceed with project approval actions.

1.3 NOTICE OF DETERMINATION

If the project is approved, the County will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Alameda County Fire District (Department), Fire Training Center

2.2 LEAD AGENCY CONTACT

Patrick Lam, Senior Project Manager
General Services Agency – Capital Programs
County of Alameda
1400 Lakeside Drive, Suite 800
Oakland, CA 94612
(510) 208-9522
patrick.lam@acgov.org

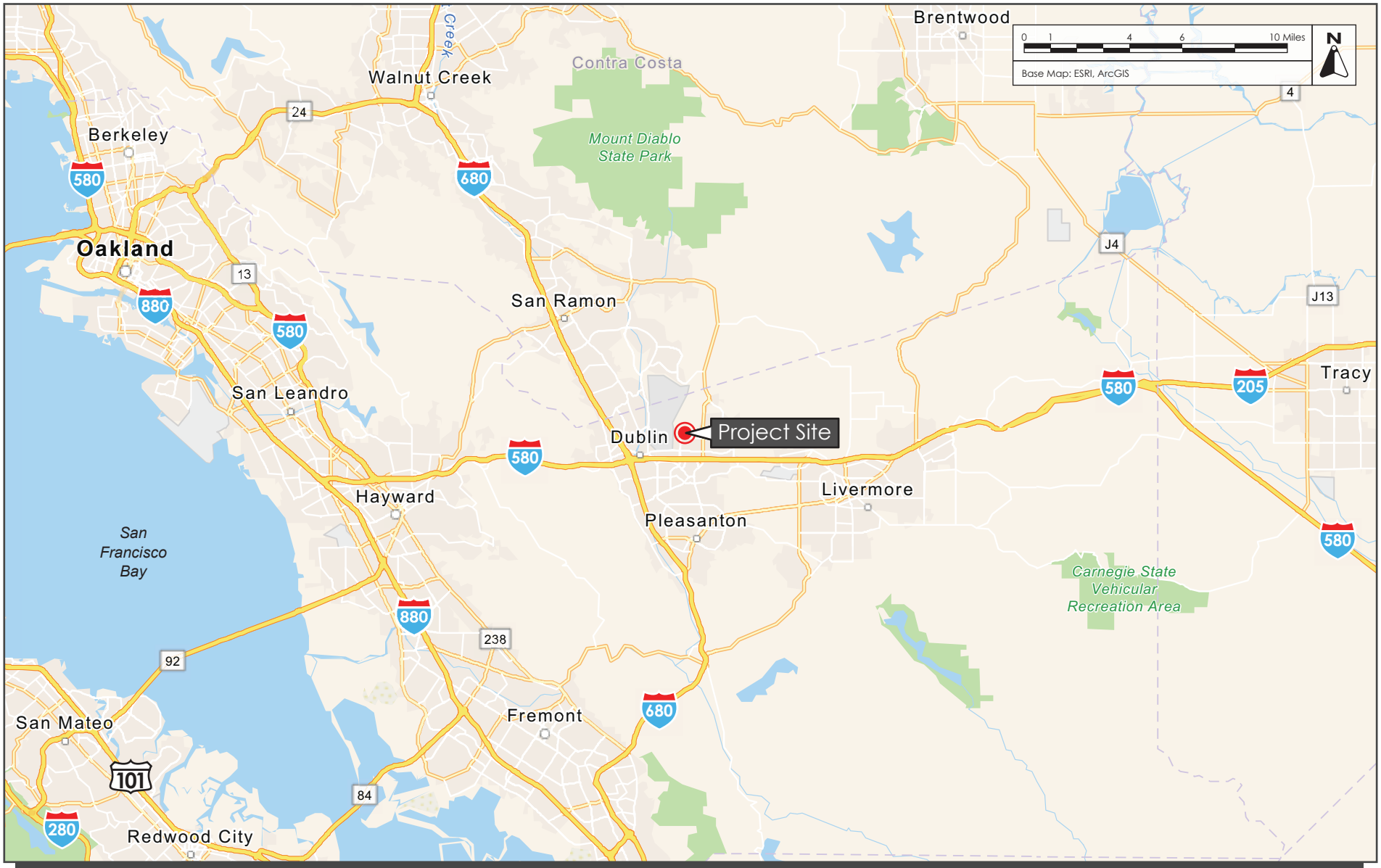
2.3 PROJECT PROPONENT

Alameda County Fire Department
6363 Clark Avenue
Dublin, CA 94568
(510) 632-3473

2.4 PROJECT LOCATION

The 5.2-acre project site is located at 5053 Gleason Drive, adjacent to the East County Hall of Justice to the west and the Alameda County Fire Station 17 and California Highway Patrol to the east in the City of Dublin.

Regional, vicinity, and aerial maps of the project sites are shown on Figure 2.4-1, Figure 2.4-2, and Figure 2.4-3, respectively.



REGIONAL MAP | FIGURE 2.4-1

VICINITY MAP

FIGURE 2.4-2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 2.4-3

2.5 ASSESSOR'S PARCEL NUMBER

986-5-38-16

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

The project site has a Planned Development (PD) General Plan land use designation and zoning (City of Dublin Resolution ("RESO") 105-85). The PD includes approximately 2,700 acres of publicly owned land in the City of Dublin. The project site is intended for governmental uses (RESO. 52-93).

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

Approvals required for this project include but are not limited to:

- County of Alameda Board of Supervisors
- Alameda County Fire Department
- County of Alameda Building Department – Building Permits (if necessary)
- Bay Area Air Quality Control Board - Emergency Generator and Live Fire Burns
- City of Dublin for Site Development Review Approval
- City of Dublin Encroachment and Offsite Improvement Permits

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The Alameda County Fire District (Department), Fire Training Center project (project) proposes to construct a new fire-training facility across 3.2 acres within an approximately 5.2-acre, County-owned parcel adjacent to the existing Fire Station 17 on Gleason Drive in Dublin. Within the proposed 3.2 -acre area proposed for development, the project would construct a new fire-training facility that would include an approximately 8,000 square foot (sf) classroom building, an approximately 576-sf covered utility yard, an approximately 304-sf self-contained breathing apparatus (SCBA) building and exterior restroom building, an approximately 5,500 sf, five-story training tower with Class A burn rooms, associated site located training props[1] including a live fire flash over prop, an approximately 2,856 sf concrete area, 43 public parking spaces and open site training areas north and east of the training tower. As part of a future phase, the Department intends to construct a new fire apparatus storage building ranging in size from 3,000 to 6,000 sf. A wildland fire training area is also proposed within the larger 5.2-acre site (refer to Figure 3.3-1). The new facility would replace the currently outdated and undersized fire training center in San Leandro, California.

3.2 PROJECT LOCATION

The 5.2-acre project site is located at 5053 Gleason Drive, Dublin, CA, adjacent to the East County Hall of Justice (ECHJ) to the west and the Alameda County Fire Station 17 and California Highway Patrol Substation on Madigan Road to the east in Dublin.

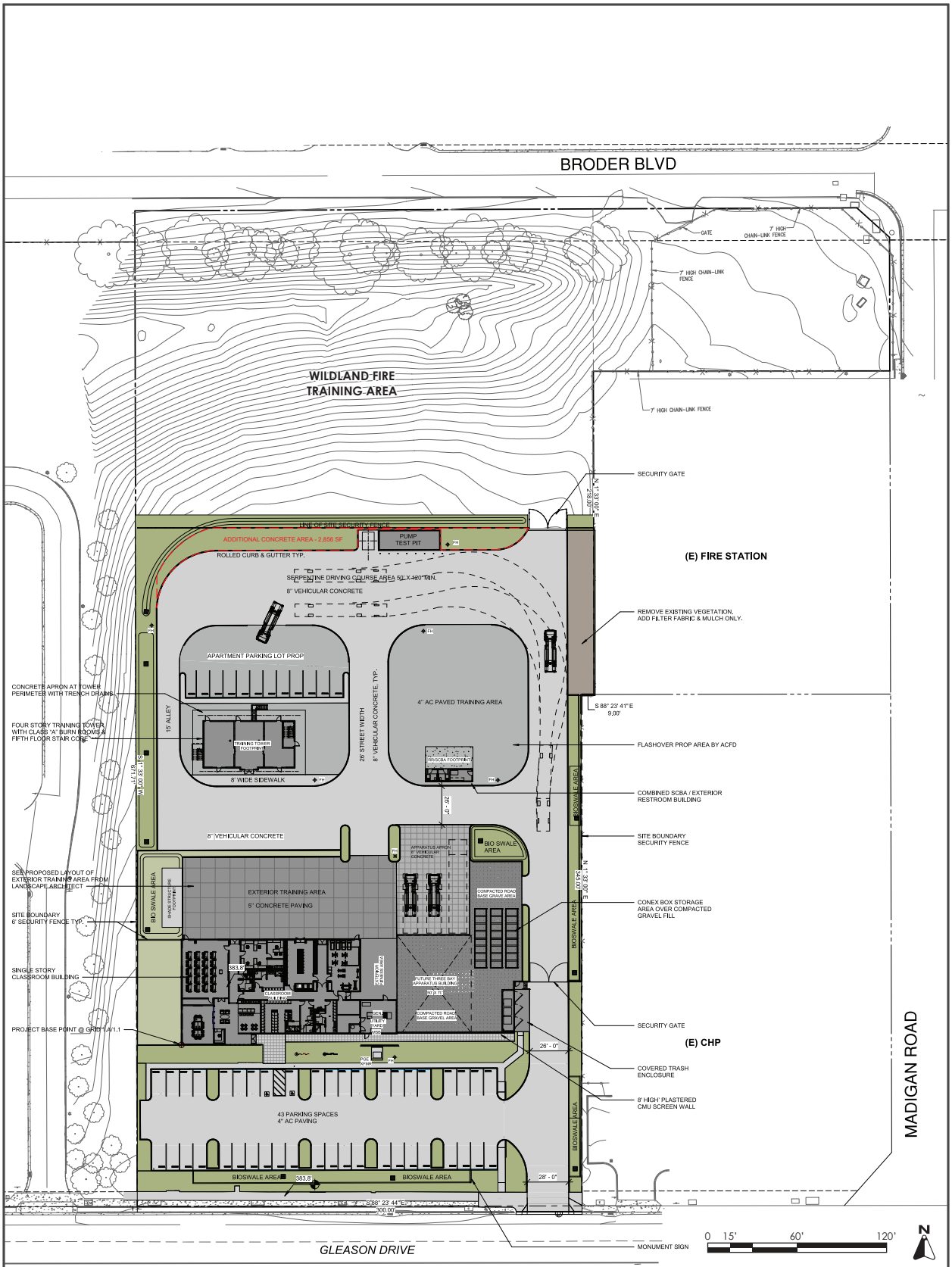
The project site is in an urban area and surrounded by government buildings to the west, north, and east and single-family residences to the south. The project site is proposed within a larger parcel bordered by Gleason Drive to the south, Broder Boulevard to the north and extends to the corner with Madigan Road. The project site is primarily open pervious areas of dirt and compacted gravel, with a line of off-site trees along the western and eastern project site boundaries and several on-site trees near the middle of project site in the compacted gravel area. A large tree lined earthen berm exists along the northern boundary of the larger 5.2-acre site which would not be disturbed.[2]

3.3 PROPOSED DEVELOPMENT

The proposed project involves the construction of a new fire-training facility, which includes a one-story classroom building, a five-level training tower, an accessory building, a covered utility area, parking lot, and landscaped areas (see Figure 3.3-1). The project would include grading and the removal of the existing trees on-site trees and one off-site tree. As part of a future phase, the Department would construct a fire apparatus storage building on the site.

The proposed buildings and project elements are discussed in further detail below.

[1] Training props include forcible entry door prop, low and high pitch roof prop for practicing ventilation techniques, and firefighter survival maze for practicing traversing through areas of limited space with limited visibility.
[2] The berm is not located within the area proposed for project development.



Source: RossDrulisCusenbery Architecture, Inc.; MGE Engineering, Inc., 2022.

CONCEPTUAL SITE PLAN | FIGURE 3.3-1

3.3.1 Classroom Building

The proposed one-story building is approximately 22 feet tall (31 feet to the parapet). The approximately 8,000 sf classroom building would be in the southwestern portion of the project site (see Figure 3.3-2). The building would include classrooms, offices, storage, locker rooms, exercise facilities, restrooms, and a covered break area and outdoor classroom space. A solar photovoltaic (PV) array would be installed on the classroom building roof.

3.3.2 Training Tower

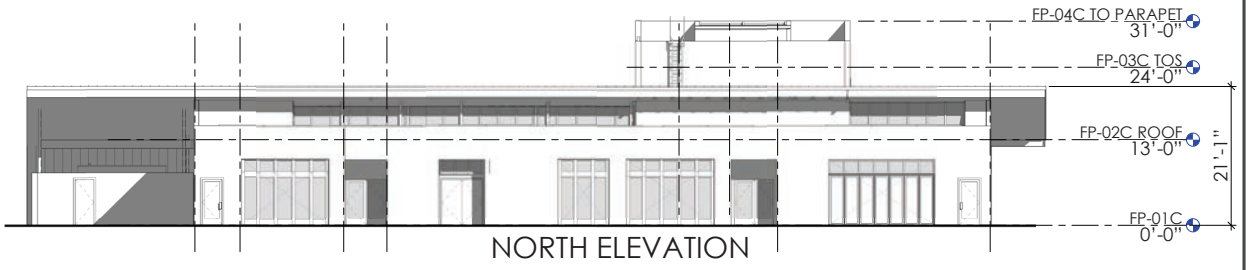
The proposed five-level, 51.5-foot-tall, approximately 5,500 sf training tower with Class A burn rooms would be located in the northwestern portion of the project site (see Figure 3.3-3). The training tower building would facilitate live fire training and include simulation rooms for smoke and burning scenarios and equipment storage. Fuels to be burned would be Class A fuels (i.e., wood, straw, and paper products). The planned use of the training tower, and other training facilities, is discussed below in Section 3.4 Site Operations.

The training tower would be constructed to meet National Fire Protection Association training standards. Training activities would include but not be limited to:

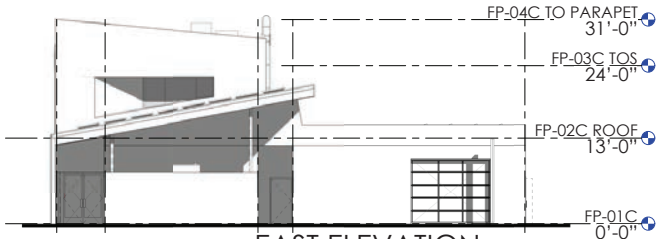
- Physical training
- Ladder drills
- Hose drills
- Fire Apparatus equipment training
- Hydraulics and pump training
- Fire control training
- Roof ventilation training
- High and low roof pitch training
- Confined space training
- High angle rope rescue training
- Flash over live fire training
- Vehicle extrication exercises
- Hazardous materials training
- Trench rescue training
- Collapsed building rescue training
- Ground skills tool training
- Driver operations training

3.3.3 Self-Contained Breathing Apparatus (SCBA) Building and Paved Training Area

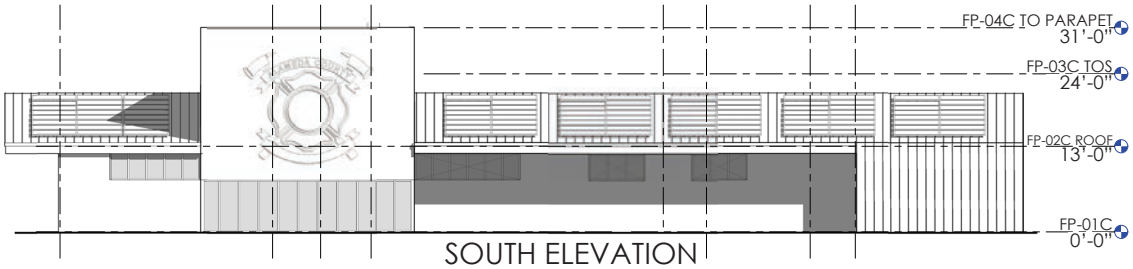
An approximately 304 sf building, and paved training area would be located directly east of the training tower. The building would include a SCBA room and restrooms. No training activities take place in this building.



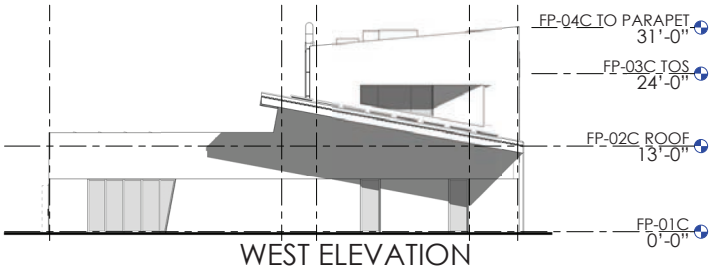
NORTH ELEVATION



EAST ELEVATION



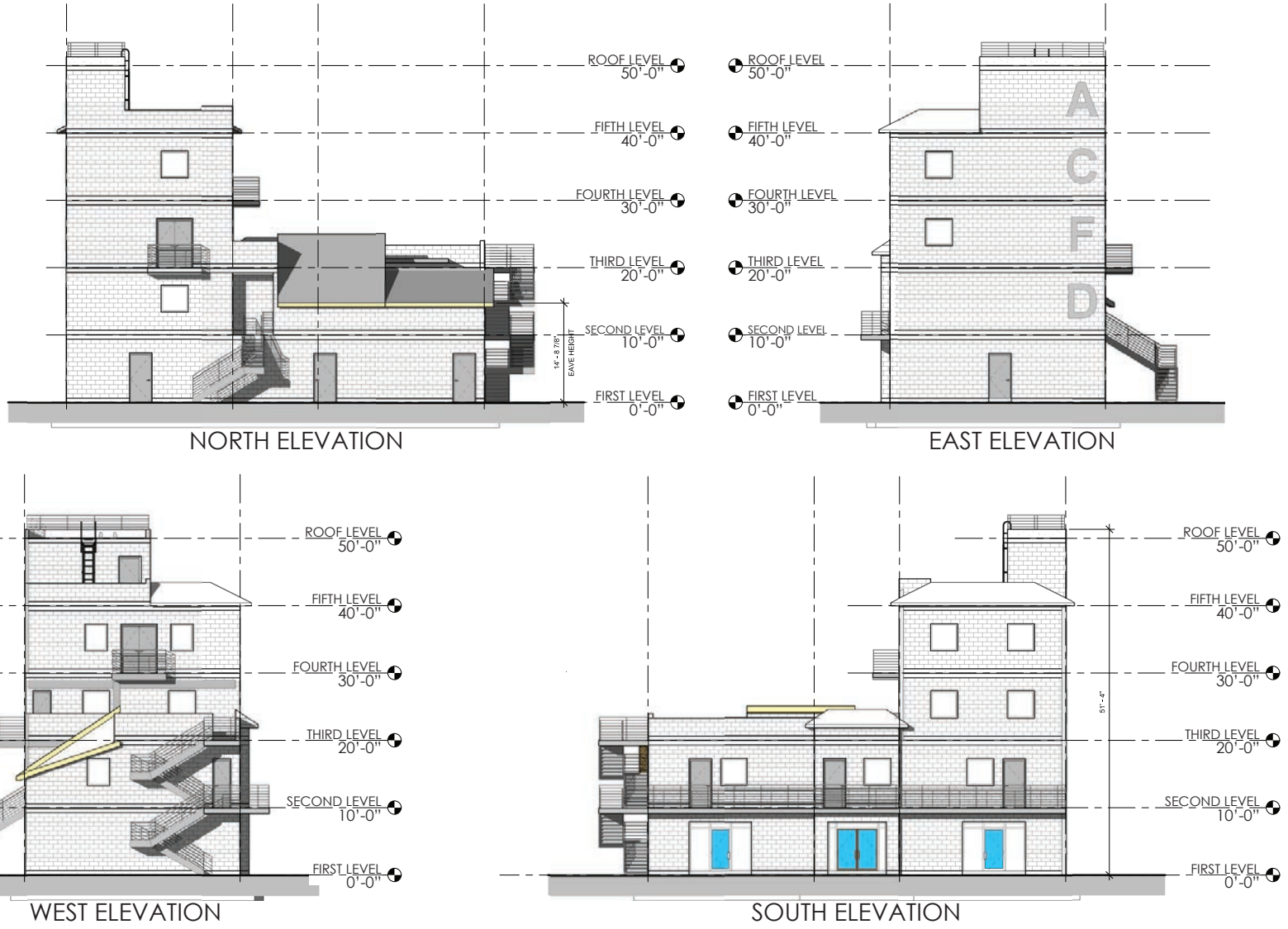
SOUTH ELEVATION



WEST ELEVATION

Source: RossDrulisCusenbery Architecture, Inc., June 6, 2022.

CLASSROOM BUILDING ELEVATION | FIGURE 3.3-2



Source: RossDrulisCusenbery Architecture, Inc., June 6, 2022.

TRAINING TOWER ELEVATION | FIGURE 3.3-3

3.3.4 Wildland Fire Training Area

An approximately two-acre-unimproved area on the northwest portion of the site would be used as a wildland fire training area. The type of activities that occur in this undeveloped area would include progressive hose lay, hand tool use (shovel, axe, Pulaski, McCloud) and fire shelter deployments. Fire shelters protect a firefighter in the event that they are overrun by a wildland fire, shelters would be deployed, and the firefighter would enter it in a last ditch effort to save their life. This type of activity would not include any live fire training. Additionally, no fire apparatus would drive on the northwest portion of the site.

3.3.5 Apparatus Building (Phase 2)

As part of a future phase, the Department would construct a three bay, fire apparatus storage building ranging in size from 3,000 to 6,000 sf on the southeastern portion of the project site adjacent to the classroom building.

3.3.6 Parking, Access, and Circulation

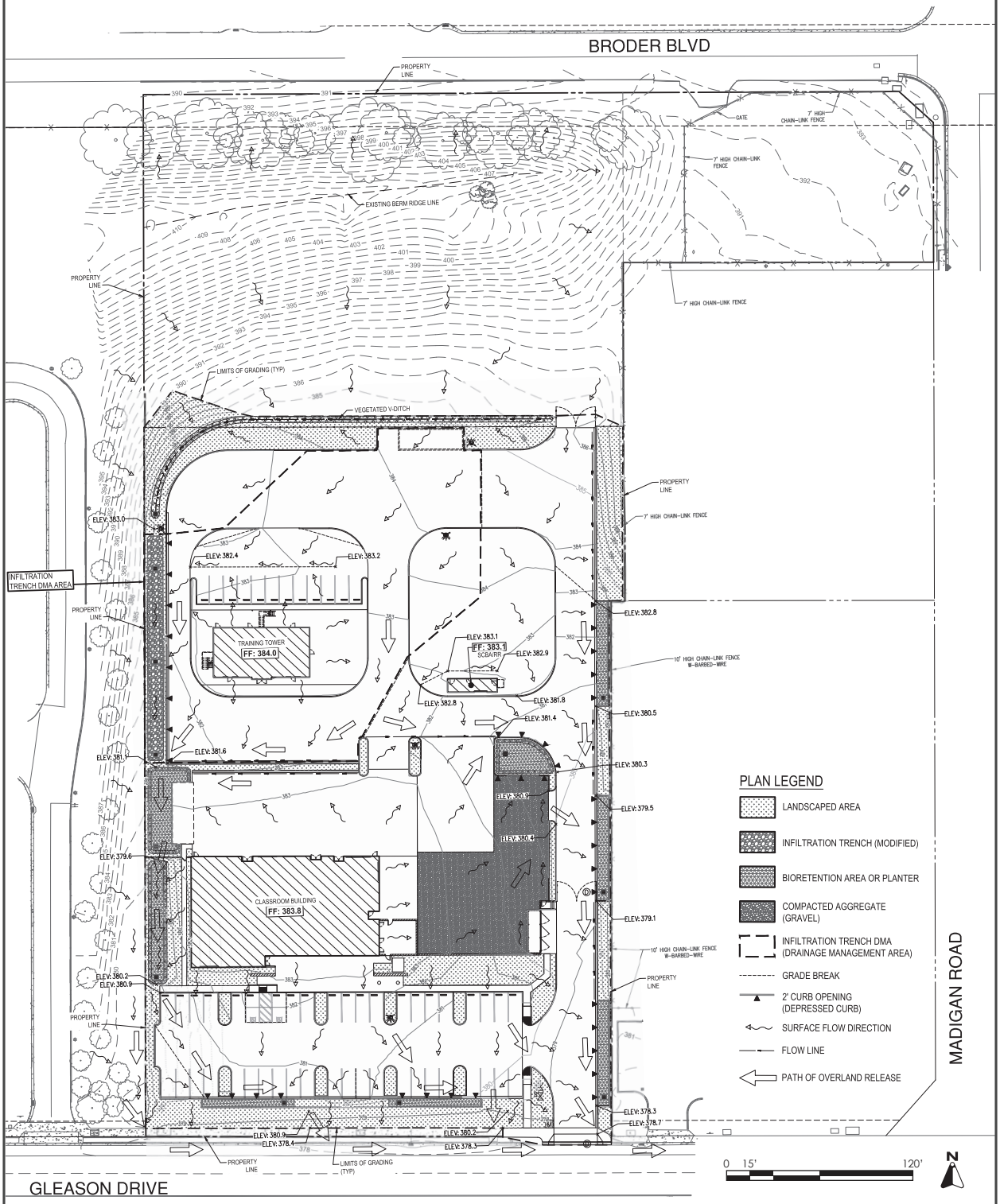
Vehicular access to the project site would be through a new driveway on Gleason Drive and extend along the eastern boundary of the project site to provide access to the proposed on-site buildings. The project would include 43 surface parking spaces in the classroom parking lot near Gleason Drive. A vehicular security gate in the northeast corner of the project site would provide access to the wildland fire training area to the north.

Bicycle access to the project site would be provided via existing bicycle routes located along Gleason Drive. Covered onsite bicycle parking for four bikes for staff and trainees will be provided in the covered utility yard. A four-bike capacity bike rack will be provided for visitors at the classroom building entry plaza.

Pedestrian access to the project site would be provided by a sidewalk located in between the driveway and parking lot from Gleason Drive. A walkway would be provided in front of the Training Building. A small portion of the sidewalk on Gleason Drive would be replaced.

3.3.7 Landscaping and Stormwater Controls

The project would remove the existing five trees near the middle of the site and one off-site tree outside the southwest corner of the site. New landscaped areas would be located throughout the project site. Mulched areas would extend along the project site's northern boundary with an infiltration trench to the west of the training tower. Stormwater treatment planting areas would extend along the eastern and western boundary of the project, around the classroom facility and interspersed in the parking lot**.** New trees would be located around the perimeter of the project site and around the primary parking lot, and to the west of the training building and training area. All new tree, shrub, and groundcover planting materials will be low water use and designed to achieve a fire-resistant landscape. Street trees would be selected from the City of Dublin approved street tree list. The entry plaza would include raised planters with some planters featuring benches with three additional benches attached to the entry plaza walls. A free-standing entry monument sign would be built at the entrance on Gleason Drive. A public art installation would be located in the landscape area parallel to Gleason Drive between the back of sidewalk and the facility parking lot.



Source: RossDrulisCusenbery Architecture, Inc.; MGE Engineering, Inc., June 6, 2022.

STORMWATER MANAGEMENT PLAN | FIGURE 3.3-4

Construction of the initial phase of the project would result in an impervious surface area totaling 104,980 sf, with a remaining 34,650 sf as pervious surfaces dedicated to site landscaping. Following completion of the apparatus building (Phase 2), there would be approximately 112,980 sf of impervious surfaces. Stormwater would be treated via by bioswale retention areas and planters, infiltration trench, compacted gravel, and mulched landscape areas (see Figure 3.3-4). A drainage swale would extend from the north of the project site and extend south to an infiltration trench inside the project's western boundary. The asphalt parking lot would utilize light colored materials to reflect sunlight and reduce the urban heat island effect.

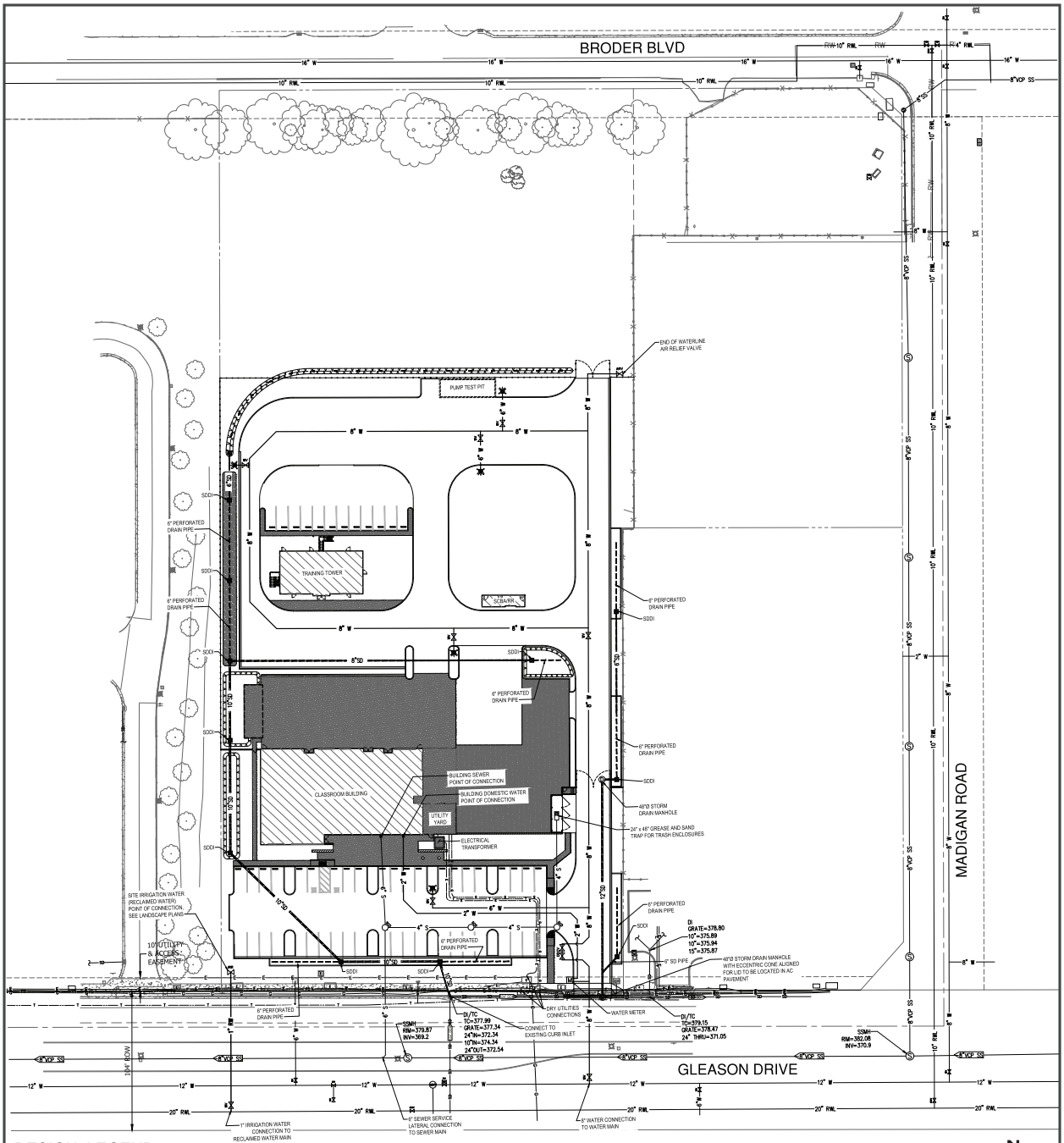
3.3.8 Utility Improvements

Utility services to the proposed project would be provided by the City of Dublin (storm drain), Dublin San Ramon Services District (DSRSD) (water service and sanitary sewer), and Pacific Gas & Electric (PG&E) (electricity) through utility line connections in Gleason Drive (see Figure 3.3-5). The project would install new 10-inch storm drain laterals into existing 24-inch stormwater main, a 6-inch sanitary sewer lateral into a 10-inch sanitary sewer main, a 1-inch irrigation water lateral in a 20-inch recycled water main, and an 8-inch water lateral into a 12-inch water main. Existing utility boxes and vaults would be preserved on Gleason Drive.

Emergency power would be provided by a 30 kilowatt (kW) diesel generator with a 54-gallon diesel sub-base fuel tank located in a General Utility Yard on the southeast corner of the Classroom Building.

3.4 SITE OPERATIONS

Once operational, the proposed fire-training facility would allow the Department to continue to provide superior service to the communities and citizens they serve. The training facility would allow the Department to conduct recruit academies, as well as department and regional training of fire personnel. The fire-training facility would operate year-round, primarily on Tuesdays through Friday. It is anticipated that an average of 18 staff members would be on site each day. The training activities and anticipated number of staff members that would be on site each day are summarized in Table 3.4-1 and described in detail below.



DESIGN LEGEND

0 15' 60' 120'

N

1" RW — RECYCLED WATER / IRRIGATION WATER	DETECTABLE WARNING SURFACE (TRUNCATED DOMES)
6" W — POTABLE WATER	TIRE STOP
4" S — SANITARY SEWER	DROP INLET
10"SD — STORM DRAIN PIPE	STORM DRAIN MANHOLE
PERFORATED DRAIN PIPE	FLOOR DRAIN
E — ELECTRICAL SERVICE	SANITARY SEWER CLEANOUT
T — COMMUNICATION SERVICE	WATER VALVE
G — GAS SERVICE	AIR RELIEF VALVE
RETAINING WALL	IRRIGATION WATER VALVE
NEW FENCE	FIRE HYDRANT
CURB & GUTTER	DOUBLE DETECTOR CHECK VALVE ASSEMBLY
VERTICAL CURB	WATER METER
TOP / TOE — GRADING SLOPE	

Source: RossDrulisCusenbery Architecture, Inc.; MGE Engineering, Inc., June 6, 2022.

UTILITY PLAN | FIGURE 3.4-1

Table 3.4-1: Operational Summary					
	Average Number of Participants		Occurrence (days/year)	Weekly Schedule	Daily Operating Hours
	Trainees	Staff			
Recruit Academy	24	5	84	Tuesday to Friday	7:00 am to 6:00 pm
Special Operations	32	5	3	Tuesday to Friday	9:00 am to 7:00 pm
Task Force Training	0	18	128	Tuesday to Friday	9:00 am to 7:00 pm*
Battalion Training	0	8.5	130	Tuesday to Friday	9:00 am to 7:00 pm
Company Training	0	3	156	Tuesday to Friday	9:00 am to 7:00 pm
Notes: * During odd years, there would be a night drill consisting of 16-20 personnel, 32 times per quarter scheduled from 6:00 pm to 9:00 pm.					

3.4.1 Recruit Academy

The proposed fire-training facility would be used for the Department's Recruit Academy, which consists of a five-month training program for new firefighters. It is anticipated that up to 24 firefighters and five personnel would participate in the academy. The academy would consist of on-site classes related to structures, hazardous materials, wildland fires, rescue operations, physical training, fire control, and driver operations.

Live fire training would occur over a period of five days per recruit academy and up to a total of 24 days per year, for up to six hours each day and would result in the discharge of approximately 500 gallons of water per day.

3.4.2 Special Operations Classes

Special Operations Classes consist of confined space rescue classes, low angle rope and trench classes, and hazard materials classes. Special operations classes would be offered once a year on an alternating schedule for up to three days.[3]

[3] Confined space rescue classes would be offered in odd years; low angle rope and trench classes would be offered in even years; and hazardous materials classes would be offered as needed.

3.4.3 Task Force Training

Task Force Training would include the participation of four to five companies attending quarterly training by subject matter experts with night trainings occurring every other year for up to 128 days per year.

3.4.4 Battalion Based Training

Battalion Based Training would occur two to three times per week and consist of performance evolutions, dual company evolutions, truck performance evolutions[4], and readiness/awareness drills for up to 130 days per year.

3.4.5 Company Level Training

Company Level Training would occur for limited staff several times a week to develop or maintain Firefighter, Engineer, and Company Officer knowledge, skills, and ability, task book, and probationary requirements for up to 156 days per year.

3.5 PROJECT CONSTRUCTION AND SCHEDULE

Construction of the initial phase of the project is estimated to last approximately 17 months.[5] Excavation would occur for soil preparation and building foundations, with the maximum depth of approximately 14 feet below grade. Grading would require approximately 3,780 cubic yards of cut and 3,991 cubic yards of fill, which would balance onsite based on the adjusted earthwork.

The project would be constructed in two phases. Phase one would start in October 2023 and include site clearing and demolition, utility connections (approximately 24 tons of pavement to be removed for utility connection in public right-of-way), building construction of the classroom building, training tower, and landscaping. The proposed apparatus building would be built during the second phase of the project. No specific timeline for this structure has been established by the Alameda County Fire Department.

[4] Performance evolutions are standardized training evolutions that we use to accomplish our tactics and strategies. This involves hose lays, ladder throws and forcible entry skills utilizing one or two engine or truck companies. These evolutions provide an opportunity for firefighters to maintain the skills learned in the fire academy.
[5] This does not include construction of the apparatus building (Phase 2).

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.

In Alameda County, there are four state-designated scenic highways in Alameda County, including the segments of Interstate 580 (I-580) from downtown Oakland to San Leandro Creek and a 0.4-mile segment from the San Joaquin County line to State Route (SR) 205 is a state-designated scenic highway, a segment of I-680 from the Contra Costa County line to SR 238, and a segment of CA 84 from I-680 to SR 238.[6]

Local

County General Plan

The Scenic Route Element of the County General Plan identifies the following as scenic route types: 1) Scenic Freeways and Expressways, 2) Scenic Thoroughfares, and 3) Scenic Rural-Recreation Routes. I-580 is categorized as one of the County's Scenic Freeways and Expressways.

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to aesthetics and are applicable to the project.

East County Area Plan Policies - Aesthetics	
Policies	**Description**
105	The County shall preserve the following major visually-sensitive ridgelines largely in open space use: 1. The ridgelines of Pleasanton, Main, and Sunol Ridges west of Pleasanton; 2. The ridgelines of Schafer, Shell, Skyline, Oak and Divide Ridges west of Dublin and the ridgelines above Doolan Canyon east of Dublin; 3. The ridgelines above Collier Canyon and Vasco Road and the ridgelines surrounding Brushy Peak north of Livermore; 4. The ridgelines above the vineyards south of Livermore;

[6] California Department of Transportation. "California Scenic Highway Mapping System." Accessed July 27, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

East County Area Plan Policies - Aesthetics	
	5. The ridgelines above Happy Valley south of Pleasanton.
110	The County shall require that developments are sited to avoid or, if avoidance is infeasible, to minimize disturbance of large stands of mature, healthy trees and individual healthy trees of notable size and age. Where healthy trees will be removed, the County shall require a tree replacement program which includes a range of tree sizes, including specimen-sized trees, to achieve immediate visual effect while optimizing the long-term success of the replanting effort.
112	The County shall require development to maximize views of the following prominent visual features: 1. The major ridgelines listed in Policy 105; 2. Brushy Peak, Donlan Peak, and Mount Diablo; and 3. Cresta Blanca, near Arroyo Road South of Livermore.
114	The County shall require the use of landscaping in both rural and urban areas to enhance the scenic quality of the area and to screen undesirable views. Choice of plants should be based on compatibility with surrounding vegetation, drought-tolerance, and suitability to site conditions; and in rural areas, habitat value and fire retardance.
115	In all cases appropriate building materials, landscaping and screening shall be required to minimize the visual impact of development. Development shall blend with and be subordinate to the environment and character of the area where located, to be as unobtrusive as possible and not detract from the natural, open space or visual qualities of the area. To the maximum extent practicable, all exterior lighting must be located, designed, and shielded to confine direct rays to the parcel where the lighting is located.
116	To the maximum extent possible, development shall be located and designed to conform with rather than change natural landforms. The alteration of natural topography, vegetation, and other characteristics by grading, excavating, filling or other development activity shall be minimized. To the extent feasible, access roads shall be consolidated and located where they are least visible from public view points.

4.1.1.2 *Existing Conditions*

Project Site

The project site is in central Dublin and is primarily an open field with pervious dirt areas and a compacted gravel area on the southern portion of the project site as shown in Photos 1 and 2. An approximately 20- to 30-foot-tall earthen berm extends along the northern frontage of the project site adjacent to Broder Boulevard. There are sixteen trees distributed on and adjacent to the project's proposed development area. The off-site trees are located eight in a row to the west of the project boundary along an embankment to the ECHJ parking lot driveway and three in a row to the east of the project boundary along the CHP parking lot. There are five on-site trees located in the compacted gravel area near the center of the site including a cluster of four trees near the CHP parking lot. There are additional trees located outside the project's proposed area development along the earthen berm.

Surrounding Area

The project site is in an urban area with a mix of residential and government uses. The project site is bounded by government facilities to the west including a large surface parking lot and the five-story ECHJ as shown in Photo 3, surface parking and the one-story Alameda County Emergency Services to the north, and the Alameda County Fire Station 17 and California Highway Patrol to the east. A mix of one- and two-story single-family residential uses are located to south as shown in Photo 4 across Gleason Drive.

The project area is developed with a mix of land uses and architectural styles. As a result, no single design aesthetic is dominant. Government and residential buildings are primarily of stucco and simple features. The ECHJ includes large, glazed elements.

Scenic Views

Dublin is in the Amador Valley within the Diablo Range which include views of Schafer, Shell, Skyline, Oak and Divide Ridges, south of the Mount Diablo foothills, and west of ridgelines of Doolan Canyon.

The County's General Plan recognizes natural features as important scenic resources including ridgelines identified in Policy 105 and large stands of mature trees and individual healthy trees of notable size. Visually sensitive ridgelines in the area include Doolan Canyon is located approximately three miles to the east and the ridgelines west of Dublin are located approximately four miles to the west.

Views from Gleason Drive are limited based on the flat topography and intervening buildings and trees as shown in Photos 5 and 6. Views of the surrounding scenic ridgelines are limited due to the flat topography of the project site and the intervening development between the ridgelines and the project site. The nearest scenic ridgelines are located more than 1.5 miles away from the project site, which at that distance, are indistinguishable due to intervening development.

Scenic Highways

The nearest state-designated scenic highway is the segment of I-680 from the Contra Costa County line to SR 238, located approximately 2.2 miles to the west, and is not visible from the project site.[7]

Light and Glare

Sources of light and glare in the surrounding area are those typical of developed urban areas, including headlights, streetlights, parking lot lights, security lights, and reflective surfaces such as windows.

[7] California Department of Transportation. "California Scenic Highway Mapping System." Accessed July 27, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Photo 1: View from Gleason Drive looking northeast across the site to the berm (left) and ACFD Station 17 (right).

Photo 2: View from Gleason Drive looking east across the site's southern frontage towards the ACFD Station 17 and California Highway Patrol building.

PHOTOS 1 & 2

Photo 3: View looking west of the project site towards the East County Hall of Justice building and surface parking lot.

Photo 4: View of two-story residential buildings and vegetation across Gleason Drive looking south of the project site.

PHOTOS 3 & 4

Photo 5: View looking east along the project site frontage and down Gleason Drive.

Photo 6: View looking west along the project site frontage and down Gleason Drive.

PHOTOS 5 & 6

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [8] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

The project site is located in an urbanized area of Dublin and is surrounded by residential and government uses. The site is not located within or adjacent to any County designated scenic vistas or corridors. As described in Section 4.1.1.2 Existing Conditions, visually sensitive ridgelines in the vicinity of the project site include Doolan Canyon (located approximately three miles to the east) and the ridgelines west of Dublin (located approximately four miles to the west). Views from these scenic vistas and corridors would not be adversely affected since the proposed development would be virtually indistinguishable due to the distance between these vistas and the project site.

The proposed project would construct buildings up to 51.5 feet high. Due to the site's topography, distance between the site and regional scenic resources, the height and mass of the existing development, and surrounding development and trees, views of the hills and mountains surrounding the valley are heavily obscured. As shown in Photos 5 and 6, no broad views of the visually-sensitive ridgelines of Schafer, Shell, Skyline, Oak and Divide Ridges west of Dublin and the ridgelines above Doolan Canyon east of Dublin of ECP Policy 105 are provided from or near the subject site. The project would increase the size and height of development on-site, however it would not impede views of visually sensitive ridgelines or scenic vistas. **(Less than Significant Impact)**

[8] Public views are those that are experienced from publicly accessible vantage points.

Impact AES-2:	The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(No Impact)**

As discussed in Section 4.1.1.2 Existing Conditions, the closest designated state scenic highway is I-680, located approximately 2.2 miles east of the site, and the closest County-designated scenic road is I-580, located approximately one mile to the south. The project site is not adjacent to or visible from I-680 or I-580, and therefore the project would not damage scenic resources within a state scenic highway. **(No Impact)**

Impact AES-3:	The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The project site is in an urbanized area of Dublin, which is developed with residential, and government uses. The project proposes to construct government facilities that include a fire training facility comprised of a 22-foot-tall single story classroom building with a 30-foot-tall lobby entry feature, an approximately 51.5-tall fire training tower, accessory building, parking, and landscaped areas. The proposed uses are consistent with Planned Development (PD) General Plan land use designation and zoning (RESO. 105-85) that permit government uses of the project site. As discussed in Section 4.4 Biological Resources, the project would remove all five of the on-site trees and one of the 11 off-site site trees. All trees removed by the project would be replaced in accordance with the County Tree Protection Ordinance. Trees would be selected from the City of Dublin approved street tree list. Therefore, the project would not conflict with applicable zoning and other regulations governing the scenic quality of the project site. **(Less than Significant Impact)**

Impact AES-4:	The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

As discussed in Section 4.1.1.2 Existing Conditions, the project site is located within an urbanized area with light and glare typical of urban areas, including headlights, streetlights, parking lot lights, security lights, and reflective surfaces such as windows. The project would include exterior glass surfaces and outdoor lighting including 15-foot-tall parking lot lights, 6-foot-tall flood lights near the classroom building entry plaza, and wall-mounted lighting. The project would be subject to the East County Area Plan Policy 115 that would ensure all exterior lighting is designed and located in a manner that shields lighting to the project site. Therefore, the proposed project would not adversely affect day or nighttime views in the area from lighting or glare. **(Less than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[9]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[10]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[11] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[12]

4.2.1.2 *Existing Conditions*

The 5.2-acre site was historically developed as part of the Camp Parks Military Facility. The vacant site is located adjacent to the ECHJ to the west and the Alameda County Fire Station 17 and California Highway Patrol to the east in Dublin. According to the California Department of Conservation *Important Farmland Finder* map, the site is designated as "Urban and Built-Up Land",

[9] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed June 7, 2022. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[10] California Department of Conservation. "Williamson Act." Accessed June 7, 2022. http://www.conservation.ca.gov/dlrp/lca.
[11] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).
[12] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed June 7, 2022. http://frap.fire.ca.gov/.

defined as land with at least six structures per 10 acres. Common examples of "Urban and Built-Up Land" are residential, institutional, industrial, commercial, landfill, golf course, airports, and other utility uses. The site is not under a Williamson Act contract and there are no existing agricultural or forestry resources on or in the vicinity of the site.

The project site has a Planned Development (PD) General Plan land use designation and zoning (RESO. 105-85), which allows for business park and industrial uses and would not conflict with agricultural or forest uses. The project site is not used for agriculture, forestry, or timberland; and are not the subject of a Williamson Act contract.

No lands adjacent to the project site are used for agricultural production, forest land, or timberland. Surrounding properties are designated, zoned, and used for urban uses.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) 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))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) 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?	☐	☐	☐	☒

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

As discussed above in Section 4.2.1.2 Existing Conditions, the project site is not designated or used for agricultural use. Therefore, the project would not convert farmland to non-agricultural use. **(No Impact)**

Impact AG-2:	The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site has a Planned Development zoning which is intended for governmental uses, and is not zoned for agricultural use or subject to a Williamson Act contract. The surrounding area is urbanized and not zoned for agricultural use or considered farmland. Accordingly, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. **(No Impact)**

Impact AG-3:	The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The project site and surrounding area is not zoned for forest land, timberland, or timberland production. Therefore, the project would not impact timberland or forest land. **(No Impact)**

Impact AG-4:	The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

As discussed under Impact AG-3, the project site and surrounding area are not used or zoned for timberland or forest land. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Impact AG-5:	The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(No Impact)**

Both the project site and surrounding area are urbanized and do not contain designated farmland, forest land, or lands used or zoned for agriculture. As a result, the implementation of the proposed project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest uses. **(No Impact)**

4.3 AIR QUALITY

The following analysis is based, in part, on an Air Quality and GHG Assessment prepared for the proposed project by Illingworth & Rodkin, Inc. The report, dated August 31, 2022, is included in this Initial Study as Appendix A.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[13] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_X. These precursor pollutants react under certain meteorological conditions to form high O_3 levels.

[13] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter (DPM) near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[14] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

[14] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed July 27, 2022. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[15]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

[15] Bay Area Air Quality Management District. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to air quality and are applicable to the project.

East County Area Plan Policies – Air Quality	
Policies	Description
291	The County shall strive to meet federal and state air quality standards for local air pollutants of concern. In the event that standards are exceeded, the County shall require appropriate mitigation measures on new development.
294	The County shall require new development projects to include traffic and air pollutant reduction measures to help attain air quality standards. For non-residential projects, these measures could include Transportation Demand Management programs such as ridesharing and transit promotion; for residential projects, these measures could include site plan features to reduce traffic trip generation such as mixed use development and transit-oriented development.
300	The County shall review proposed projects for their potential to generate hazardous air pollutants.
303	The County shall incorporate the provisions of the Association of Bay Area Government's (ABAG) Bay Area Air Quality Plan and the Bay Area Air Quality Management District's (BAAQMD) Air Quality and Urban Development Guidelines into project review procedures.

Alameda County Administrative Code

Pursuant to Chapter 4.38, Title 4 of the Alameda County Administrative Code for Construction Debris Management and Green Building Practices, County projects must divert construction debris from landfills and incorporate Green Building Practices. The project would be subject to Section 4.38.030(B) requiring debris generated by the project be diverted from landfill via reuse or recycling for 75 percent of asphalt, concrete, and earth debris, for at least fifty (50) percent of the total of all other debris. For debris consisting of hazardous waste, contaminated earth or soil, and materials without any use or market value even after re-manufacturing would be exempted from the foregoing diversion requirements.

Alameda County Climate Action Plan

The *Alameda County Climate Action Plan for Government Services and Operation* (CAP) was adopted in 2010.The CAP outlines the strategy for reducing the county's greenhouse gas emissions and is consistent with AB 32, which directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020.

It is anticipated that the County will update the CAP in 2023 to address emission reductions beyond 2020 and set a 2030 reduction target in alignment with SB 32 and the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

4.3.1.3 *Existing Conditions*

The project is in the Amador Valley portion of the Tri-Valley Subregion within the San Francisco Bay Area Air Basin.[16] The project area's proximity to the San Francisco Bay has moderating influence on the on the climate. The portion of Tri-Valley in which the project site is located within is bounded by Mount Diablo to the north, the Diablo Range to the west, Doolan Canyon ridgeline to the east, and the flat topography of Amador Valley to the south. The surrounding terrain influences wind in the valley, resulting in a prevailing wind that follows the valley's east-west axis.

The Bay Area is considered a nonattainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act.[17] The area is also considered in nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors that apply to both construction and operational period emissions.

The closest sensitive receptors to the project site are located approximately 100 feet south of the project site as the single-family residential development south of Gleason Drive. Additional nearby sensitive receptors to the project site include the Chubby Cheeks Preschool and Daycare located approximately 260 feet to the south and James Dougherty Elementary School located approximately 0.2 miles to the south.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts. As discussed in CEQA Guidelines Section

[16] The Tri-Valley area consists of the lowlands of the San Ramon, Amador, and Livermore Valleys.
[17] Bay Area Air Quality Management District. Air Quality Standards and Attainment Status. Accessed July 27, 2022. https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status.

15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The County of Alameda has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2 below.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Annual Daily Emissions (pounds/year)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust-Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)	

Notes:
ppm = part per million; and $\mu g/m^3$ = micrograms per cubic meter..

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(Less than Significant)**

The BAAQMD CEQA Air Quality Guidelines set forth criteria for determining consistency with the 2017 CAP. In general, a project is considered consistent if it: a) supports the primary goals of the 2017 CAP; b) includes relevant control measures; and c) does not interfere with implementation of the 2017 CAP control measures.

2017 Clean Air Plan

As discussed in Section 4.3.1.2 Regulatory Framework, the goals of the 2017 CAP include 1) protecting public health by progress towards attaining air quality standards and eliminating health risk and 2) protecting the climate. If a project exceeds the BAAQMD thresholds of significance, its emissions are considered to result in significant adverse air quality impacts to the region's existing air quality conditions. Similarly, if the project exceeds the BAAQMD community health risk threshold of significance, the project would result in a community health risk. Because the project would not exceed the BAAQMD impact thresholds, it would not result in significant impacts due to the generation of operational-related criteria air pollutants and/or precursors. Thus, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Further, the project is considered urban infill and would be located near bike facilities and transit with regional connections. Implementation of the project would not prevent BAAQMD or partner agencies from continuing progress toward attaining State and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. For these reasons, the project would not result in a significant impact related to inconsistency with the 2017 CAP.

An analysis of the project's construction and operational air pollutant emissions is provided below, as well as a discussion of the project's community health risk.

Construction Period Emissions – Criteria Pollutants

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate annual emissions from construction activities. Construction emissions were modeled based on equipment list and schedule information provided by the applicant. Details about the equipment list, construction schedule, modeling, data inputs, and assumptions are included in Appendix A.

Table 4.3-3 summarizes the construction emissions for the project which includes the future construction emissions from the apparatus building[18] and shows the project's construction criteria pollutant emissions would not exceed BAAQMD thresholds.

Table 4.3-3: Construction Period Emissions

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
	(average daily emissions in pounds per day)			
2023 (65 construction workdays)	2.45	23.76	1.07	0.97
2024-2025 (284 construction workdays)	2.77	17.84	0.85	0.78
BAAQMD Thresholds	*54*	*54*	*82*	*54*

[18] Since construction phasing for the future apparatus building were not available, the air quality assessment assumed that construction would occur as part of the initial phase. This approach is conservative since construction equipment will become more efficient in the future.

Table 4.3-3: Construction Period Emissions				
Year	**ROG**	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
	(average daily emissions in pounds per day)			
Exceed Threshold?	**No**	**No**	**No**	**No**
Notes: Includes 2025 (only one month of construction) Source: Illingworth & Rodkin, Inc. *Alameda County Fire Department Training Center Air Quality & Greenhouse Gas Assessment*. August 31, 2022.				

As shown in Table 4.3-3, the unmitigated average daily emissions of ROG, NOx, PM_{10}, or $PM_{2.5}$ generated by project construction would not exceed BAAQMD thresholds. These emissions would be further reduced by adherence to the BAAQMD best management practices for construction dust control, as described below under Impact AIR-3. Therefore, construction criteria air pollutant emissions would be less than significant.

Operational Period Emissions – Criteria Pollutants

According to the BAAQMD thresholds, a project that generates more than 54 pounds per day of ROG (reactive organic gases), NOx, or $PM_{2.5}$, or 82 pounds per day of PM_{10} would be considered to have a significant impact on regional air quality. Operational air emissions from the project would be generated primarily from vehicles driven by future trainees and employees and the project's emergency diesel-powered generator. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses.

As discussed in Section 3.0 Project Description, the project would facilitate live fire training and include simulation rooms for smoke and burning scenarios and equipment storage. Fuels to be burned would be Class A fuels (i.e., wood, straw, and paper products). These activities would create emissions and smoke. BAAQMD has adopted Regulation 5: Open Burning in 2019 which created guidelines, requirements, and policies for open burning within the District. Exemption 5-110.4 and Administrative Requirements 5-401.7 allows for fires to be set for the purposes of fire training using one gallon or less of flammable liquid per fire. Otherwise, Section 401.7 allows for fires set for the exclusive purpose of instruction of either public or industrial employees in firefighting methods. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be, in their opinion, necessary. Therefore, operational emissions associated with normal fire training activities and smoke from these exercises are typically exempt.

CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out, including the apparatus building to be implemented as a later phase. The modeling assumptions, data inputs, and results are described further in Appendix A of this Initial Study. The estimated annual and daily operational period emissions from the project were compared to BAAQMD thresholds of significance are summarized in Table 4.3-4.

Table 4.3-4: Project Operational Period Emissions				
Year	**ROG**	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
2025 Project Operational Emissions (tons/year)	0.12	0.06	0.03	0.01
BAAQMD Thresholds	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	**No**	**No**	**No**	**No**
2025 Project Operational Emissions (*lbs./day*)[1]	0.67	0.32	0.14	0.05
BAAQMD Thresholds (lbs./day)	*54 lbs.*	*54 lbs.*	*82 lbs.*	*54 lbs.*
Exceed Threshold?	**No**	**No**	**No**	**No**
Notes: Assumes 365-day operation. Source: Illingworth & Rodkin, Inc. *Alameda County Fire Department Training Center Air Quality & Greenhouse Gas Assessment*. August 31, 2022.				

As shown in Table 4.3-4, the project's operational period emissions would not exceed the BAAQMD significance thresholds.

The project would comply with the 2017 Clean Air Plan and would not exceed emissions thresholds for construction or operational criteria pollutants. **(Less than Significant Impact)**

Impact AIR-2:	The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(Less than Significant Impact)**

As stated in the BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

As described in Section 4.3.2.1 Existing Conditions, the Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not the federal act. As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. As described under Impact AIR-1, the project would not result in an exceedance of BAAQMD thresholds for these air pollutants during construction or operation. Therefore, the project would not result in a cumulatively considerable increase of any criteria pollutant for which the region is in nonattainment. **(Less than Significant Impact)**

Impact AIR-3:	The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Dust Generation

Construction activities would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are implemented to reduce these emissions.

Mitigation Measures:

MM AIR-3.1: The following standard measures reflect BAAQMD best management practices and would be implemented by the project to reduce potential impacts from fugitive dust.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- 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.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 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.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The measures above are consistent with BAAQMD-recommended basic control measures for reducing fugitive particulate matter, as set forth in the BAAQMD CEQA Air Quality Guidelines. With implementation of MM AIR-3.1 as described above, fugitive dust and other particulate matter during construction would have a less than significant air quality impact.

Operation of the project, including the wildland fire training area, would not require dust control measures. As discussed in Section 3.3.4, the wildland fire training area would be used for progressive hose lays, hand tool use (shovel, axe, Pulaski, McCloud), and fire shelter deployments.

Community Risk

Construction activity and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC and could pose a health risk to nearby sensitive receptors. A construction community health risk assessment was prepared to address project construction impacts on the surrounding off-site sensitive receptors within 1,000 feet of the project site.

Community Risk from Project Construction

The primary community risk impact issue 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. The maximum-modeled annual DPM and $PM_{2.5}$ concentrations were identified at nearby sensitive receptors (as shown in Figure 4.3-1) to find the maximum exposed individuals (MEIs).

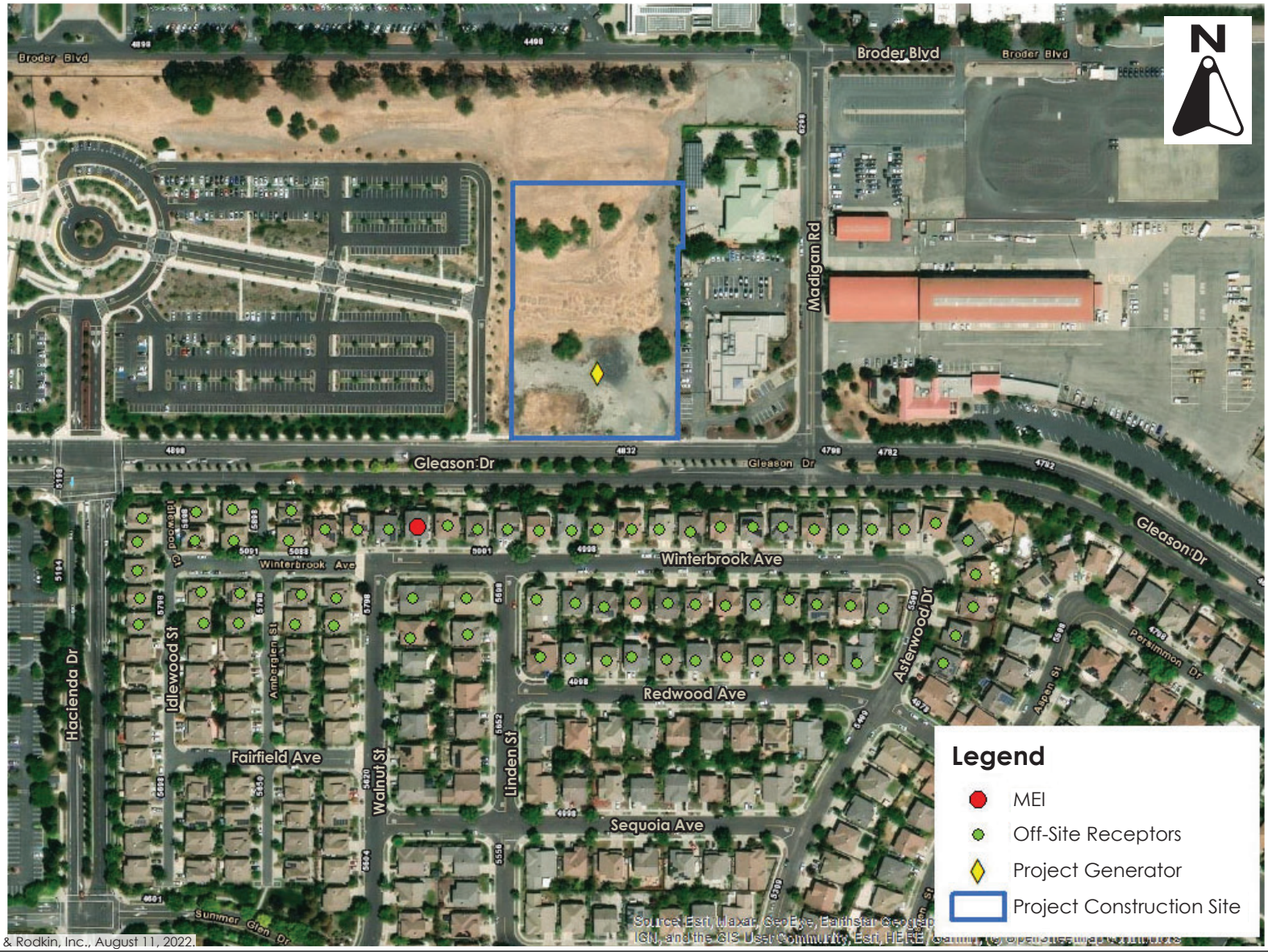
Results of this assessment indicated that the construction MEI was located on the first floor (5 feet above ground) at a single-family residence to the south of the construction project site. Table 4.3-5 summarizes the construction risk from construction activities. Appendix A to this report includes the emission calculations used for the construction modeling and the cancer risk calculations, which includes the construction of the apparatus building for conservative emissions analysis.

Table 4.3-5: Construction Risk Impacts at the Off-Site Project MEI

Source	Cancer Risk	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction (Years 0-2) at MEI	**14.67 (infant)**	0.09	0.01
BAAQMD Single-Source Threshold	*10*	*0.3*	*1.0*
Exceed Threshold?	**Yes**	No	No

Source: Illingworth & Rodkin, Inc. *Alameda County Fire Department Training Center Air Quality & Greenhouse Gas Assessment*. August 31, 2022.

The maximum increased cancer risk a from construction would exceed the BAAQMD single source threshold of greater than 10.0 per million for cancer risk at the MEI.



Source: Illingworth & Rodkin, Inc., August 11, 2022.

LOCATIONS OF OFF-SITE SENSITIVE RECEPTORS AND MAXIMUM TAC IMPACT | FIGURE 4.3-1

Mitigation Measures:

The proposed project would be required to implement the following mitigation measures during all phases of construction.

MM AIR-4.1: Implement a feasible plan to reduce DPM emissions by 35 percent such that increased cancer risk and annual $PM_{2.5}$ concentrations from construction would be reduced below TAC significance levels as follows:

- All mobile construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for PM (PM10 and PM2.5), if feasible, otherwise,
  - If use of Tier 4 equipment is not available for mobile construction equipment, alternatively use equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 35 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination),
  - Use of electrical or non-diesel fueled equipment.

Alternatively, the County may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 35 percent or greater. Elements of the plan could include a combination of some of the following measures:

- Implementation of No. 1 above to use Tier 4 for mobile equipment or alternatively fueled equipment,
- Installation of electric power lines during early construction phases to avoid use of diesel generators and compressors,
- Use of electrically-powered equipment,
- Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,
- Change in construction build-out plans to lengthen phases, and
- Implementation of different building techniques that result in less diesel equipment usage.

Such a construction operations plan shall be subject to review by an air quality expert and approved by the County prior to construction.

With implementation of mitigation measure AIR-4.1, the project's construction cancer risk would be reduced from 14.67 to 3.72 chances per million.

Community Risk from Project Operation

Operation of the project would have long-term emissions from mobile sources (i.e., traffic) and stationary sources (i.e., generator). While these emissions would not be as intensive at or near the site as construction activity, they would contribute to long-term effects to sensitive receptors.

Based on the project's trip generation estimates provided by the traffic study, the project would typically add 56 daily trips distributed on the roadway system around the project site, although some days would be higher and others lower based on the training occurring on a given day. The proposed project would not result in operations of vehicles which would contribute TACs or $PM_{2.5}$ in excess of established thresholds. Therefore, the project's increase in traffic would be a negligible source of TACs and $PM_{2.5}$.

The project would include an emergency diesel generator. To estimate the increased cancer risk from the generator and fire pump at the MEI, the cancer risk exposure duration was adjusted to account for the MEI being exposed to construction for the first two years of the 30-year exposure period. Therefore, construction cancer risks would occur during the first two years and then operational cancer risks for the remaining 28 years. Refer to Appendix A of this Initial Study for more information and Figure 4.3-1 for the project generators, off-site receptors, and MEI. Table 4.3-6 provides a summary of the unmitigated construction and operation risk impacts at the off-site MEI.

Table 4.3-6: Combined Construction and Operation Risk Impacts

Source	Cancer Risk	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction (Years 0-2) at MEI	**14.67 (infant)**	0.09	0.01
Project Generator, One 180-kW, 240-HP (Years 3-30)	0.16 (child-adult)	<0.01	<0.01
Total/Maximum Project Impact (Years 0-30)	**14.83**	0.09	0.01
BAAQMD Single-Source Threshold	*10*	*0.3*	*1.0*
Exceed Threshold?	**Yes**	No	No

Source: Illingworth & Rodkin, Inc. *Alameda County Fire Department Training Center Air Quality & Greenhouse Gas Assessment*. August 31, 2022.

With the implementation of mitigation measure MM AIR-4.1, the total maximum project cancer risk impact to infants would be reduced from 14.83 to 3.88 cases per one million, which would be below the BAAQMD significance threshold of 10 per one million cases for cancer risk.

Criteria Pollutant Emissions

In a 2018 decision (*Sierra Club v. County of Fresno*), the State Supreme Court determined that CEQA requires that when a project's criteria air pollutant emissions would exceed applicable thresholds and contribute a cumulatively considerable contribution to a significant cumulative regional criteria pollutant impact, the potential for the project's emissions to affect human health in the air basin must be disclosed. State and federal ambient air quality standards are health-based standards and exceedances of those standards result in continued unhealthy levels of air pollutants. As stated in the 2017 BAAQMD CEQA Air Quality Guidelines, air pollution by its nature is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing

cumulatively significant adverse air quality impacts. 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 has a less than significant impact for criteria pollutants, it is assumed to have no adverse health effect.

As discussed under Impact AIR-1 above, the proposed project would result in a less than significant project-level operational and construction criteria pollutant impact. As a result, the project would result in a less than significant health impact to sensitive receptors.

The proposed project would implement the identified mitigation measures to reduce construction dust and other particulate matter emissions and TAC emissions. Additionally, the project would have a less than significant impact for criteria pollutants and would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Impact AIR-4:	The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

According to the BAAQMD CEQA Guidelines, an odor source with five or more confirmed complaints per year averaged over three years is considered to have a significant impact.[19] Construction activities for the project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. The odors from these emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary. Odors associated with the application of paints and coatings may also be noticeable on occasion by adjacent receptors. Painting and coating of the project would occur during daytime hours only, would be localized, and would be generally confined to the project site. These odors would also be temporary. Given the temporary nature of the above-described odors, exposure of sensitive receptors to these emissions would be limited and the impact is less than significant.

The project would include an approximately 5,500-sf training tower with Class A burn rooms which would facilitate live fire training and include simulation rooms for smoke and burning scenarios. These activities would produce smoke that would create odors noticeable to nearby receptors. As previously discussed, BAAQMD has adopted Regulation 5: Open Burning in 2019 which created guidelines, requirements, and policies for open burning within the District. Exemption 5-110.4 and Administrative Requirements 5-401.7 allows for fires to be set for the purposes of fire training using one gallon or less of flammable liquid per fire. Otherwise, Section 401.7 allows for fires set for the exclusive purpose of instruction of either public or industrial employees in firefighting methods. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be, in their opinion, necessary. Therefore, odors associated with smoke from these fire training exercises are exempt from BAAQMD's odor guidelines. Typical daytime wind flow (based on the Livermore Airport wind rose) is from the west-northwest. Smoke plumes would disperse by the time it reached the sensitive receptors to the south and would not directly affect any sensitive receptors with this wind flow. **(Less than Significant Impact)**

[19] Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines. May 2017. Page 2-1.

4.4 BIOLOGICAL RESOURCES

Information in this section is based in part on the Arborist Report prepared by HortScience | Bartlett Consulting. The report, dated June 8, 2022, is attached to this Initial Study as Appendix B.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. This includes direct and indirect acts, except for harassment and habitat modification, which are not included unless they result in direct loss of birds, nests, or eggs. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to biological resources and are applicable to the project.

East County Area Plan Policies – Biological Resources	
Policies	**Description**
110	The County shall require that developments are sited to avoid or, if avoidance is infeasible, to minimize disturbance of large stands of mature, healthy trees and individual healthy trees of notable size and age. Where healthy trees will be removed, the County shall require a tree replacement program which includes a range of tree sizes, including specimen-sized trees, to achieve immediate visual effect while optimizing the long-term success of the replanting effort.
125	The County shall encourage preservation of areas known to support special status species.
127	The County shall encourage the preservation of East County's oak woodland plant communities.

Alameda County Tree Ordinance

The County's adopted Tree Ordinance in Chapter 12.11 of the General Ordinance Code prescribes measures for removal and replacement of trees in the County's roadway right-of-way, in addition to protective actions to be taken to avoid damage to existing trees.[20]

East Alameda County Conservation Strategy

The East Alameda County Conservation Strategy (EACCS) is an informative document used to streamline environmental permitting for projects with impacts to listed species, facilitate voluntary land stewardship conservation, as well as coordinate the connection of Tri-Valley open space and habitat in the Alameda Creek watershed with adjacent natural areas and watersheds in Contra Costa, San Joaquin, and Santa Clara Counties.

4.4.1.2 *Existing Conditions*

The project site is in an urbanized area and consists primarily of an open pervious dirt area with a compacted gravel area in the southern portion of the project site. A tree-lined berm approximately

[20] "County right-of-way" means land, which by deed, conveyance, agreement, dedication, usage or process of law is reserved for use as a public roadway. For the purpose of this chapter, the roadway right-of-way shall include not only the surface of the roadway and the earth beneath the roadway, but also all facilities and natural features located across, along, beneath, in, on, over, under, upon and within the roadway.

20- to 30-feet high runs along the northern section of the larger 5.2-acre site. There are no streams or riparian habitat on or adjacent to the site. The nearest riparian corridor and waterway to the project site is Tassajara Creek, located approximately 0.3 miles east of the site. The next closest waterway is a drainage ditch running parallel and west of Arnold Drive, located approximately 0.4 miles to the west of the site.

The Alameda County Juvenile Justice Facility/East County Hall of Justice Environmental Impact Statement/Environmental Impact Report (ECHJ EIR) identified a potential jurisdictional wetland, approximately 3,960 square feet, on the project site extending east to west across the middle of the larger 5.2-acre project site (refer to Figure 4.4-1).[21]

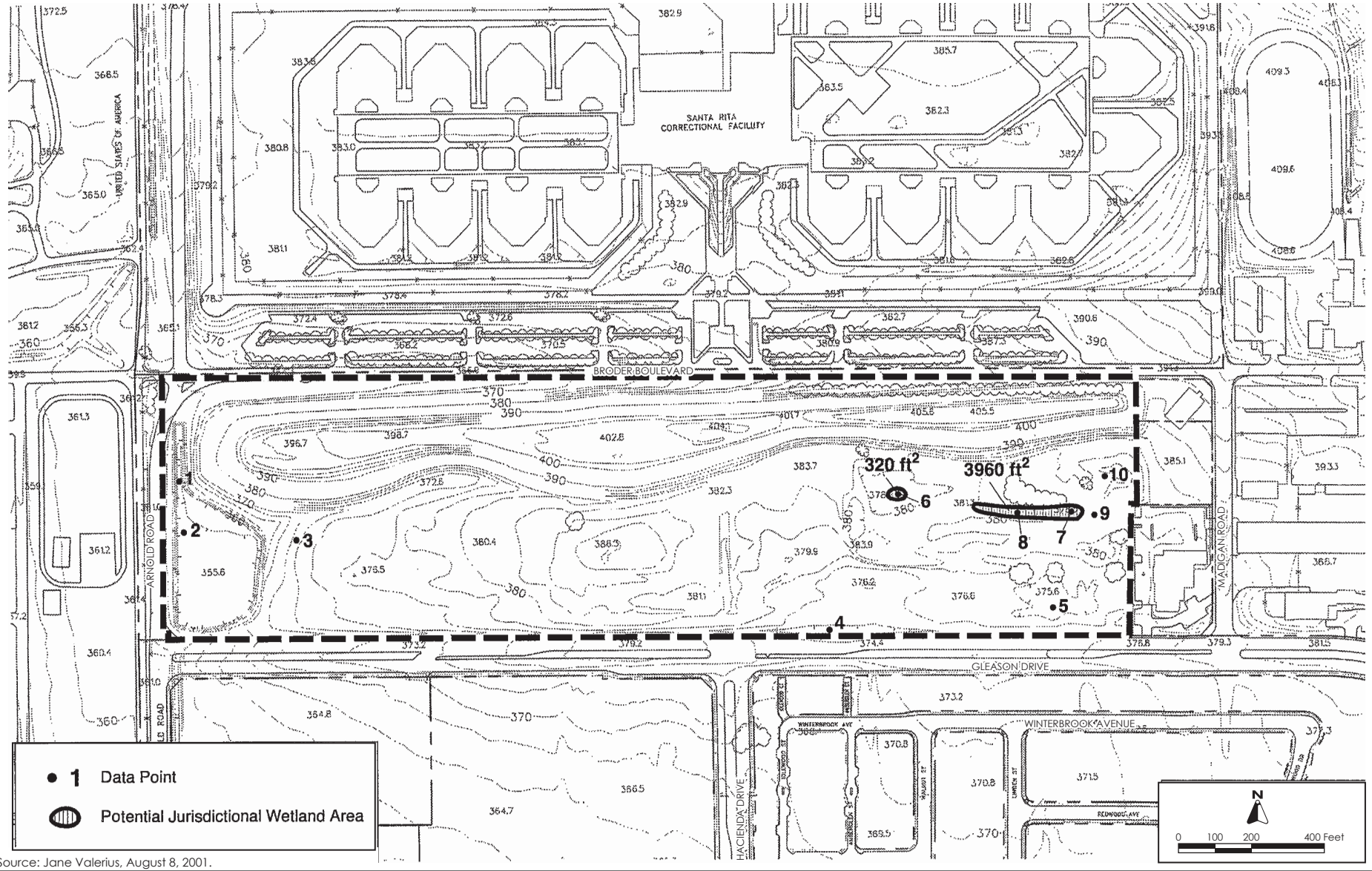
The site and surrounding lands have been highly disturbed by historical agricultural and ranching activities, the previous military base and more recently by suburban development. Evidence of past grading extends over much of the site, including an earthen berm created from excess grading material for the Santa Rita Jail (described in Section 4.9.1.2 Existing Conditions). Most of the site is now covered by nonnative grassland and ruderal (weedy) species, with a few scattered ornamental trees and shrubs. The extent of surrounding development and past disturbance limits the value of the site to wildlife. Existing development borders the southern, eastern and northern boundaries of the site, and fencing limits opportunities for movement of larger wildlife to the partially undeveloped lands to the west

Habitats in developed areas are extremely low in species diversity. The wildlife species most often associated with developed areas are those that are most tolerant of periodic human disturbances, including several introduced species such as birds (pigeons), opossums, raccoons, skunks, feral pigs, wild turkeys, red and grey foxes, deer, squirrels, coyotes, and mountain lions.[22]

Based on surveys conducted as part of the ECHJ EIR, the project site may contain occurrences or habitat for Congdon's tarplant, a species considered by the CNPS to be rare (List 1B) (refer to Figure 4.4-2).[23,24,25]Additionally, several raptor species may have suitable foraging habitat on the project site including burrowing owl, white-tailed kite, northern harrier, other raptors, and loggerhead shrike.[26]

There are a total of 16 trees within and adjacent to the project site. There are no on-site trees that are within the County roadway right-of-way. A summary of the tree species, condition, and quantity on

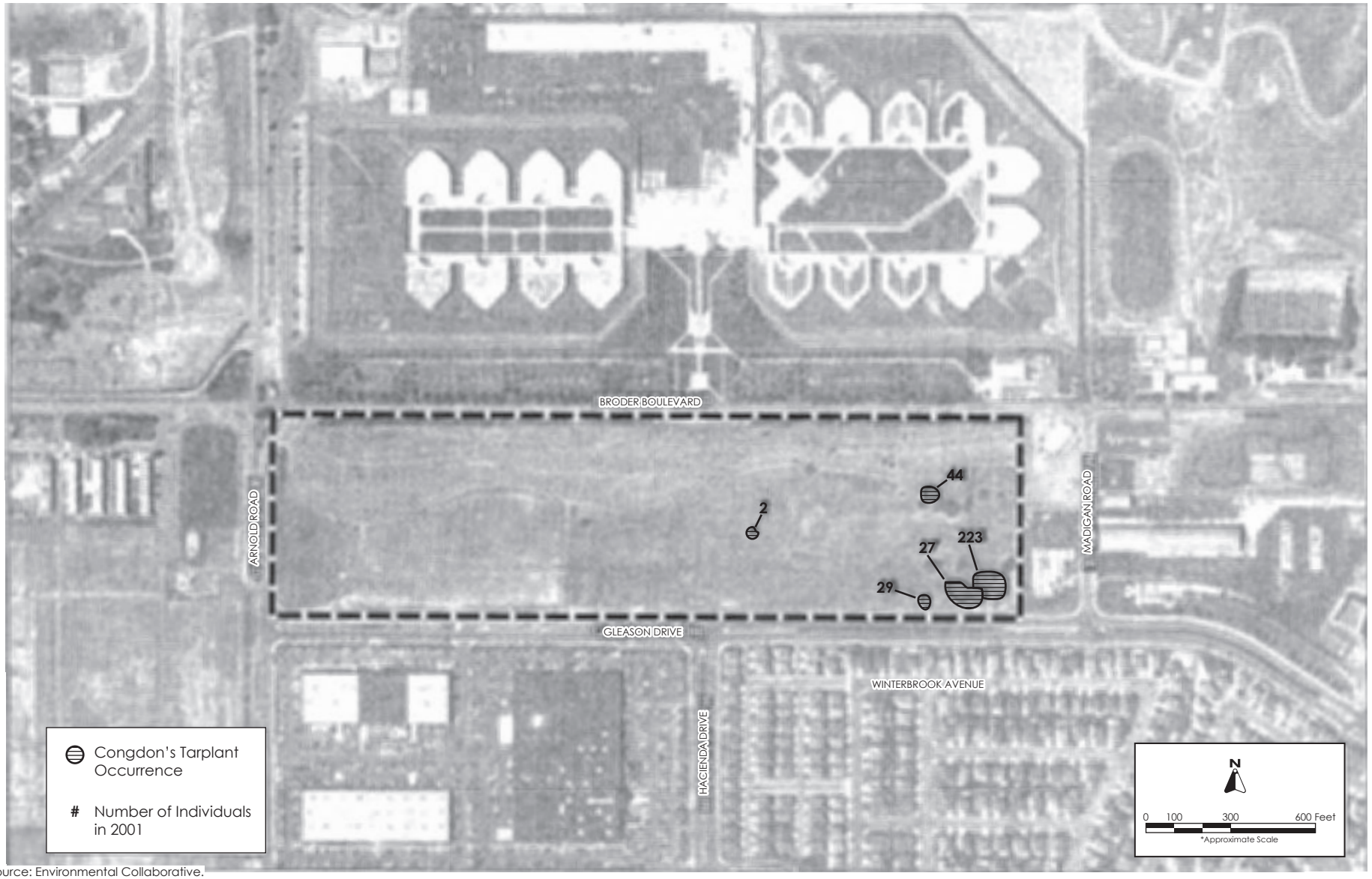
[21] County of Alameda. *Juvenile Justice Facility and East County Hall of Justice Environmental Impact Statement and Environmental Impact Report*. Draft. January 2003. Figure 8.4, East County Government Center Site Wetlands, page 8-20.
[22] Alameda County Health Care Services Agency, Vector Control. "Wildlife". Accessed August 24, 2022. https://acvcsd.org/programs-services/wildlife-2/.
[23] Alameda County General Services Agency. Addendum to Alameda County Juvenile Justice Facility/East County Hall of Justice Environmental Impact Statement/Environmental Impact Report. September 23, 2009.
[24] California Department of Fish and Wildlife. "Threatened or Endangered Plant Species List". Accessed August 9, 2022. https://wildlife.ca.gov/Conservation/CESA.
[25] County of Alameda. *Juvenile Justice Facility and East County Hall of Justice Environmental Impact Statement and Environmental Impact Report*. Draft. January 2003. Figure 8.3, East County Government Center Site Rare Plan Locations, page 8-15.
[26] Alameda County General Services Agency. Addendum to Alameda County Juvenile Justice Facility/East County Hall of Justice Environmental Impact Statement/Environmental Impact Report. September 23, 2009.



Source: Jane Valerius, August 8, 2001.

WETLANDS

FIGURE 4.4-1



Source: Environmental Collaborative.

RARE PLANT LOCATIONS | FIGURE 4.4-2

the project sites is provided in Table 4.4-1 and the location of trees is shown on Figure 4.4-3. Additional details about the trees are included in Appendix B.

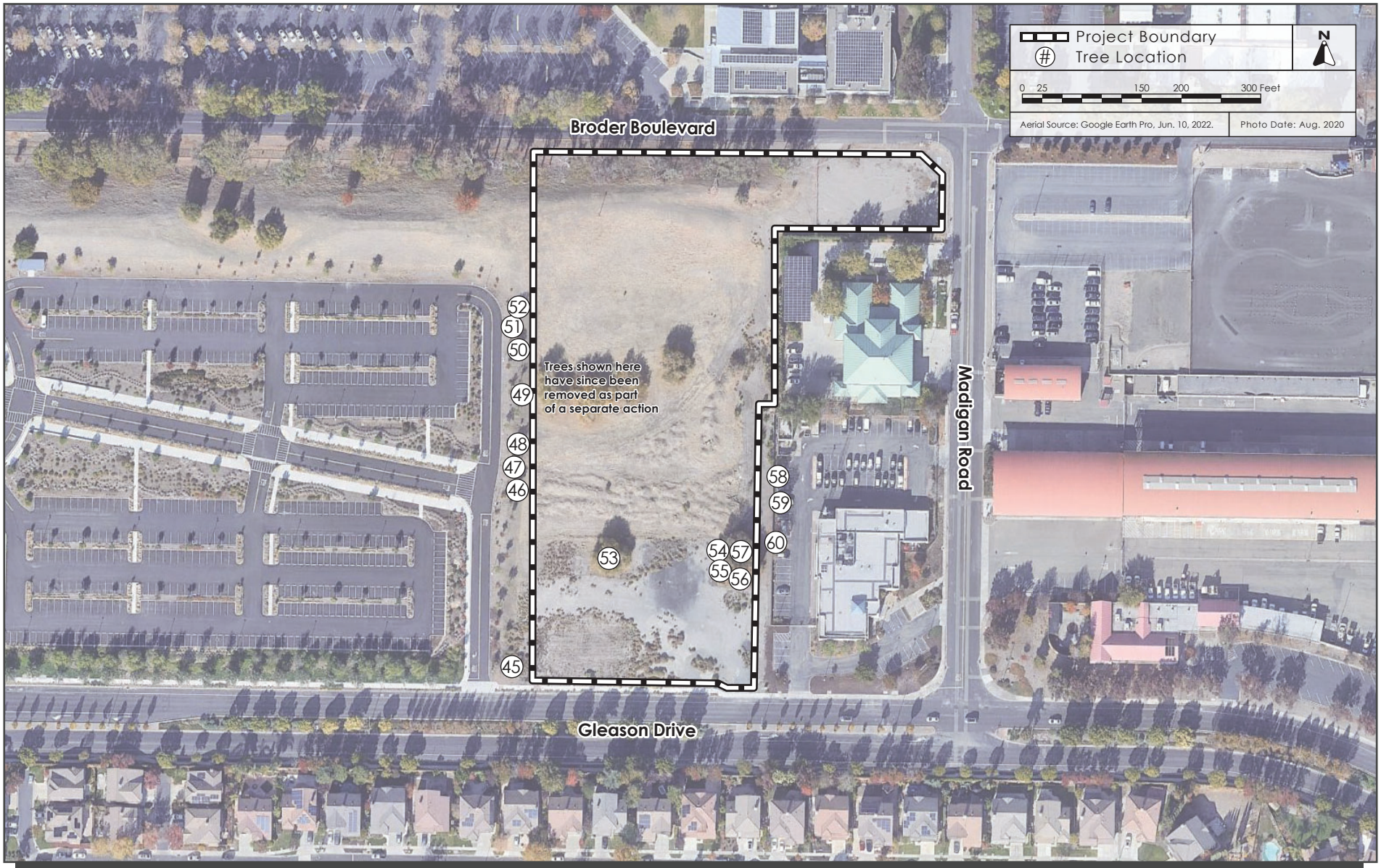
Table 4.4-1: Summary of Trees On and Adjacent to the Project Site

Tree Number	Common Name	Diameter (inches)	Condition	Protected
45*	Yellow willow	26	4	No
46^	California pepper	7	4	No
47^	California pepper	7	4	No
48^	California pepper	8	4	No
49^	California pepper	6	4	No
50^	California pepper	7	4	No
51^	California pepper	7	4	No
52^	California pepper	7	4	No
53*	Siberian elm	82	3	No
54*	Siberian elm	74	2	No
55*	Siberian elm	15	2	No
56*	Siberian elm	15	2	No
57*	Siberian elm	11	1	No
58^	Tulip tree	10	4	No
59^	Tulip tree	12	4	No
60^	Tulip tree	14	4	No

Notes:
Tree Condition: 1=Poor, 5=Excellent, 4-5=Healthy
* Tree to be removed.
^ Tree is located off-site.
Source: HortScience | Bartlett Consulting. *Preliminary Arborist Report Gleason Drive.* June 8, 2022.

Alameda County does not have an established habitat conservation plan or a natural community conservation plan.[27] The County has adopted the EACCS which identifies important countywide environmental conservation values included listed species habitats, unique open space types and vegetative communities. Based on the EACCS, the project site is located in Conservation Zone 2 in the Livermore Watershed. The project site is identified as within a developed area of Dublin and is not located on designated open space types, within the identified range of a listed species, or other areas identified as important for conservation.

[27] California Department of Fish and Wildlife. "BIOS – Conservation Plan Boundaries – HCP and NCCP [ds760]". Accessed August 24, 2022. https://apps.wildlife.ca.gov/bios/?al=ds760.



TREE LOCATION MAP

FIGURE 4.4-3

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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 (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
2) 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 CDFW or USFWS?	☐	☐	☐	☒
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
4) 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?	☐	☐	☒	☐
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1:	The project would not 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 CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

As described in Section 4.4.1.2 Existing Conditions, the project site is in an urbanized area and consists of open dirt area with an earthen berm along the northern edge of the site and has a compacted gravel area in the southern portion of the site. The project site includes scattered vegetation and mature trees. Due to the lack of suitable habitat and history of development on the site

and in the surrounding areas as the Camp Parks Military Facility (discussed in Section 4.5.1.2 Existing Conditions), special-status species (with the exception of nesting birds, described below) are unlikely to occur on-site.

As described above, there are a total of 16 trees adjacent and located off-site. Project implementation would remove six trees, all of which would be ordinance-sized, however none are in the County's roadway right-of-way. Trees could provide nesting and/or foraging habitat for birds, including migratory birds. Additionally, the ECHJ EIR identified potential suitable foraging habitat for several raptor species may have suitable foraging habitat on the project site including burrowing owl, white-tailed kite, northern harrier, other raptors, and loggerhead shrike. Migratory birds, like nesting raptors, are protected under the Migratory Bird Treaty Act and CDFW Code Sections 3503, 3503.5, and 3800. The CDFW defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Construction activities such as site grading that disturb a nesting bird or raptor on-site or immediately adjacent to the project construction zone would also constitute an impact.

Mitigation Measures:

MM BIO-1.1: Prior to the issuance of any demolition, grading, tree removal or building permits (whichever occurs first), the County shall confirm the initial site disturbance (demolition and/or construction activities) is scheduled to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area, extends from February 1 through August 31 (inclusive).

MM BIO-1.2: If tree removal, demolition and construction cannot be scheduled between September 1 and January 31 (inclusive), pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests are disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1 through April 30 inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1 through August 31 inclusive). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats immediately adjacent to the construction areas for nests.

MM BIO-1.3: If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist shall determine the extent of a construction free buffer zone to be established around the nest to ensure that bird nests shall not be disturbed during project construction.

MM BIO-1.4: Prior to any tree removal, or approval of any grading or demolition permits (whichever occurs first), the ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the County General Services Agency.

MM BIO-1.5: Preconstruction Burrowing Owl Survey. Preconstruction surveys shall be conducted for burrowing owl within 30 days of project-related ground disturbing activities throughout the year to determine whether any nesting owls are present and to provide for their protection during the active breeding season or passive relocation during the non-breeding season if nests are encountered. The surveys shall be conducted by a qualified biologist and shall comply with Burrowing Owl Protocol and Mitigation Guidelines. If burrowing owls are found on site, the Mitigation Guidelines generally require the creation of other suitable habitat for burrowing owls nearby, relocating any burrowing owls that are found on site and filling all onsite burrows once they have been vacated.

If avoidance is not feasible, mitigation shall be developed in consultation with the CDFW and shall meet with the approval of the County General Services Agency prior to any construction or grading. The results of the preconstruction survey and any required mitigation monitoring shall be submitted to the CDFW and County General Services Agency

As discussed in Section 4.4.1.2, the project site may contain occurrences or habitat for special status species including Congdon's tarplant, which is considered rare under Section 15380 of the CEQA Guidelines. The ECHJ EIR found that development of the project site would result in the elimination of the occurrence of Congdon's tarplant. Consistent with the ECHJ EIR, the project would be required to implement the following mitigation measure to address the potential loss of Congdon's tarplant.

MM BIO-1.6: Focused Botanical Surveys. Prior to construction, a focused botanical survey will be conducted by a qualified plant biologist to ascertain the presence or absence of Congdon's tarplant on the project site during the initial blooming period (June).

MM BIO-1.7: Prior Congdon's Tarplant Mitigation Program. A detailed off-site mitigation program shall be prepared to address the potential loss of Congdon's tarplant on the site in the event that the focused surveys determine that the project site supports the species. The program shall be prepared by a qualified botanist or plant ecologist, and shall at minimum provide for seed collection and reseeding, and creating replacement habitat at secure locations. The program shall include identification of appropriate areas(s), including shallow depressions designed with a suitable hydrologic regime for Congdon's tarplant to be sown with seed collected from the site. Seed shall be collected from the site in early fall prior to initiation of construction activities. This seed collection and re-establishment may be combined with other mitigation plans for the vicinity, such as the mitigation being developed for impacts associated with the Dublin Transit Center. Any mitigation plan shall include monitoring for a minimum of five years to determine success of reseeding and habitat creation.

Implementation of mitigation measures MM BIO-1.1 would ensure that the initial site disturbance of the project takes place outside of the nesting season, thus avoiding any incidental loss of fertile eggs or nestlings, or nest abandonment. Alternatively, if demolition and the initial site disturbance cannot be scheduled between September 1 and January 31, the implementation of mitigation measures MM

BIO-1.2 through MM BIO-1.4 would identify and protect all active nests within the project's area of effect from being disturbed during construction. Implementation of MM BIO-1.5 would ensure that burrowing owls are identified and avoided. Implementation of MM BIO-1.6 would require focused botanical surveys to determine the presence/absence of Condgond's tarplant. In the event that Condgon's tarplant is present, MM BIO-1.7 would require the collection of seeds of individual Congdon's Tarplant identified on the project site and re-established off-site through a mitigation plan. For these reasons, the project with the implementation of mitigation measures MM BIO-1.1 through MM BIO-1.7 would not result in significant impacts to nesting birds. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-2:	The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(No Impact)**

As described in Section 4.4.1.2 Existing Conditions, the project site does not contain any riparian habitats or other sensitive natural communities. Tassajara Creek is approximately 0.3 miles west of the project site, which is physically separated from this riparian corridor by Madigan Road, Barnet Road, and intervening governmental developments. Given the distance to the nearest riparian corridors, implementation of the project would not adversely affect any riparian habitat or sensitive natural communities identified in local or regional plans, polices, regulations, or by the CDFW or USFWS. **(No Impact)**

Impact BIO-3:	The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Less Than Significant Impact with Mitigation)**

As described in Section 4.4.1.2 Existing Conditions, the project site includes a potential jurisdictional wetland in the middle of the larger 5.2-acre ECHJ project site. The ECHJ EIR found that development of the project site would result in significant impacts to wetlands.

Mitigation Measures:

MM BIO-3.1: Prior to construction, a qualified biologist shall conduct a site assessment during the Spring to determine whether the prior conditions documented in the ECHJ EIR still exist. In the event that wetlands are present on the project site, mitigation measure MM BIO-3.2 shall be implemented.

MM BIO-3.2 Wetland Delineation and Possible Replacement. The preliminary wetland delineation shall be submitted to the Army Corps of Engineers for verification, if this site is selected for the project. If the identified wetlands and detention basin to be filled are not considered jurisdictional then no additional mitigation is considered necessary. If the Corps and/or Regional Water Quality Control Board determine these features are jurisdictional and must be filled, then a mitigation program shall be prepared by a qualified wetland specialist, and shall at minimum provide for no net loss of wetlands. This mitigation program will be required to provide for the creation of

replacement habitat with an increase in acreage and value at a secure location to meet the "no net loss" standard. Any mitigation program shall include monitoring and management for a minimum of five years to ensure success of wetlands creation; specify success criteria, maintenance, monitoring requirements, and contingency measures; and define site preparation and revegetation procedures, along with an implementation schedule, and funding sources to ensure long-term management. If required, the detailed mitigation program shall be prepared in consultation with the Corps and/or Regional Water Quality Control Board and meet with the approval of the County General Services Agency prior to any construction on the site.

Implementation of mitigation measure MM BIO-3.1 and MM BIO-3.2 would require the verification of the potential jurisdictional wetland and require appropriate mitigation measures if the wetland features are confirmed jurisdictional by the U.S. Army Corps of Engineers and/or Regional Water Quality Control Board. With the implementation of MM BIO-3.1 and MM BIO-3.2, the project's impact on wetlands would be less than significant through implementation of a mitigation program. **(Less than Significant Impact with Mitigation)**

Impact BIO-4:	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

Migratory movements of animal species are most often associated with riparian corridors, and the project site is not located adjacent to any streams or waterways. The closest riparian corridor to the site (Tassajara Creek) is located approximately 0.3 miles to the east of the site and would be unaffected by the proposed project (see discussion under Impact BIO-2). For these reasons, the project would not interfere with migratory fish or wildlife species.

Glass windows and multi-story building facades can result in injury or mortality of birds due to bird collisions with these surfaces. The project design would consist of some glass on the proposed classroom building and training tower. Due to the highly urbanized nature of the project area, trees on and adjacent to the project sites are more conducive to use by urban-adapted resident birds that are widespread through urban and suburban land uses in the San Francisco Bay Area and have a high regional population. Therefore, any bird collisions resulting from the proposed project would represent a very small portion of regional populations and would not represent a substantial portion of any species. For the reasons above, the project would not substantially interfere with movement of native resident species due to avian collision with the proposed building. **(Less than Significant Impact)**

Impact BIO-5:	The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact)**

There are 16 trees on and adjacent to the project site, none of which meet the County's definition as a tree within the County's roadway right-of-way. The project would remove six trees, including five

on-site trees and one off-site tree. The project development would exclude the large linear stand of trees located along the northern berm of the larger project parcel. The trees to be removed are identified in Table 4.4-1 and noted on Figure 4.4-1.

The project would be subject to East County Area Plan Policy 110 which requires the removal of healthy trees be replaced through a tree replacement program to select appropriate trees to optimize the long-term success of the replanting effort. Based on Table 4.4-1, one healthy tree is expected to be removed.

Additionally, as described in Section 3.3.7 Landscaping and Stormwater Controls, the project would install planting materials to require low water use and be designed to achieve a fire-resistant landscape that would encourage the success of the project site's landscape. The proposed project is not expected to result in a significant impact to trees upon implementation of the recommended tree protection measures based on East County Area Plan Policy 110, which would include a range of tree sizes that are drought tolerant and fire resistant, and therefore be optimized for the success of the replanting effort at the proposed fire training facility. Therefore, the project would not conflict with the local policies or ordinances protecting biological resources. **(Less than Significant Impact)**

Impact BIO-6:	The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(Less than Significant Impact)**

The project site is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan. The project site is, however, located within the East Alameda County Conservation Strategy (EACCS) which identifies listed species and open space conservation areas in East Alameda County. As described in 4.4.1.2 Existing Conditions, the project is not located within any of the identified areas important for conservation in the EACCS. Therefore, the project would not conflict with the EACCS or other local, state, or national habitat conservation plan areas. **(Less than Significant Impact)**

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[28]

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease, and the county coroner be notified.

[28] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed June 7, 2022. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to cultural resources and are applicable to the project.

East County Area Plan Policies – Cultural Resources	
Policies	**Description**
136	The County shall identify and preserve significant archaeological and historical resources, including structures and sites which contribute to the heritage of East County.
137	The County shall require development to be designed to avoid cultural resources or, if avoidance is determined by the County to be infeasible, to include implement appropriate mitigation measures that offset the impacts.

4.5.1.2 *Existing Conditions*

Archaeological Resources

The 5.2-acre site has been previously developed as the Camp Parks Military Facility and is surrounded by existing developments. According to the ECHJ EIR, there are no known recorded archaeological sites on or adjacent to the project site. Alameda County planning study maps show the project area as "high" for archeological sensitivity; however, archival research indicates there is a low potential for undiscovered subsurface archaeological resources.[29]

[29] Alameda County. *Juvenile Justice Facility and East County Hall of Justice Environmental Impact Statement and Environmental Impact Report.* Draft. Page 15-22. January 2003.

Historic Resources

The 5.2-acre site was historically used for agricultural purposes. In 1942, the project site was developed as part of the Camp Parks Military Facility, a 3,600-acre military installation comprising Camp Parks, a military personnel relocation center, and Camp Shoemaker, a military personnel rehabilitation complex. Based on the ECHJ EIR, structures in the project area which include living quarters, recreational buildings, warehouses and stores, administration offices, an agricultural nursery and greenhouse, a multiple ward dispensary, a prosthetics laboratory and three boiler houses/rooms.[30] The site was deactivated by 1947 with most of the remaining above ground structures removed over the next decade. The Camp Parks Military Facility was reactivated in 1958 by the Air Force and used as a firefighting training area. In 1969, Alameda County purchased a large portion of the facility. The project site likely includes buried foundations, pipes, and similar remnants of the prior military use.

The vacant site is located adjacent to ECHJ to the west and the Alameda County Fire Station 17 and California Highway Patrol to the east in Dublin. Based on a review of the National Park Service's National Register of Historic Places and the California Office of Historic Preservation's California Register of Historical Resources and Historical Landmarks[31], there are no federal- or state-designated historical resources on or adjacent to the project site. Buried foundations, pipes and similar remnants of the prior military use remain.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

There are no structures on site, nor are the surrounding buildings listed in the National Register of Historic Places, or the California Register of Historical Resources. For these reasons, the project would not cause an adverse change in the significance of a historical resource. **(No Impact)**

[30] Alameda County. *Juvenile Justice Facility and East County Hall of Justice Environmental Impact Statement and Environmental Impact Report.* Draft. Figure 15.3, Page 15-23. January 2003.
[31] California State Parks. Office of Historic Preservation. California Historical Resources. Accessed on June 7, 2022. https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=1.

Impact CUL-2:	The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

The project site was previously disturbed and developed as part of the Camp Parks Military Facility. As such, there is a low possibility for uncovering buried prehistoric subsurface resources. As previously discussed, Alameda County planning study maps show the project area as "high" for archeological sensitivity; however, archival research indicates there is a low potential for undiscovered subsurface archaeological resources. Project-related grading and excavation during construction, which would extend approximately 14 feet below grade, could however result in significant impacts, if any unknown culturally significant prehistoric subsurface and historic-era archaeological resources were discovered.

Mitigation Measures: Implementation of the following mitigation measures would ensure that potential impacts to subsurface archaeological resources are less than significant.

MM CUL-2.1: Pursuant to CEQA Guidelines 15064.5 (f), if potentially significant cultural resources are discovered during ground-disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with Alameda County, and other appropriate agencies and interested parties. A qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and locational information to the California Historical Resources Information Center office (Northwest Information Center). The consulting archaeologist shall also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (Public Resources Code Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that the find does not meet the CEQA standards of significance, construction shall proceed. In the event the archaeologist determines that further information is needed to evaluate significance, the County General Service Agency shall be notified and a data recovery plan shall be prepared.

With implementation of MM CUL-2.1, any unknown culturally significant archaeological resources encountered during construction would be identified, evaluated and appropriately treated in accordance with the recommendations of a qualified archaeologist. Accordingly, the project would not cause a substantial adverse change in the significant of an archaeological resource. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3:	The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

Human graves are most often associated with prehistoric occupation sites. Although unlikely, it is possible that project construction activities (under either option), such as excavation and grading, could disturb as-yet undiscovered human remains at the project sites. If human remains were unearthed during project construction, damage to or destruction of culturally significant human remains would be a potentially significant impact.

Mitigation Measure: Implementation of the following mitigation measures would ensure that potential impacts to undiscovered human remains is at a less than significant level.

MM CUL-3.1: If human remains are encountered, the County shall halt work in the immediate area and contact the Alameda County coroner. The coroner will determine whether the remains are Native American. If the remains are believed to be Native American, the coroner will contact the Native American Heritage Commission (NAHC) which will designate the Most Likely Descendants (MLD). The MLD will inspect the remains and make a recommendation for the respectful treatment of the remains and related burial goods.

Implementation of MM CUL-3.1 would ensure that any human remains encountered during ground-disturbing activities are appropriately identified and treated and the impact reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires California Air Resources Board to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[32] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[33]

[32] California Building Standards Commission. "California Building Standards Code." Accessed July 27, 2022. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.
[33] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed July 27, 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[34]

Regional and Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to energy and are applicable to the project.

East County Area Plan Policies – Energy	
Policies	**Description**
140	The County shall encourage the design of new or expanding public facilities to serve as models for the community. Features that should be incorporated into public facility design include drought tolerant landscaping, energy conserving features, public art, childcare, open space usable by workers and the public, and accessibility to all members of the community. The County shall investigate the potential for shared use of public facilities, such as joint use of neighborhood parks and school playgrounds.

Alameda County Climate Action Plan

The *Alameda County Climate Action Plan for Government Services and Operation* (CAP) was adopted in 2010. The CAP outlines the strategy for reducing the county's greenhouse gas emissions and is consistent with AB 32, which directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020.

CAP Policy BE-11 requires the County to actively expand its use of renewable energy to meet 40 percent green power target, including a focus on developing new sources of on-site generation.

[34] California Air Resources Board. "The Advanced Clean Cars Program." Accessed July 27, 2022. https://www.arb.ca.gov/msprog/acc/acc.htm.

It is anticipated that the County will update the CAP in the next 12 to 18 months to address emission reductions beyond 2020 and set a 2030 reduction target in alignment with SB 32 and the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,790 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available. Out of the 50 states, California is ranked second in total energy consumption and 49th in energy consumption per capita. The breakdown by sector was approximately 22 percent (1,507 trillion Btu) for residential uses, 20 percent (1,358 trillion Btu) for commercial uses, 24 percent (1,701 trillion Btu) for industrial uses, and 34 percent (2,355 trillion Btu) for transportation.[35] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Alameda County in 2020 was consumed primarily by the non-residential sector (67 percent), followed by the residential sector consuming 33 percent. In 2020, a total of approximately 10,247 gigawatt hours (GWh) of electricity was consumed in Alameda County[36]

Pacific Gas and Electric Company (PG&E) is Alameda County's energy utility, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2020, natural gas facilities provided 16 percent of PG&E's electricity delivered to retail customers; nuclear plants provided 43 percent; hydroelectric operations provided 10 percent; renewable energy facilities including solar, geothermal, and biomass provided 31 percent.[37]

Natural Gas

PG&E provides natural gas services within Alameda County. In 2022, approximately 2.5 percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[38] In 2019, residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 26 percent, the industrial sector used 35 percent, and other uses used six percent.[39] Transportation accounted for one percent of natural gas use in California. In 2020, Alameda County used approximately three percent of the state's total consumption of natural gas.[40]

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[35] United States Energy Information Administration. *State Profile and Energy Estimates, 2020.* Accessed July 27, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[36] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed July 27, 2022. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[37] Pacific Gas and Electric Company. "Exploring Clean Energy Solutions." Accessed July 27, 2022. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page?WT.mc_id=Vanity_cleanenergy.
[38] California Gas and Electric Utilities. *2019 California Gas Report Supplement*. July 2019. Page 22. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.
[39] United States Energy Information Administration. "State Profile and Energy Estimates, 2020." Accessed September 13, 2022. https://www.eia.gov/state/?sid=CA#tabs-2.
[40] California Energy Commission. "Natural Gas Consumption by County." Accessed May 17, 2022. http://ecdms.energy.ca.gov/gasbycounty.aspx.

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.[41] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2019.[42] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026. [43,44]

Energy Use of Existing Development

The project site is a vacant lot that does not consume energy.

4.6.2 Impact Discussion

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

Impact EN-1:	The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Less than Significant Impact)**

Energy is consumed during the construction and operational phases of the project, as discussed below.

Energy Use During Construction

The construction phase would require energy for the manufacture and transportation of building materials, preparation of the project site for grading, and the actual construction of the buildings.

[41] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed May 17, 2022. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.

[42] United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf.

[43] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed May 17, 2022. http://www.afdc.energy.gov/laws/eisa.

[44] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed May 17, 2022. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

Construction of the project would require demolition, preparation of the site, grading, trenching, building construction, paving, and finishing of the building interiors. The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the project site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Further, construction of the project would occur in an urbanized area proximate to roadways, construction supplies, and workers, making it more efficient than construction occurring in outlying, undeveloped areas. For these reasons, the construction process for the project is efficient.

In addition, energy would not be wasted or used inefficiently by construction equipment, since the project would select equipment during construction that would minimize emissions

Energy Use During Project Operation

Operation of the proposed project would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Operational energy would also be consumed during each vehicle trip associated with the project. Accordingly, the project's estimated electricity and gasoline use is summarized in Table 4.6-1 below.

Table 4.6-1: Estimated Energy Use of the Project

	Electricity Use (kWh/yr.)[1]	Natural Gas Use (kBtu/yr.)[1]	Gasoline (gal/yr.)[3]
Government Office Building	334,815	0	2,753
Parking Lot	6,697	0	0
Project Total	341,512	0	2,753
Existing Total	0	0	0
Net Change in Energy Consumption	341,512	0	2,753

[1] Illingworth & Rodkin, Inc. *Alameda Conty Fire Department Training Center Air Quality and Greenhouse Gas Assessment*. August 11, 2022.

[3] Gasoline use calculated based on forecasted annual VMT in CalEEMod (68,552) divided by average U.S. fuel economy. Per the 2020 EPA Automotive Trends Report, the average U.S. Fuel Economy is 24.9 mpg for light-duty vehicles.

As shown in Table 4.6-1, the project would result in a net increase in energy demand for electricity and gasoline in comparison with existing conditions, and no change in natural gas use. In addition, the project would install a PV system on the roof of the Classroom Building. Finally, as the project involves the construction and operation of conventional building types, there is nothing atypical or

unusual about the project's construction or operations that would result in wasteful, inefficient, or unnecessary consumption of energy. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

As discussed above under Impact EN-1, the project would comply with the current energy efficiency standards set forth in Title 24, CALGreen Building Code, and the County's General Ordinance Code. For these reasons, the project would comply with state and local plans for renewable energy and energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following analysis is based, in part, on a geotechnical engineering investigation report prepared for the proposed project by Rockridge Geotechnical. The report, dated May 10, 2022, is included in this Initial Study as Appendix C.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Regional and Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to geology and soils and are applicable to the project.

East County Area Plan Policies – Geology and Soils	
Policies	Description
309	The County shall not approve new development in areas with potential for seismic and geologic hazards unless the County can determine that feasible measures will be implemented to reduce the potential risk to acceptable levels, based on site-specific analysis. The County shall review new development proposals in terms of the risk caused by seismic and geologic activity.
310	The County, prior to approving new development, shall evaluate the degree to which the development could result in loss of lives or property, both within the development and beyond its boundaries, in the event of a natural disaster.
311	The County shall ensure that new major public facilities, including emergency response facilities (e.g., hospitals and fire stations), and water storage, wastewater treatment and communications facilities, are sited in areas of low geologic risk.
314	The County shall prohibit the construction of any structure intended for human occupancy within 50 feet on either side of the Calaveras, Greenville, or Verona earthquake fault zones as defined by the Alquist-Priolo Earthquake Fault Zoning Act.
315	The County shall require that buildings be designed and constructed to withstand groundshaking forces of a minor earthquake without damage, of a moderate earthquake without structural damage, and of a major earthquake without collapse of the structure. The County shall require that critical facilities and structures (e.g., hospitals, emergency operations centers) be designed and constructed to remain standing and functional following an earthquake.

Alameda County General Ordinance Code

The County's Grading Erosion and Sediment Control in Chapter 15.36 of the General Ordinance Code requires compliance with the County's grading permit requirements including prohibiting the

discharge of grading debris into nearby stormwater facilities. Any grading on district property must be authorized by an encroachment permit issued by the Director of Public Works or by Alameda County Flood Control and Water Conservation District (Zone 7), as applicable.

4.7.1.2 *Existing Conditions*

Regional Geology

The project area is located in the Diablo Range, a northwest-trending group of hills and mountains extending southeast from Carquinez Straits along the west-side of the San Joaquin Valley to Coalinga. The project is located in a topographic depression within the Diablo Range known as the Tri-Valley area consisting of the lowlands of the San Ramon, Amador, and Livermore Valleys. The Livermore and Amador valleys are adjacent valleys, aligned east-west across the Diablo Range with the smaller San Ramon Valley extending northwest from Amador Valley along the western edge of the Diablo Range.

The Tri-Valley is an alluvial basin underlain by sedimentary rocks of the Great Valley Sequence. Alluvial deposits generally consist of a mixture of fine-grained and coarse-grained deposits and are deposited by rivers and streams, consisting of shale, sandstone, and minor conglomerate. The Tri-Valley was formed when sediments derived from surrounding Diablo Range were exposed by tectonic uplift and regression of the inland sea which previously inundated this area.

On-Site Geologic Conditions

Soils and Topography

The project site is located in a relatively flat area on the floor of the Amador Valley. The soils on-site are underlain by Pleistocene-age alluvium (Qpa). The results of on-site borings indicate most of the site (outside of the berm) is underlain by up to four feet of fill and overlays native alluvium layer that extends to the maximum depth explored of 50 feet below ground surface (bgs). The surface fill consists of medium dense clayey sand with gravel and very stiff sandy clay which presents a highly expansive near-surface native clay across the site. The fill thickness increases to more than 35 feet at the berm location. The native alluvial deposits underlying the fill are predominantly very stiff to hard fine-grained deposits interbedded with medium dense to very dense granular deposits with varying fines (very fine mud particles) to the maximum depth explored of about 50 feet bgs. The expansive soils located across the project site near-surface have the capacity to shrink or swell in response to changes in moisture content.

The project site slopes down to the south with an approximate elevation difference of 30 feet from the east to the west boundaries of the property. An approximately 20- to 30-foot-high, irregularly shaped earthen screening berm runs approximately east-west along the northern area of the site and has been in place since about 1986.[45] The existing elevations across most of the site vary from 391 to 380 feet with the crest of earthen berm varies from about an elevation of 409 to 405 feet within the project site.

[45] Based on a topographic survey of the project site, the berm is generally 20-feet above the grade at Broder Boulevard to the north and 30-feet above grade at Gleason Drive on the south side of the site.

Seismicity and Seismic Hazards

The project site is located within the seismically active San Francisco Bay region. The San Francisco Bay Area contains several faults that are capable of generating earthquakes of magnitude 7.0 or higher. The closest faults to the project site are the Mount Diablo Thrust (approximately 4.5 miles northeast of the site), Calaveras (approximately 4.8 miles west of the site), Greenville (approximately 13 miles northeast of the site), and Las Positas (approximately 13 miles southeast of the site) faults. The project site is not located within an Alquist-Priolo Earthquake Fault for any of the faults mentioned above. Refer to Appendix C for a comprehensive list of regional fault segments and seismicity.

Liquefaction

Liquefaction occurs when water-saturated soils lose structural integrity due to seismic activity. Soils that are most susceptible to liquefaction are loose to moderately dense, saturated granular soils with poor drainage. The southeast corner of the project site is located in a Liquefaction Hazard Zone, as identified in maps prepared by the California Geological Survey, and soils on-site are of medium to high plasticity.[46,]

The project's geotechnical investigation identifies soil layers susceptible to liquefaction including occasional thin (less than two feet) discontinuous layers of sand, silty sand and sandy silt between 30 and 44 feet bgs and a four-foot-thick zone of potentially liquefiable silty sand between depths of approximately 40 and 44 feet bgs. The potentially liquefiable soil layers are deep and relatively thin. Based on the thickness of layers and the overlying thickness of non-liquefiable soil, geotechnical investigation concluded the potential for surface manifestation from liquefaction is zero.

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying soil toward an open or "free" face such as an open body of water, channel, or excavation. This movement is often associated with liquefaction and commonly occurs on gentle slopes in seismically active regions. Lateral spread presents a significant hazard to the integrity of buildings and other structures. According to the project's geotechnical investigation, the potential for lateral spreading is absent at the project site because the potentially liquefiable soil layers are not continuous.

Landslides

The project site is located on the valley floor and is relatively flat (slopes on site range from zero to two percent), and is not mapped within a state-designated Landslide Hazard Zone.[47]

Groundwater

Groundwater was documented between 33 and 44 feet bgs based upon on-site borings, with historical levels indicating high ground water level in the vicinity occurring from 25 to 30 feet bgs.

[46] California Geological Survey. "Earthquake Zones of Required Investigation." Accessed July 28, 2022. https://maps.conservation.ca.gov/cgs/EQZApp/app/.
[47] Ibid.

Groundwater levels can fluctuate temporally due to a variety of factors, including seasonal variations in precipitation and temperature, and rates of groundwater extraction in the surrounding area.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments in geologic strata. Older Pleistocene sediments that are present at or near the ground surface have a high potential to contain paleontological resources. These sediments have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. The project site is situated on Pleistocene-age alluvial sediments that have the potential to yield paleontological resources.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☐	☒
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) 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?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant)**

Fault Rupture

The project site is not located in an Alquist-Priolo Earthquake Fault Zone and no known faults cross the site, therefore, fault rupture would not occur at the site. While existing faults that are currently considered active are located within 10 miles of the site (4.5 miles northeast to Mount Diablo Thrust fault and 4.8 miles west to Calaveras fault), the proposed project is located outside of their fault rupture zones.

Seismic Ground Shaking

There are several major fault lines within 30 miles of the project site that have the potential to produce earthquakes with a magnitude of 6.0 or higher. During a major earthquake on a segment of one of the nearby faults, strong to severe ground shaking is expected to occur at the project site. The ground shaking could potentially damage structures and threaten the safety of occupants in the proposed development.

The project would be required to adhere to the CBC and recommendations in the site-specific geotechnical report prepared for the project, prior to permit issuance. Additionally, the project would be required to utilize standard engineering techniques to increase the likelihood that the project could withstand minor earthquakes without damage and major earthquakes without collapse as consistent with East County Area Plan Policy 315. For these reasons, the proposed project would not result in seismic (e.g., ground shaking) or seismic-related hazards (e.g., liquefaction and lateral spreading) as it would be constructed in accordance with current design and engineering standards. As such, the existing seismic hazards on the project would not be exacerbated by the project that it would impact (or worsen) off-site conditions.

Liquefaction and Lateral Spreading

As discussed under 4.7.1.2 Existing Conditions, although the project's southeast corner of the project site is within a designated Liquefaction Hazard Zone, the project site is not subject to liquefaction or

lateral spreading. Adherence to the CBC and recommendations in the site-specific geotechnical report would reduce the risk of liquefaction of the project site to acceptable levels.

Landslides

As discussed under 4.7.1.2 Existing Conditions, the project site is not located in a designated landslide hazard zone. The project site is relatively flat and construction would not occur in or near the project site's earthen berm, nor any other steep embankments that could increase the risk of landslides affecting the site. Construction of the project would not include substantial earthwork that would create unstable slopes that would exacerbate any existing landslide risks, and there are no risks of landslides impacting the project. Accordingly, the project is not susceptible to landslides, on or off the site.

Based on the on-site geologic conditions, there is no threat from fault rupture, liquefaction, or landslide. The project would be designed in conformance to the CBC and that would reduce the risk of loss, injury, or death from strong ground shaking. Based on the above analysis, the project would not cause any substantial adverse effects associated with a geologic hazard. **(Less than Significant Impact)**

Impact GEO-2:	The project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact)**

Construction activities resulting in ground disturbance related to the required excavation and construction of the proposed fire training facility, could result in disturbance of soils. These activities would increase exposure of soil to wind and water erosion and increase sedimentation. By implementing standard grading and best management practices as required by the CBC, in addition to the site design and post-construction treatment control measures required by the MRP (as discussed in Section 4.10 Hydrology and Water Quality), erosion and sedimentation impacts would be less than significant. Compliance with General Ordinance Code 15.36 and the best management practices regarding erosion control required under Provision C.6.c of the MRP (see Section 4.7.1) would reduce potential construction-related erosion impacts to less than significant. **(Less than Significant Impact)**

Impact GEO-3:	The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Less than Significant Impact)**

As discussed under Section 4.7.1.2 Existing Conditions and Impact GEO-1, implementation of the project has no potential for on- or off-site landslides and lateral spreading. As discussed under Impact GEO-1, the project, in conformance with the CBC and recommendations in the site-specific geotechnical report would reduce the risk of seismic and seismic related hazards to acceptable levels. **(Less than Significant Impact)**

Impact GEO-4:	The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

As discussed under Section 4.7.1.2 Existing Conditions, the project site is located on highly expansive soils. Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may result over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Although expansive soils can be a hazard, adherence with the standard engineering and building practices and techniques specified in the CBC and adherence to the recommendations in the site-specific geotechnical report to reduce impacts from expansive soils to an acceptable level. The project would comply with the CBC and recommendations of the site-specific geotechnical report. **(Less than Significant Impact)**

Impact GEO-5:	The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **(No Impact)**

The project would connect to the Dublin San Ramon Services District's existing sanitary sewer systems to dispose of wastewater from the project site. Therefore, the project site would not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

As described in Section 4.7.1.2 Existing Conditions, there are no known unique geological features at the project site, and the site has been previously disturbed from development related to the Camp Parks facility. However, the project site's location on Pleistocene sediment indicates the site has the potential to contain significant nonrenewable paleontological resources. The project's excavation would extend up to 14 feet bgs and have the potential to encounter paleontological resources. The project includes the following mitigation measure to reduce impacts to paleontological resources (if encountered on-site):

Mitigation Measures:

MM GEO-6.1: Should a unique paleontological resource be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet would cease and the County General Services Agency notified immediately. A qualified paleontologist would be retained to evaluate the find and prescribe action measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while action for paleontological resources is implemented. Upon completion of the paleontological assessment, a report would be prepared and submitted to the County and, if paleontological materials are

recovered, a paleontological repository, such as the University of California Museum of Paleontology would also be submitted to the County.

The implementation of mitigation measure MM GEO-6.1 would reduce impacts to paleontological resources (if discovered on-site) to a less than significant level by halting work in the vicinity of the find, assessing the find, and implementing actions to preserve the paleontological resource. **(Less than Significant Impact with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

The following analysis is based, in part, on an Air Quality and GHG Assessment prepared for the proposed project by Illingworth & Rodkin, Inc. The report, dated August 31, 2022, is included in this Initial Study as Appendix A.

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO_2e ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2050. Plan Bay Area 2050 establishes a course for reducing per capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The

guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to energy and are applicable to the project.

East County Area Plan Policies – Energy	
Policies	**Description**
140	The County shall encourage the design of new or expanding public facilities to serve as models for the community. Features that should be incorporated into public facility design include drought tolerant landscaping, energy conserving features, public art, childcare, open space usable by workers and the public, and accessibility to all members of the community. The County shall investigate the potential for shared use of public facilities, such as joint use of neighborhood parks and school playgrounds.

Alameda County Administrative Code

Pursuant to Chapter 4.38, Title 4 of the Alameda County Administrative Code for Construction Debris Management and Green Building Practices, County projects must divert construction debris from landfills and incorporate Green Building Practices. The project would be subject to Section 4.38.030 requiring debris generated by the project be diverted from landfill via reuse or recycling. Additionally, all County projects would be required to meet a minimum LEED "Silver" rating under the LEED rating system for green building design, or a county-approved equivalent.

Alameda County Climate Action Plan

The *Alameda County Climate Action Plan for Government Services and Operation* (CAP) was adopted in 2010. The CAP outlines the strategy for reducing the county's greenhouse gas emissions and is consistent with AB 32, which directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020.

It is anticipated that the County will update the CAP in 2023 to address emission reductions beyond 2020 and set a 2030 reduction target in alignment with SB 32 and the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

4.8.1.3 *Existing Conditions*

The project site is vacant and does not contribute to GHG emissions.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

On April 20, 2022, BAAQMD adopted new thresholds of significance for operational GHG emissions from land use projects. The recently adopted BAAQMD's CEQA Air Quality Guidelines do not use quantified (numeric) thresholds. Rather, BAAQMD has presented two qualitative approaches for demonstrating that a project's GHG emissions are less than significant. If a land use project incorporates all of the design elements necessary for it to be carbon neutral by 2045, then it will contribute its portion of what is needed to achieve the State's climate goals and will help to solve the cumulative problem. As GHG emissions from the land use sector come primarily from building energy use and from transportation, these are the areas that need to be evaluated to ensure that the project can and will be carbon neutral by 2045. With respect to building energy use, this can be achieved by replacing natural gas with electric power and by eliminating inefficient or wasteful energy usage. With respect to transportation, projects need to be designed to reduce project-generated vehicle miles travelled (VMT) 15 percent below the existing VMT per employee. Alternatively, a project that is consistent with a qualified GHG reduction strategy is presumed to result in a less than significant contribution to global climate change. The County's Government Services CAP is not a qualified GHG Reduction Plan in that it does not currently address GHG emissions beyond 2020 and does not have a Compliance Checklist. Therefore, this latter approach cannot be used in this analysis.

The project would produce very low GHG emissions (refer to discussion below), and the project would also involve the relocation and modernization of the existing outdated Fire Training Facility in San Leandro. The new BAAQMD design thresholds were developed primarily to address typical residential, office, and retail development projects and were not tailored to specifically apply to a proposed fire training facility, in that the latest BAAQMD thresholds were designed primarily to address emissions from residents, office and other commercial sector employees, and customers.

For these reasons, and utilizing the discretion provided by CEQA to a lead agency in evaluating GHG emissions, the County has opted to utilize an approach that relies on quantification of the fire training facility's GHG emissions and comparing them to targets related to the state's 2030 GHG reduction goals contained in SB 32. BAAQMD has not published a quantified threshold for 2030. BAAQMD's 2017 guidelines addressing 2020 GHG emissions recommended a GHG threshold of 1,100 metric tons or 4.6 metric tons (MT) per capita. These thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. Development of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate. This Initial Study uses a "Substantial Progress" efficiency metric of 2.8 MT CO_{2e}/year/service population and a bright-line threshold of 660 MT CO_{2e}/year based on the GHG reduction goals of EO B-30-15.

The service population metric of 2.8 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels. The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 MT CO_{2e}/year threshold. Evidence published by the State indicates the AB 32 goal of reducing statewide GHG emissions to 1990 levels was met prior to 2020. Current State plans are to further reduce emissions to 40 percent below 1990 levels by 2030. Assuming statewide emissions are at 1990 levels or lower in 2020, it would be logical to reduce the BAAQMD-recommended threshold for meeting the AB 32 threshold by 40 percent to develop a threshold for 2030.

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

Construction Emissions

Short-term GHG emissions from the construction phase of the project would consist primarily of heavy equipment exhaust, worker travel, materials delivery, and solid waste disposal. Neither the Alameda County nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions. BAAQMD encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

GHG emissions from the project's construction-related activities are estimated to be approximately 671 metric tons of CO_2e for the total construction period which includes the future phase apparatus building, accounting for the on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. The project includes BAAQMD best management practices that would reduce GHG emissions during construction (refer to MM AIR-3.1 in Section 4.3 Air Quality).

Because construction would be temporary (approximately 17 months, which accounts for the future phase construction of the apparatus building) and would not result in a permanent increase in emissions, and the fact that the project includes measures that would reduce GHG emissions during construction, the project would not result in a significant GHG impact from construction emissions.

Operational Emissions

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of project. As shown in Table 4.8-1, the annual emissions resulting from operation of the project are predicted to be 88 MT of CO_{2e} in 2025 and 85 MT of CO_{2e} in 2030. The project would produce very low GHG emissions. When compared to the quantifiable bright-line threshold of 660 MT CO_{2e}/year for the year 2030, the project's 85 MT CO2e/year is well below this threshold.

Table 4.8-1: Annual Project GHG Emissions (CO_2e) in Metric Tons		
	2025	**2030**
Total (MT CO_{2e}/year)	88	85
Exceed Threshold?	No	No
Source: Illingworth & Rodkin, Inc. *Alameda County Fire Department Training Center Air Quality and Greenhouse Gas Assessment.* August 31, 2022.		

Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. **(Less than Significant Impact)**

Impact GHG-2:	The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

AB 32, SB 32, Alameda County Climate Action Plan

Alameda County adopted its Climate Action Plan (CAP) for Government Services and Operations in May 2010, which established GHG emissions reduction targets s by at least 15 percent by 2020 and 80 percent by 2050. This Government Services CAP established 16 commitments to climate protection and 80 specific action measures that provide a common vision and high-level policy direction for how the emissions reduction targets will be met and address emissions from the County's buildings, transportation, and solid waste disposal as well as broader organizational and policy issues.

As discussed under Impact GHG-1, the project's GHG emissions would not exceed the bright-line threshold of 660 MT CO_{2e}/year, which is based on the targets established by BAAQMD in response to AB 32 and SB 32. Accordingly, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and therefore would not conflict with AB 32, SB 32, or the Alameda County CAP.

2017 Clean Air Plan

As discussed in Section 3.3 Air Quality under Impact AIR-1, the project is consistent with the 2017 CAP.

The project would not conflict with AB 32, SB 32, the Alameda County CAP, or the 2017 CAP. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;

- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on the EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[48]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[49]

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[50]

[48] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed July 28, 2022. https://www.epa.gov/superfund/superfund-cercla-overview.
[49] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed July 28, 2022. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[50] California Environmental Protection Agency. "Cortese List Data Resources." Accessed July 28, 2022. https://calepa.ca.gov/sitecleanup/corteselist/.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Alameda County Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA began phasing out use of friable asbestos products in 1973 and issued a ban in 1978 on manufacture, import, processing, and distribution of some asbestos-containing products and new uses of asbestos products.[51] The EPA is currently considering a proposed ban on on-going use of asbestos.[52] National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Hazardous Materials Release Response Plans

The California Health and Safety Code (CHSC) Section 20.6.95 requires the inventorying of hazardous materials and the preparation of a hazardous materials response plans to prevent or mitigate the damage to the health and safety of persons and the environment from the release or

[51] United States Environmental Protection Agency. "EPA Actions to Proect the Public from Exposure to Asbestos." Accessed April 19, 2022. https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos.
[52] Ibid.

threatened release of hazardous materials into the workplace and environment. Under CHSC 25507(a)(1)(A), an emergency response plan to a release or threatened release of a hazardous material is required if the business handles a hazardous material or a mixture containing a hazardous material with a quantity at any one time of the year that is equal to, or greater than, 55 gallons for materials that are liquids, 500 pounds for solids, or 200 cubic feet for compressed gas.

Regional and Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to hazards and hazardous materials and are applicable to the project.

East County Area Plan Policies – Hazards and Hazardous Materials	
Policies	Description
134	The County shall not approve new development in areas with potential natural hazards (flooding, geologic, wildland fire, or other environmental hazards) unless the County can determine that feasible measures will be implemented to reduce the potential risk to acceptable levels, based on site-specific analysis.
135	The County, prior to approving new development, shall evaluate the degree to which the development could result in loss of lives or property, both within the development and beyond its boundaries, in the event of a natural disaster.
139	The County shall ensure that new major public facilities are properly sited to avoid land use conflicts and potential health and safety risks.
154	The County shall abide by the policies and Siting Criteria in the Alameda County Hazardous Waste Management Plan to ensure the responsible handling of hazardous waste in the County.
217	The County shall require that, where conflicts between a new use and the airport that could interfere with the airport's operations are anticipated, the burden of mitigating the conflicts will be the responsibility of the new use.
311	The County shall ensure that new major public facilities, including emergency response facilities (e.g., hospitals and fire stations), and water storage, wastewater treatment and communications facilities, are sited in areas of low geologic risk.
315	The County shall require that buildings be designed and constructed to withstand ground shaking forces of a minor earthquake without damage, of a moderate earthquake without structural damage, and of a major earthquake without collapse of the structure. The County shall require that critical facilities and structures (e.g., hospitals, emergency operations centers) be designed and constructed to remain standing and functional following an earthquake.
318	The County shall limit residential development to very low densities in high fire hazard zones as identified by the Fire Hazard Severity Scale (see definition in Table 1).

East County Area Plan Policies – Hazards and Hazardous Materials	
319	The County shall adhere to the provisions of the Alameda County Fire Protection Master Plan and Fire Hazard Mitigation Plan.
324	The County shall require the use of fire resistant building materials, fire-resistant landscaping, and adequate clearance around structures in "high" and "very high" fire hazard areas.

4.9.1.2 *Existing Conditions*

Site History

The project site is in the northeast area of the former 3,600-acre Camp Parks military facility that was used by the U.S. Army, Navy, and Air Force from 1942 to 1969. In 1984, the County purchased the project site, and all of the previous structures were removed prior to the acquisition. Based on a review of the historical building layout of Camp Parks, numerous buildings were located to the west of the project site on the East County Courthouse property, including a boiler house, quarters, a general detail building, a draft shed, a sales building, a ships service storage, a dispensary ward, a personnel building and military reservation bureau, a dispensary garage, a greenhouse, an administration building, a supply department building, recreation buildings and a prosthetic laboratory.[53] In 1984, the County developed the Santa Rita Jail facility directly to the north of the project. During construction, soil was moved onto the northern portion of the project site, forming the on-site earthen berm approximately 20 to 30 feet tall.

Potential On-Site Sources of Contamination

The project site is not on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 (Cortese List).

Based upon the ECHJ EIR, the project site may contain an inactive underground storage tank (UST) buried below the site and, if present, may still contain petroleum hydrocarbon byproducts.[54] Buried utility lines that could be coated with or constructed of asbestos-containing materials also may exist on site. Chemicals including pesticides, herbicides and/or heavy metal-based amendments may have been used and stored in this area, and surface releases of these compounds may have occurred during the time of prior use. Vehicle repair and maintenance may also have been conducted in this area, with petroleum hydrocarbon compounds and other chemicals.

[53] Lai & Associates. *Updated Environmental Site Assessment Report Proposed East County Hall of Justice*. September 30, 2011.

[54] The project site is included or partially included on previous environmental review in EIR, the Addendum to the EIR, and the Phase I and II Environmental Site Assessments (ESA). The relative maps showing the project limit in each document are listed below.

- ECHJ EIR. Page 3-21, Figure 3.13: East County Government Center Site Detail
- Addendum to ECHJ EIR. Page 5, Figure 1: Project Location and Vicinity
- Phase I ESA for Proposed East County Hall of Justice. Page 10, Plate 2: Historic Building Layout
- Phase II ESA for New East County Courthouse. Page 20, Figure 2: Site Plan with Boring and Stockpile Sampling Locations

The majority of the fill and earthen berm located at the property is believed to be soil excavated during the development of the adjacent Santa Rita Jail facility. The fill may contain remnants of past surface releases or artifacts and chemical residues from past source areas associated with former farming and agricultural activities, which were conducted at the adjacent jail site in the past. The Phase II Environmental Site Assessment (ESA) for the ECHJ did not evaluate the project site, however, it can be reasonable to expect that similar conditions to the excavated soil from the Santa Rita Jail facility are present on the project site as were analyzed on the ECHJ site.[55] The ECHJ Phase II ESA identified a soil sample from a soil stockpile that exceeded RWQCB Environmental Screening Levels (ESL) and DTSC California Human Health Screen Levels (CHHSL) for arsenic with low concentrations below ESL and CHHSL on the site. In addition, the Phase II ESA identified a soil sample in the earthen berm with a lead concentration exceeding CCR Title 22 hazardous waste screening levels for Soluble Threshold Limit Concentration (STLC) and Toxicity Characteristic Leachate Procedure (TCLP) criteria. A soluble extract of lead was analyzed based on STLC and TCLP reporting limits and determined to not constitute a hazardous waste.[56] The Phase II ESA concluded that the arsenic result for the soil stockpile and the lead were not representative of the general site conditions.

Off-Site Sources of Contamination

Federal and state databases were searched to determine the potential for the project site to be affected by releases from off-site sources of contamination within 1,000 feet of the project site. There are two nearby closed cleanup cases according to the Geo Tracker website, including a leaking underground storage tank (LUST) cleanup site identified as the Alameda County Hall of Justice located in the adjacent parcel to the west, and a cleanup program site identified as the Alameda County Santa Rita Emergency Services (OES) located to the north in the parcel opposite of Gleason Drive.[57,58]

Sources of contamination at the Alameda County Hall of Justice resulted from past uses of the buildings described around project area in the Camp Park military facility. Two LUSTs associated with the former boiler house were removed between 2012 and 2013 which contained oil and sludge wastes. The removal and soil cleanup of the two LUSTs received a no further action (NFA) letter from the RWQCB in February 2013.

Sources of contamination at the OES site were the result of approximately 20 gallons of diesel fuel released from a fuel tank that flowed downhill approximately 80 feet. The diesel fuel spill was collected in soil and other impacted materials into 10 drums and removed. No further action was warranted, and the case was closed in February 2022.

[55] Bureau Veritas North America, Inc. *Final Draft Phase II Environmental Site Assessment for New East County Courthouse*. November 15, 2013.
[56] Ibid.
[57] California State Water Resources Control Board. GeoTracker – ALCO Hall of Justice (T10000004293). Accessed July 29, 2022. https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000004293.
[58] California State Water Resources Control Board. Geotracker - Santa Rita OES (T10000005213). Accessed July 29, 2022. https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000005213.

Wildland Fires

The project site is in a highly urbanized area that is not within a very high fire hazard severity zone.[59,60] The nearest fire hazard area is a moderate fire hazard severity zone located approximately 0.9 miles to the northeast. Based upon the location of CalFire's Wildland-Urban Interface Fire Threat (WUI), the project site is partially within a WUI area near the northern, eastern, and southern boundaries of the site, which contributes to a moderate fire hazard.[61]

Proximity to an Airport

The project site is not located within an airport land use plan. The Livermore Municipal Airport is the closest airport, and it is located approximately three miles southeast of the project site.

[59] California Department of Forestry and Fire Protection. *Alameda County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.
[60] California Department of Forestry and Fire Protection. *Alameda County Fire Hazard Safety Zone Map – Local Responsibility Area.* September 2008.
[61] California Department of Forestry and Fire Protection. "GIS Data: Wildland-Urban Interface Fire Threat". Accessed July 29, 2022. https://frap.fire.ca.gov/mapping/gis-data/.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) 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?	☐	☒	☐	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
4) 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?	☐	☐	☐	☒
5) 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, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Construction of the project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and fluids. All hazardous materials would be transported, contained, stored, used, and disposed of in accordance with manufacturers' instructions and would be handled in compliance with all applicable standards and regulations. Construction-related hazardous materials use would be temporary, and does not constitute routine transport, use, or disposal.

After construction is completed, the proposed fire training facility would include the use of hazardous materials related to live fire training, including Class A fuels (i.e., wood, straw, and paper products). Small quantities of Class A fuels would be burned in the Class A burn rooms in the proposed training tower. Operation of the project would also require the storage of diesel fuel associated with occasional testing and use of emergency generators during power failures. Under CHSC 25507(a)(1)(A), the project would be required to establish and implement a Hazardous Materials Business Plan if the amount of diesel fuel stored on-site exceeds 55 gallons. The proposed 30 KW stand by generator will include a 54-gallon diesel belly tank. No underground fuel tanks will be included in this project. These materials would be managed in accordance with existing laws and regulations, including the National Fire Protection Association training standards, that ensure that the routine transport, storage, use, and disposal of these materials would not result in a significant hazard to the public or environment. **(Less than Significant Impact)**

Impact HAZ-2:	The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in Section 4.9.1.2 Existing Conditions, the project site was historically used as a military facility through 1969. The Phase II ESA for the ECHJ indicated the presence of limited occurrences of lead and asbestos above screening levels. The proximity of the Phase II findings and common historical use as a military base with the ECHJ indicate similar conditions may be present on site. The berm in the north of the project site, created during the construction of the Santa Rita Jail facility in 1984, was identified as containing the presence of a soil sample with lead concentration above STLC and TCLP criteria in the adjacent Alameda County Hall of Justice. However, the berm would not be impacted by the project construction and therefore would not expose construction workers, adjacent properties and future site workers to lead contamination.

Mitigation Measure:

MM HAZ-2.1: Prior to issuance of demolition or grading permits, Alameda County shall notify their grading and excavation contractor(s) of the potential presence of contaminants below the native ground surface and shall prepare and implement a Soil Handling/Management Plan (SHMP). The SHMP shall address worker notification, dust control, and include a contingency plan for unexpected conditions. Effective implementation of an SMP would reduce the potential impact associated with exposure to soil contaminants to a level of less than significant.

Mitigation measure MM HAZ-2.1 would reduce impacts regarding upset and accident conditions involving the release of hazardous materials into the environment to a less than significant level by notifying workers of potential soil contamination and implementing dust control and contingency plans should contaminated soils be encountered. **(Less than Significant Impact with Mitigation Incorporated)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

The closest schools to the project site include Chubby Cheeks Preschool and Daycare, located approximately 260 feet to the south at 4906 Winterbrook Avenue, and James Dougherty Elementary School, located approximately 0.22 miles south of the project site at 5301 Hibernia Drive. As discussed under Impact HAZ-1, the project as proposed would be in compliance with existing regulations (including CHSC 25507(a)(1)(A), East County Area Plan Policies 154), and would not result in hazardous materials impacts. As discussed in Section 4.3.2 Air Quality Impact Discussion, the project would operate live fire training exercises that would be subject to BAAQMD regulations, exemptions, and requirements that would permit the Department to produce smoke and associated odors in performance of official duty for fire training exercises. For this reason, the project would not significantly impact the nearby preschool. **(Less than Significant Impact)**

Impact HAZ-4:	The project would not 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, create a significant hazard to the public or the environment. **(No Impact)**

As discussed in Section 4.9.1.2 Existing Conditions, the project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. **(No Impact)**

Impact HAZ-5:	The project would not be 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. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

As discussed in Section 4.9.1.2 Existing Conditions, the project site is not located within an airport land use plan or within two miles of an airport. While the Livermore Municipal Airport is located three miles southeast of the project site, smoke would not be expected to interfere with air traffic. Therefore, the proposed project would not result in safety hazard or noise impacts due to airport activities. **(No Impact)**

Impact HAZ-6:	The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

Alameda County has an Emergency Operations Plan (EOP) that outlines the County's framework for managing a variety of hazards such as natural disasters and human-caused events. The project would be designed in accordance with current building and fire codes and regulations and would not impair implementation of or physically interfere with the EOP, including its operating procedures. In addition, the project would provide facilities for the County's fire protection services to train and support the County's emergency management and operations, including a classroom building, training tower, SCBA room, and wildland fire training area. The project would serve the County to

continue providing adequate response times for police and fire protection services emergencies, consistent with East County Area Plan Policies 139 and 315. Therefore, the project would not interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

Impact HAZ-7:	The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(Less than Significant Impact)**

As discussed under Section 4.9.1.2 Existing Conditions, the project site is located within a wildland urban interface area, however it is not within very high fire hazard severity zone. The project would be built with fire resistant landscaping that would minimize the risk to structures and people on-site. The project would be built to provide training for fire protection services, including an area used for wildland fire training area, and therefore contribute to reducing the risk of wildland fire in the County. Additionally, the project's proximity as adjacent to Alameda County Fire Station 17 would further reduce the potential risk of wildland fire. Therefore, the project would not expose people or structures, either directly or indirectly, to an increased significant risk of loss, injury, or death involving wildland fires. **(Less than Significant Impact)**

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Under Section 303(d) of the federal Clean Water Act, the SWRCB and RWQCBs are required to identify impaired surface water bodies that do not meet water quality standards and develop total maximum daily loads (TMDLs) for contaminants of concern. The list of the state's identified impaired surface water bodies, known as the "303(d) list" can be found on the on the RWQCB's website.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[62] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 sf or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in sub watersheds or catchment areas that are greater than or equal to 65 percent impervious.

Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to hydrology and water quality and are applicable to the project.

[62] MRP Number CAS612008

East County Area Plan Policies – Hydrology and Water Quality	
Policies	**Description**
277	The County shall work with the Alameda County Flood Control and Water Conservation District (Zone 7) to provide for development of adequate storm drainage and flood control systems to serve existing and future development.
280	The County shall regulate new development on a case-by-case basis to ensure that, when appropriate, project storm drainage facilities shall be designed so that peak rate flow of storm water from new development will not exceed the rate of runoff from the site in its undeveloped state.
282	The County shall encourage use of natural or nonstructural storm water drainage systems to preserve and enhance the natural features of a site.
306	The County shall protect surface and groundwater resources by: • preserving areas with prime percolation capabilities and minimizing placement of potential sources of pollution in such areas; • minimizing sedimentation and erosion through control of grading, quarrying, cutting of trees, removal of vegetation, placement of roads and bridges, use of off-road vehicles, and animal-related disturbance of the soil; • not allowing the development of septic systems, automobile dismantlers, waste disposal facilities, industries utilizing toxic chemicals, and other potentially polluting substances in creek side, reservoir, or high groundwater table areas when polluting substances could come in contact with flood waters, permanently or seasonally high groundwaters, flowing stream or creek waters, or reservoir waters; and, • avoiding establishment of excessive concentrations of septic systems over large land areas.
316	The County shall require new residential, public, commercial, and industrial development to have protection from a 100-year flood.

Alameda County General Ordinance Code

The County's Stormwater Management and Discharge Control in Chapter 13.08 of the General Ordinance Code requires compliance with Federal Clean Water Act, the State Porter/Cologne Act, and the County's NPDES permit. This includes regulating the design and construction of permanent post-development stormwater quality measures and controls, including the application of site design, source control, stormwater treatment, and hydromodification management.

The County's Grading Erosion and Sediment Control in Chapter 15.36 of the General Ordinance Code requires compliance with the County's grading permit requirements including prohibiting the discharge of grading debris into nearby stormwater facilities. Any grading on district property must be authorized by an encroachment permit issued by the Director of Public Works or by Zone 7, as applicable.

Alternative Groundwater Sustainability Plan

The Alternative Groundwater Sustainability Plan (AGSP) for the Livermore Valley Groundwater Basin fulfills the state requirement to have an adopted Groundwater Sustainability Plan (GSP) in place to demonstrate sustainable management of the groundwater resource. Zone 7 was approved for an Alternative GSP for the Livermore Valley Basin in July 2019. The approved AGSP demonstrates a 10-year sustainable yield analysis of basin conditions showing how operations would not result in undesirable results such as subsidence, saltwater intrusion, or degraded water quality.[63]

4.10.1.2 *Existing Conditions*

The project site is predominantly pervious with open dirt and compacted gravel areas. Pervious areas on-site consist of primarily of grassy areas, with a compacted gravel area on the south of the project site leading to the southeast frontage on Gleason Drive, and an earthen berm along the northern frontage of the project site on Broder Boulevard. The area proposed for development on the project site has 139,630 sf of pervious surfaces (approximately 100 percent of the site).

The project site is served by the Dublin San Ramon Services District which provides water delivery and sewer service, the City of Dublin for storm drain service, and Zone 7 for groundwater management and flood control.

Hydrology and Drainage

The closest creek to the project site is Tassajara Creek, located approximately 0.3 miles east of the site. The project site is located in the Arroyo Mocho Canal watershed, an approximately 39 square mile area which drains to the Arroyo De Laguna canal via a network of connecting stormwater pipes.[64]

Stormwater from the project site percolates into the ground on pervious surfaces and sheet flows on nearby impervious surfaces southward where it is collected by storm drain inlets and conveyed into 24-inch storm drain on Gleason Drive. Stormwater is then conveyed north through the City of Dublin's drainage system and discharged, untreated, into the Arroyo Laguna canal and eventually flows to the San Francisco Bay.[65]

Groundwater

The project site is located on the northern edge of the Livermore Valley groundwater subbasin. Based upon a map of the AGSP Staff Report on Livermore Valley Groundwater Basin, the project is within a fringe management area.[66] Groundwater is likely present at the project site at depths of

[63] California Department of Water Resources. "Alternatives to Groundwater Sustainability Plans". Accessed August 10, 2022. https://water.ca.gov/Programs/Groundwater%20Management/SGMA-Groundwater-Management/Alternatives.
[64] Alameda County Flood Control. Explore Watersheds – Arroyo Mocho Canal Watershed. Accessed August 1, 2022. https://acfloodcontrol.org/the-work-we-do/resources/#explore-watersheds.
[65] Zone 7 Water Agency. Service Area – Water Ways Map. Accessed August 1, 2022. https://www.zone7water.com/service-area.
[66] A Fringe Management Area does not use groundwater for municipal supply nor is it managed for groundwater storage in this area, primarily due to thinner alluvium layer resulting in poor groundwater storage, production, and

approximately 25 feet to 44 feet bgs.[67] Water levels on-site may vary depending on seasonal precipitation, irrigation practices, and other climate conditions.

Flooding

The project site is not located in a 100-year floodplain, according to FEMA Flood Insurance Rate Maps for Alameda County.[68] The project site is in a Flood Zone X (unshaded), which is an area with minimal flood hazard. The nearest flood hazards zone is in Tassajara Creek approximately 0.3 miles to the east as a 100-year floodplain and regulatory floodway.

Seiches, Tsunamis, and Mudflows

A seiche is defined as a standing wave generated by rapid displacement of water within an enclosed body of water (such as a reservoir, lake, or bay) due to an earthquake that triggers land movement within the water body or land sliding into or beneath the water body. There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche.

A tsunami is a large tidal wave caused by an underwater earthquake or volcanic eruption. Tsunamis affecting the Bay Area can result from offshore earthquakes within the Bay Area. Tsunami inundation maps for Alameda County show that the project site is not within a tsunami inundation area.[69]

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The project area is flat and there are no hillsides in proximity that would affect the site in the event of a mudflow.

quality. Source: California Department of Water Resources. *Alternative Assessment Staff Report Livermore Valley Basin*. July 17, 2019.

[67] Rockridge Geotechnical. *Geotechnical Engineering Investigation for Alameda County Fire Department Training Facility*. May 20,2022.

[68] Federal Emergency Management Agency. Flood Insurance Rate Map: Alameda County Panel 38 of 830. Map Number 06085C0038H. May 18, 2009.

[69] California Geological Survey. *Alameda County Tsunami Inundation Maps.* Accessed August 1, 2022. https://www.conservation.ca.gov/cgs/tsunami/maps/alameda.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Impacts

Construction activities, such as grading and excavation, have the potential to result in temporary impacts to surface water quality in adjacent waterways. When disturbance to the soil occurs, sediments may be dislodged and discharged into the storm drainage system when surface runoff flows across the site. To comply with the County's Grading Erosion and Sediment Control (Chapter

15.36), the project would prohibit discharge of grading debris into nearby storm drains and require an encroachment permit authorized by the Director of Public Works or by Zone 7. The proposed project would disturb 3.2 acres of soil, which is above the one-acre threshold requiring conformance with the Construction General Permit. As such, an NOI must be submitted to the RWQCB and a SWPPP must be developed to establish methods for controlling discharge associated with construction activities. The project, therefore, would not result in significant construction-related water quality impacts.

Post-Construction Impacts

The project would add or replace more than 10,000 sf of impervious surface area and would therefore require conformance with Provision C.3 of the MRP and the County's Stormwater Management and Discharge Control (Chapter 13.08). To comply with Provision C.3 and General Ordinance Code 13.08, the project includes landscaping, and the treatment control measures (i.e., landscaped area, infiltration trench, bioretention areas or planters, and compacted gravel) to reduce the rates, volumes, and pollutant loads of runoff from the project, as shown in Figure 3.3-4. As discussed in Section 3.3.4, operation of the project includes a wildland training area. Ground disturbing activities would be limited to driving vehicles, dragging hoses, and weeding. Therefore, the project would have a less than significant impact on post-construction water quality.

With compliance with the Construction General Permit, County's Grading Erosion and Sediment Control Ordinance, and Provision C.3 of the MRP, the proposed project would result in a less than significant impact on water quality during project construction and operation. **(Less than Significant Impact)**

Impact HYD-2:	The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Less than Significant Impact)**

Groundwater has been encountered at approximate depths of 25 to 44 feet bgs. Development of the project would include excavation to construct the footing for new buildings, as well as trenching for new utility connections. Project-related grading and excavation, which would extend 14 feet bgs, and would not encounter the water table. As such, the project would not require dewatering during construction or operation.

The project would rely on existing sources of water and the City of Dublin's existing water delivery system. Although the project would increase the demand for water within the City, this increase would not result in a substantial depletion of aquifers relied upon for local water supplies (see discussion of water demand and supply under Impact UTL-2 in Section 4.19 Utilities and Service Systems). As discussed in Section 4.10.1.2 Existing Conditions, the project is on the edge of the groundwater basin in the fringe management zone and therefore would not be located within or adjacent to any groundwater recharge facilities used by Zone 7.[70] Implementation of the project would increase the amount of impervious surfaces on-site compared to existing conditions, however, storm water would be directed to pervious surfaces that would continue to facilitate rainfall

[70] Zone 7 Water Agency. Service Area – Facilities Map. Accessed August 1, 2022. https://www.zone7water.com/service-area.

infiltration on-site to nearby groundwater resources. For these reasons, the project would not substantially deplete groundwater supply or interfere with groundwater recharge. **(Less than Significant Impact)**

Impact HYD-3:	The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

There are no waterways on-site. As discussed under Section 4.10.1.2 Existing Conditions, the project site is mostly pervious. The project would reduce the amount of pervious surface area of the site's development area (3.2 acres) by 2.4 acres (or approximately 75 percent) from 3.2 acres to 0.80 acres. The project would include site design and post-construction treatment control measures in compliance with the MRP (as previously discussed under Impact HYD-1) and the County's permanent stormwater control standards (General Code Ordinance 13.08).

The project would increase runoff volumes compared to existing conditions; however, stormwater runoff would be collected, filtered, and processed through proposed stormwater control facilities. As discussed in Impact HYD-1, the project would reduce impacts associated with stormwater runoff. With the implementation of these stormwater control measures, it is not anticipated that the project would exceed the capacity of existing or planned stormwater drainage systems.

Based on the above discussion, the project would not substantially alter the drainage pattern of the site or area. **(Less than Significant Impact)**

Impact HYD-4:	The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

As discussed under Impact HAZ-1 in Section 4.9 Hazards and Hazardous Materials, in addition to Class A fuels that will be stored and used within the Class A burn rooms, the project would include fuel for the generator and the 54-gallon diesel sub-base fuel tank. The project would store limited amounts of cleaning supplies, maintenance chemicals, and herbicides and pesticides for landscape maintenance would be routinely stored or used by the project. As discussed in Section 4.10.1.2, the project site is within Flood Zone X, where there is a minimal chance of flooding. Due to the project site's inland location and distance from large bodies of water (i.e., the San Francisco Bay), it is not subject to seiche or tsunami hazards.

Additionally, the project would be required to comply with Provision C.3 of the MRP requirements to reduce the impacts of stormwater runoff on post-construction water quality (refer to Impact HYD-1. For these reasons, the project would result in a less than significant risk for releasing pollutants due to inundation. **(No Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

San Francisco Bay Basin Plan

As discussed under Impact HYD-1, the project would comply with Provision C.3 of the MRP. Thus, the project would not conflict with or obstruct implementation of the San Francisco Bay Basin Plan.

2021 Groundwater Management Plan

As discussed in 4.10.1.2 Existing Conditions , the project site is within the Livermore Valley groundwater subbasin, and this subbasin has not been identified in the GMP as being subject to groundwater overdraft.[71] Implementation of the project would not interfere with any actions set forth by Zone 7 in its AGSP in regards to groundwater recharge, transport of groundwater, and/or groundwater quality. In addition, as discussed under Impact HYD-2, the project would not substantially decrease groundwater supplies or substantially interfere with groundwater recharge. **(Less than Significant Impact)**

[71] Zone 7 Water Agency. Alternative Groundwater Sustainability Plan for the Livermore Valley Groundwater Basin. December 2021.

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to land use and planning and are applicable to the project.

East County Area Plan Policies – Land Use and Planning	
Policies	**Description**
139	The County shall ensure that new major public facilities are properly sited to avoid land use conflicts and potential health and safety risks.
140	The County shall encourage the design of new or expanding public facilities to serve as models for the community. Features that should be incorporated into public facility design include drought tolerant landscaping, energy conserving features, public art, child care, open space usable by workers and the public, and accessibility to all members of the community. The County shall investigate the potential for shared use of public facilities, such as joint use of neighborhood parks and school playgrounds.
143	The County shall ensure that all new uses approved near the Santa Rita Jail in Eastern Dublin are compatible with jail operations.

4.11.1.2 *Existing Conditions*

The 5.2-acre site is located within the City of Dublin, in the planning area of the East Dublin Specific Plan. The project site is located in an urban area and surrounded by government buildings to the west, north, and east and single-family residences to the south. The 3.2-acre project site is proposed within a larger 5.2-acre site bordered by Gleason Drive to the south, Broder Boulevard to the north and extends to the corner with Madigan Road.

The site is currently vacant, however was historically developed as part of the Camp Parks Military Facility. Surrounding land uses include Alameda County Santa Rita Jail facility and Alameda County Emergency Services (OES) to the north, ECHJ to the west, the Alameda County Fire Station 17 and California Highway Patrol to the east, and residential uses to the south across Gleason Drive (refer to Figure 2.4-3).

The project site has a Planned Development (PD) General Plan land use designation and zoning (RESO. 105-85) which allow governmental uses on the subject property. The PD includes approximately 2,700 acres of publicly owned land in the City of Dublin.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☒	☐
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Impact LU-1: ***The project would not physically divide an established community.*** **(Less than Significant Impact)**

A physical division of an established community typically refers to the construction of a physical feature (such as a wall, roadway, or railroad tracks) or the removal of a means of access (such as a local roadway or bridge) that would impair mobility within an existing community or between communities.

The project would redevelop the site with a new fire training facility. The project would not construct physical features or close an existing street that would impair mobility. For these reasons, the project would not physically divide an established community. **(Less than Significant Impact)**

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

The proposed fire training facility is allowed under the PD General Plan land use designation and zoning (Resolution 105-85). As discussed within the individual sections of this Initial Study, the project would not cause a significant environmental impact due to a conflict with plans, policies, or regulations adopted for the purpose of avoiding or mitigation an environmental effect. For the reasons discussed above, the impact is less than significant. **(Less than Significant Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The project site exists on alluvial soils in the Livermore Valley formed from erosion of the nearby hills of the Diablo Range. As a result of this process, the topography of the project area is relatively flat (other than the man-made berm on the northern portion of the site with soils derived from the construction of the adjacent Hall of Justice) and there are no significant mineral resources within the project vicinity.[72]

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒

Impact MIN-1: The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

[72] United States Geological Survey. Mineral Resources Online Spatial Data – Mineral Resources. Accessed August 1, 2022. https://mrdata.usgs.gov/general/map-us.html#home.

As discussed in Section 4.12.1.2 Existing Conditions, there are no mineral resources on the project site. Therefore, development of the project would not result in the loss of availability of a mineral resource. **(No Impact)**

Impact MIN-2:	The project would not 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. **(No Impact)**

There are no identified mineral resource recovery sites located on-site. Therefore, the project would not result in the loss of a locally important mineral resource recovery site. **(No Impact)**

4.13 NOISE

The following discussion is based on a Noise and Vibration Assessment completed by Illingworth & Rodkin, Inc. The report dated August 11, 2022, is attached as Appendix D.

4.13.1 Environmental Setting

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[73] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

4.13.1.1 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne

[73] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

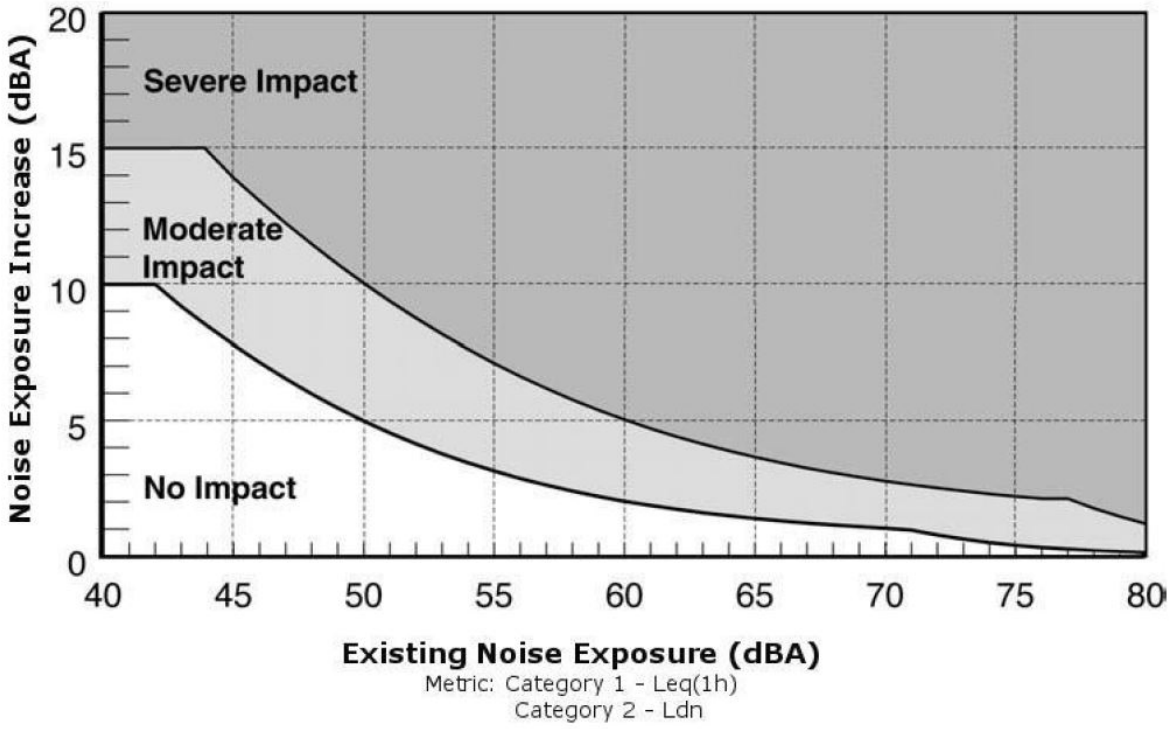
vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria			
Land Use Category	**Groundborne Vibration Impact Levels (VdB inch/sec)**		
	Frequent Event	**Occasional Events**	**Infrequent Events**
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83
Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.			

Federal Transit Administration Cumulative Noise Impact Criteria

The FTA has established criteria to compare the total noise levels resulting from a project plus the ambient noise levels to the ambient noise levels existing without the project, as shown below in Table 4.13-2.

Table 4.13-2: FTA Cumulative Noise Impact Criteria



The FTA criteria are presented by land use (refer to Table 4.13-1 above). Category 1 receivers are daytime only uses and Category 2 receivers are 24-hour uses such as residences. The "Moderate Impact" zone represents the threshold of measurable annoyance. For temporary construction noise, the upper boundary of the "Moderate Impact" zone is used to define a substantial temporary noise increase above ambient conditions. For example, if the existing noise were measured to be 60 dBA Ldn/CNEL, and the combined noise including the construction of the project would exceed 65 dBA Ldn/CNEL, the increase in the ambient would be considered substantial, resulting in significant impact.

State and Local

California Green Building Standards Code

For commercial uses, Cal Green (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to noise and are applicable to the project.

East County Area Plan Policies – Noise	
Policies	Description
288	The County shall endeavor to maintain acceptable noise levels throughout East County.
289	The County shall limit or appropriately mitigate new noise-sensitive development in areas exposed to projected noise levels exceeding 60 Db based on the California Office of Noise Control Land Use Compatibility Guidelines.
290	The County shall require noise studies as part of development review for projects located in areas exposed to high noise levels and in areas adjacent to existing residential or other sensitive land uses. Where noise studies show that noise levels in areas of existing housing will exceed "normally acceptable" standards (as defined by the California Office of Noise Control Land Use Compatibility Guidelines), major development projects shall contribute their prorated share to the cost of noise mitigation measures such as those described in Program 104.

Alameda County Noise Ordinance

The Alameda County Noise Ordinance, contained in Chapter 6.60 of the County Code, establishes regulations to control unnecessary, excessive and annoying noise in the county, maintain quiet in areas which exhibit low noise levels currently, and contains programs to reduce noise levels in areas where noise levels are above acceptable levels. Noise level standards for noise-sensitive properties

(including residential) are shown in Table 4.13-2. The noise level limits are adjusted to account for higher ambient levels. Noise levels generated by construction activities are exempted from these standards provided construction occurs during specified times (7:00 a.m. to 7:00 p.m. weekdays, 8:00 a.m. to 5:00 p.m. weekends).

Table 4.13-3: Alameda County Noise Level Standards (dBA)

Category	Cumulative Number of Minutes in any one hour time period	Daytime 7 a.m. to 10 p.m.	Nighttime 10 p.m. to 7 a.m.
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Notes:
Receiving Land Use - Single- or Multiple-Family Residential, School, Hospital, Church, or Public Library Property
Source: Illingworth& Rodkin, Inc. *Alameda County Fire Training Center Project Noise and Vibration Assessment.* August 11, 2022.

4.13.1.2 *Existing Conditions*

The project site is in an urban area and is surrounded by government buildings to the west, north, and east and single-family residences to the south. A large tree lined earthen berm exists along the northern boundary of the site.

The noise environment at the site and in the surrounding area results primarily from local vehicular traffic along Gleason Drive. A noise monitoring survey consisting of one long-term (LT-1) and two short-term (ST-1 through ST-3) noise measurements was conducted between Thursday, June 23, 2022, and Monday, June 27, 2022 to quantify existing noise levels. All measurement locations are shown in Figure 4.13-1.

Long-term noise measurement LT-1 was made approximately 50 feet from the centerline of Gleason Drive to represent typical noise levels at the nearest residences. Hourly average noise levels at LT-1 typically ranged from 59 to 69 dBA Leq during daytime hours (7:00 a.m. and 10:00 p.m.) and from 46 to 61 dBA Leq during nighttime hours (10:00 p.m. and 7:00 a.m.). The Community Noise

NOISE MEASUREMENT LOCATIONS | FIGURE 4.13-1

Equivalent Level was 68 dBA CNEL on Friday, 66 dBA CNEL on Saturday, and 65 dBA CNEL on Sunday.

Short-term noise measurement ST-1 was also made on Thursday, June 24, 2022, between 10:40 a.m. and 10:50 a.m. ST-1 was made approximately 95 feet north of the centerline of Gleason Drive at the western property line of the site. During the measurement, 66 vehicles (62 cars, 2 buses, 1 truck, and 1 motorcycle) passed the site on Gleason Drive. Typical local traffic noise levels from ranged from 50 to 62 dBA, while intermittent traffic noise levels from Dam Road Extension ranged from 53 to 79 dBA, and the 10-minute Leq was 61 dBA.

Short-term noise measurement ST-2 was also made on Thursday, June 24, 2022, between 10:40 a.m. and 10:50 a.m. ST-2 was made at the northwest corner of the site, approximately 500 feet north of the centerline of Gleason Drive. During the measurement, vehicle traffic along Gleason Drive was the primary noise source. Distant firearm training activities were audible from the northwest. Typical traffic noise levels ranged from 45 to 64 dBA, while firearm training activities produced noise levels ranging from 44 to 47 dBA. The 10-minute Leq measured at ST-2 was 50 dBA. Results of the short-term measurements are summarized in Table 4.13-4.

Table 4.13-4: Summary of Short-Term Noise Measurements (dBA)

Noise Measurement Location	Date, Time	Measured Noise Level, dBA					
		L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}
ST-1: ~95 feet north of the centerline of Gleason Drive along west boundary of site	6/23/2022, 10:40-10:50	79	70	65	55	45	61
ST-2: ~500 feet north of the centerline of Gleason Drive along west boundary of site	6/23/2022, 10:40-10:50	65	63	52	46	43	50

Source: Illingworth& Rodkin, Inc. *Alameda County Fire Training Center Project Noise and Vibration Assessment.* August 11, 2022.

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
2) Generation of excessive ground-borne vibration or groundborne noise levels?	☐	☐	☒	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The following criteria were used to evaluate the significance of environmental noise resulting from the project:

- A significant noise impact would be identified if the project would generate a substantial temporary or permanent noise level increase over ambient noise levels at existing noise-sensitive receptors surrounding the project site and that would exceed applicable noise standards presented in the General Plan or Municipal Code at existing noise-sensitive receptors surrounding the project site.
    - A significant temporary noise impact would be identified if construction noise levels would increase ambient noise levels resulting in measurable annoyance. The noise increase threshold adjusts based on the ambient noise level with the expectation that communities already exposed to high levels of noise can only tolerate a small increase. In contrast, if the existing noise levels are low, it is reasonable to allow a greater change in the community noise. Refer to Table 4.13-2 above.
    - A significant permanent noise level increase would occur if the project would result in: a) a noise level increase of 5 dBA CNEL or greater, with a future noise level of less than 60 dBA CNEL, or b) a noise level increase of 3 dBA CNEL or greater, with a future noise level of 60 dBA CNEL or greater.
    - A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan or Municipal Code.
- A significant impact would be identified if the construction of the project would generate excessive vibration levels surrounding receptors. Groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to normal buildings.

Impact NOI-1:	The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Less than Significant Impact with Mitigation Incorporated)**

Permanent Operational Noise Impacts

A significant permanent noise level increase would occur if the project would result in: a) a noise level increase of 5 dBA CNEL or greater, with a future noise level of less than 60 dBA CNEL, or b) a noise level increase of 3 dBA CNEL or greater, with a future noise level of 60 dBA CNEL or greater.

Project-Generated Traffic Noise

Based on a review of the Transportation Analysis prepared for the project (refer to Appendix E), the project would generate, on average, approximately 56 daily trips, with 10 trips occurring during the AM peak hour and 9 trips occurring during the PM peak hour. The City of Dublin reports that existing average daily traffic volumes (ADT) along Gleason Drive are approximately 8,797 ADT. The addition of 56 daily trips, with 10 trips occurring during the AM peak hour and 9 trips occurring during the PM peak hour, would not measurably increase CNEL noise levels at receptors along the roadways serving the site. Similarly, infrequent and intermittent vehicle noise in the parking lot, opposite Gleason Drive from the nearest sensitive residential receptors to the south, would not measurably increase CNEL noise levels resulting from Gleason Drive traffic.

Fire Training Operations

The predominant noise-generating component of the project would be the five-level training tower located in the northwestern portion of the project site. The training tower building would facilitate live fire training and include simulation rooms for smoke and burning scenarios and equipment storage.

Noise measurements of training activities were made on June 24, 2022 at the Alameda County Fire Department Training Division's Lola Street facility (located in San Leandro) during graduation exercises. Noise sources observed during the event primarily included the response to the scene (three fire engines passed within 25 feet of the sound level meter using emergency sirens and horns), the operation of cutting tools and pumps during fire control training, the operation of tools during vehicle extrication exercises, public address commentary during the event, and spectators voices and applause. The average noise level measured at 150 feet from the center of the training demonstration area was 72 dBA Leq when including the emergency sirens and horns and 62 dBA Leq when excluding these sounds from the dataset. The CNEL noise level at 150 feet, assuming similar activities occurring between 9:00 a.m. and 9:00 p.m., is 70 dBA during driver operations training using emergency sirens and horns, and 60 dBA CNEL during various other trainings using cutting tools, pumps, and extraction tools. These data credibly represent worst-case noise levels emanating from the fire training facility at a distance of 150 feet.

Training activities would occur approximately 400 feet from the nearest residential land uses located south of Gleason Drive. The majority of training activity noise at or near the ground level would be shielded by the classroom building and future apparatus building, which is conservatively assumed to provide 10 dBA of noise reduction. When accounting for the noise attenuation provided by additional distance and intervening noise barriers, noise levels received at the nearest residences to the south across Gleason Drive are calculated to range from 41 to 51 dBA CNEL, which would not exceed "normally acceptable" noise and land use compatibility thresholds for residential land uses. Typical weekday noise levels measured at LT-1 were 68 dBA CNEL. Although sounds would at times be

audible, the CNEL noise levels at the nearest residential land uses to the south of the site would not measurably increase as a result of the project.

Training activities would occur approximately 500 feet from the nearest residential land uses located southwest of the site along Gleason Drive that would not be shielded by intervening buildings. When accounting for the noise attenuation provided by additional distance only, noise levels received at the nearest residences to the south having direct line of sight to training activities are calculated to range from 50 to 60 dBA CNEL, which would not exceed "normally acceptable" noise and land use compatibility thresholds for residential land uses. As noted above, typical weekday noise levels measured at LT-1 were 68 dBA CNEL, therefore, CNEL noise levels at these receptors could increase by 0 to 1 dBA with the project. Although sounds would at times be audible, the CNEL noise levels at the nearest unshielded residential land uses to the south of the site would not be substantially increased as a result of the project.

The Alameda County Noise Ordinance establishes noise level standards for noise-sensitive properties including residential land uses. The noise level limits for Categories 1 to 5 are adjusted upward to account for higher ambient levels. The project proposes training activities during the daytime only; therefore, only the daytime noise limits, i.e., between 7:00 a.m. and 10:00 p.m., would apply (refer to Table 4.13-3 above).

Table 4.13-5 summarizes the worst-case noise levels emanating from the fire training facility during training activities. Noise levels are predicted at shielded receptors 400 feet from the proposed activities and at unshielded receptors 500 feet from the proposed activities. In all cases, operational noise levels would be below the noise limits adjusted to reflect ambient conditions measured at LT-1.

Table 4.13-5: Calculated Worst-Case Noise Levels from Training Activities (dBA)

Category	Noise Limit	Adjusted Noise Limit	Operational Noise Level at 400 feet (shielded)	Exceeds Limit?	Operational Noise Level at 500 feet (unshielded)	Exceeds Limit?
1	50	57	44	No	52	No
2	55	64	46	No	54	No
3	60	70	49	No	57	No
4	65	75	65	No	73	No
5	70	81	66	No	74	No

Source: Illingworth& Rodkin, Inc. *Alameda County Fire Training Center Project Noise and Vibration Assessment.* September 14, 2022.

Construction Noise Impacts

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Most demolition and construction noise fall within the range of 80 to 90 dBA at a distance of 50 feet from the source.

Construction noise levels were calculated using the FHWA'S Roadway Construction Noise Model (RCNM), assuming the two loudest pieces of equipment would operate simultaneously. Noise levels were calculated at distances of 235 and 285 feet to represent the California Highway Patrol and Fire Station 17 to the east, 360 feet to represent the residences to the south, and 1,000 feet to represent the Hall of Justice located to the west. Estimated construction noise levels are summarized in Table 4.13-5.

Table 4.13-6: Estimated Construction Noise Levels at Nearby Land Uses

Phase of Construction	Calculated Hourly Average Noise Levels, L_{eq} (dBA)				
	Noise Level at 50 feet	**Noise Level at 235 feet**	**Noise Level at 285 feet**	**Noise Level at 360 feet**	**Noise Level at 1,000 feet**
Demolition	85	72	70	68	59
Site Preparation	84	71	69	67	58
Grading/ Excavation	85	72	70	68	59
Trenching/Foundation	82	69	67	65	56
Building –Exterior	82	69	67	65	56
Building – Interior/ Architectural Coating	74	61	59	57	48
Paving	83	70	68	66	57
Site Utilities	82	69	67	65	56
Average Construction CNEL	**79**	66	64	62	53

Source: Illingworth& Rodkin, Inc. *Alameda County Fire Training Center Project Noise and Vibration Assessment.* September 14, 2022.

Table 4.13-6 summarizes the minimum distances between construction sites and receptors in various ambient noise environments. According to the FTA Cumulative Noise Impact Criteria, in relatively quiet noise environments (i.e., 55 dBA Ldn/CNEL), construction noise can increase ambient noise levels by up to 7 dBA CNEL before a substantial temporary noise increase would occur. Construction activities occurring within 400 feet (as measured from the acoustic center of the construction site) of sensitive receptors in relatively quiet noise environments would result in a substantial temporary noise increase above ambient conditions. Conversely, in relatively noisy environments (i.e., 75 dBA Ldn/CNEL), construction noise can increase ambient noise levels by up to 2 dBA CNEL before a substantial temporary noise increase would occur. Construction activities occurring within 100 feet of sensitive receptors in relatively noisy environments would result in a substantial temporary noise increase above ambient conditions.

Table 4.13-7: Noise Levels and Distances Defining Noise Impacts Due to Construction				
Existing Ambient Noise Level (L_{dn}/CNEL)	**Maximum Allowable Construction Noise Level (L_{dn}/CNEL)**	**Overall Noise Level (L_{dn}/CNEL)**	**Increase Above Ambient (L_{dn}/CNEL)**	**Minimum Distance to Avoid Substantial Temporary Noise Increase (feet)**
55	61	62	7	400
60	63	65	5	315
65	66	69	4	225
70	69	73	3	160
75	73	77	2	100
Source: Illingworth& Rodkin, Inc. *Alameda County Fire Training Center Project Noise and Vibration Assessment.* September 14, 2022.				

Existing weekday noise levels at the nearest sensitive residential land uses to the south, a minimum of 360 feet from the acoustic center of the construction site, are 68 dBA CNEL. At 360 feet, average construction noise levels are estimated to be 64 dBA CNEL. When adding the construction noise to ambient noise levels, overall noise levels are calculated to reach 69 dBA CNEL.[74] The 1 dBA CNEL noise increase would not be considered substantial.

Existing weekday noise levels at the East County Hall of Justice are 55 dBA CNEL. At the East County Hall of Justice, approximately 1,000 feet to the northwest, average construction noise levels are estimated to be 53 dBA CNEL. When adding the construction noise to ambient noise levels, overall noise levels are calculated to reach 57 dBA CNEL.[75] A 2 dBA CNEL noise increase would not be considered substantial.

Existing weekday noise levels at the California Highway Patrol are 61 dBA CNEL. At 235 feet, average construction noise levels are estimated to be 66 dBA CNEL. When adding the construction noise to ambient noise levels, overall noise levels are calculated to reach 67 dBA CNEL.[76] A 6 dBA CNEL noise increase would be considered substantial.

Existing weekday noise levels at the Fire Station are 55 dBA CNEL. At the existing fire station, approximately 285 feet to the northeast, average construction noise levels are estimated to be 64 dBA CNEL. When adding the construction noise to ambient noise levels, overall noise levels are calculated to reach 65 dBA CNEL at the Fire Station.[77] A 10 dBA CNEL noise increase would be considered substantial.

[74] When two decibel values differ by four to nine dB, one db is added to the higher value (i.e., 68 dBA +1 db = 69 dbA),
[75] When two decibel values differ by two to three dB, two db is added to the higher value (i.e., 55 dBA +2 db = 57 dbA),
[76] When two decibel values differ by four to nine dB, one db is added to the higher value (i.e., 66 dBA +1 db = 67 dbA),
[77] When two decibel values differ by four to nine dB, one db is added to the higher value (i.e., 64 dBA +1 db = 65 dbA),

Therefore, construction noise levels would result in a temporary, substantial noise increase at the California Highway Patrol and Fire Station 17.

Mitigation Measures:

MM NOI-1.1: A Construction Noise Management Plan shall be prepared by the construction contractor and implemented prior to the start of and throughout construction to reduce noise impacts on the nearby CHP building and fire station. The plan shall establish the procedures the contractor shall take to reasonably minimize construction noise at the nearby existing land uses. The plan shall include, but not be limited to, the following measures to reduce construction noise levels as low as practical:

- Construct a temporary noise barrier along the east boundary of the site to reduce noise levels at the California Highway Patrol and Fire Station 17. An eight-foot plywood noise barrier could reduce noise levels by at least 5 dBA.
- Construction equipment shall be well-maintained and used judiciously to be as quiet as practical;
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment;
- Utilize "quiet" models of air compressors and other stationary noise sources where technology exists;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, away from noise-sensitive receptors;
- Locate staging areas and construction material areas away from noise-sensitive receptors;
- Prohibit all unnecessary idling of internal combustion engines;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Implementation of the above mitigation measures would reduce construction noise levels by a minimum of 5 dBA. Resultant construction noise levels at the CHP and fire station would be reduced from 66 to 61 dBA CNEL and 65 to 59 dBA CNEL, respectively. When added to existing ambient noise levels, the resultant noise levels would be 64 dBA CNEL[78] at the CHP

[78] When two decibel values differ by zero to one dB, three db is added to the higher value (i.e., 61 dBA +3 db = 64 dbA),

and 61 dBA CNEL[79] at Fire Station 17. With implementation of MM NO1-1.1, ambient noise levels at the CHP and Fire Station 17 would not be substantially increased over a temporary basis resulting in a less-than-significant impact. In addition, construction would be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday consistent with the Alameda County Noise Ordinance.

As discussed above, with implementation of the identified mitigation measures, construction and operation of the proposed project would have a less than significant impact. **(Less than Significant Impact with Mitigation Incorporated)**

Impact NOI-2:	The project would not result in generation of excessive ground-borne vibration or groundborne noise levels. **(Less than Significant Impact)**

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include preparation work, foundation work, and new building framing and finishing. Pile driving (which generates substantial vibration) is not anticipated as a method of construction. The nearest structures would be located 60 feet from the proposed construction activities.

For structural damage, Caltrans recommends a vibration limit of 0.5 in/sec PPV for new residential and modern commercial/industrial structures and for buildings that are found to be structurally sound but where structural damage is a major concern, and 0.3 in/sec PPV for buildings that are found to be structural sound where structural damage is a major concern. For purposes of this Initial Study, the conservative 0.3 in/sec PPV vibration limit was used to determine potentially significant vibration impacts.

As shown in Table 4.13-8, construction-related vibration levels would not exceed 0.3 in/sec PPV at the nearest structures located about 60 feet east of the project site (CHP) and nearest residential buildings (approximately 120 feet south of the project site). All other buildings and receptors in the vicinity are located further from areas of the project site where construction vibration would be produced. **(Less than Significant Impact)**

Table 4.13-8: Vibration Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	PPV at 60 ft. (in/sec)	PPV at 120 ft. (in/sec)
Clam shovel drop		0.202	0.077	0.036
Hydromill (slurry wall)	in soil	0.008	0.003	0.001
	in rock	0.017	0.006	0.003
Vibratory Roller		0.210	0.080	0.037
Hoe Ram		0.089	0.034	0.016
Large bulldozer		0.089	0.034	0.016
Caisson drilling		0.089	0.034	0.016
Loaded trucks		0.076	0.029	0.014

[79] When two decibel values differ by two or three dB, two db is added to the higher value (i.e., 59 dBA +2 db = 61 dbA),

Jackhammer	0.035	0.013	0.006
Small bulldozer	0.003	0.001	0.001
Source: Illingworth& Rodkin, Inc. *Alameda County Fire Training Center Project Noise and Vibration Assessment.* September 14, 2022.			

Impact NOI-3: The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. **(No Impact)**

The project is not located within the vicinity of a private airstrip or an airport land use plan. The Livermore Municipal Airport is the closest airport, and it is located approximately three miles southeast of the project site. **(No Impact)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[80] The County of Alameda Housing Element and related land use policies were last updated in 2010.

Regional and Local

Plan Bay Area 2050

Plan Bay Area 2050 is a long-range plan for the nine-county San Francisco Bay Area that provides strategies that increase the availability of affordable housing, support a more equitable and efficient economy, improve the transportation network, and enhance the region's environmental resilience. Plan Bay Area 2050 promotes the development of a variety of housing types and densities within identified Priority Development Areas (PDAs). PDAs are areas generally near existing job centers or frequent transit that are locally identified for housing and job growth.[81]

ABAG allocates regional housing needs to each city and county within the San Francisco Bay Area, based on statewide goals. These allocations are designed to lay the foundation for Plan Bay Area 2050's long-term envisioned growth pattern for the region. ABAG also develops a series of forecasts and models to project the growth of population, housing units, and jobs in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Forecasting and Modeling Report, which is a technical overview of the of the growth forecasts and land use models upon which Plan Bay Area 2050 is based.

[80] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed August 1, 2022. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[81] Association of Bay Area Governments and Metropolitan Transportation Commission. *Plan Bay Area 2050*. October 21, 2021. Page 20.

4.14.1.2 *Existing Conditions*

The population of Alameda County was estimated to be 1,651,979 in January 2022 with an average of 2.66 persons per household.[82]

The project site is a vacant lot. Surrounding uses consist of government and residential uses. The project site is located in the City of Dublin on County-owned land.

4.14.2 Impact Discussion

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

Impact POP-1:	The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(Less than Significant Impact)**

A project can induce substantial population growth by: 1) proposing new housing beyond projected or planned development levels, 2) generating demand for housing as a result of new businesses, 3) extending roads or other infrastructure to previously undeveloped areas, or 4) removing obstacles to population growth (i.e., expanding capacity of a wastewater treatment plant beyond that necessary to serve planned growth).

The project proposes to construct a fire training facility on a vacant lot. The fire training facility is replacing an existing outdated and undersized fire training center in San Leandro; therefore, it would not indirectly induce substantial population growth. Nor does the project propose to extend a road or other infrastructure, or remove obstacles to population growth (refer to Section 3.19 Utilities and Service Systems) that would indirectly induce growth. **(Less than Significant Impact)**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

[82] California Department of Finance. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020." Accessed September 2, 2021. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

The project site is a vacant lot and does not provide housing. For this reason, implementation of the project would not displace existing residents from the project site that would necessitate the construction of housing elsewhere. **(No Impact)**

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to public services and are applicable to the project.

East County Area Plan Policies – Public Services	
Policies	Description
241	The County shall provide effective law enforcement, fire, and emergency medical services to unincorporated areas.
242	The County shall reserve adequate sites for sheriff, fire, and emergency medical facilities in unincorporated locations within East County.
244	The County shall require that new developments are designed to maximize safety and security and minimize fire hazard risks to life and property.

East County Area Plan Policies – Public Services	
245	The County shall adhere to the provisions of the Alameda County Fire Protection Master Plan.
246	The County shall limit development to very low densities in areas where police, fire, and emergency medical response times will average more than 15 minutes.
284	The County shall provide for the development and maintenance of subregional facilities such as public hospitals, jails, government offices, libraries and other facilities in East County at a level comparable with other parts of Alameda County

4.15.1.2 *Existing Conditions*

Fire Protection Services

Fire protection services in Dublin are provided by the Alameda County Fire District (Department). The Department responds to fires, hazardous materials spills, and medical emergencies (including injury accidents) in the City of Dublin. The ACFD provides fire protection services for unincorporated county land, Lawrence Livermore and Lawrence Berkeley national laboratories, and the cities of San Leandro, Dublin, Newark, Union City, and Emeryville. There are 26 fire stations that service the ACFD coverage area The ACFD has established the goal of responding to medical emergencies within five to six minutes and fire emergences within five minutes. [83]

The closest fire station to the project site is Fire Department Station 17, located adjacent and east of the project site.

Police Protection Services

Police protection services for the project site are provided by the Dublin Police Services (DPS), Dublin Police services is a contract with the Alameda County Sheriff's Department which is headquartered at 6361 Clark Avenue, approximately two miles southwest of the project site (nine-minute drive time per Google Maps). The project site is served by the DPs. In 2020, the citywide average response time was 5.3 minutes.[84]

Schools

The project site is located within the attendance boundaries of the Dublin Unified School District which serves students from pre-kindergarten through high school and includes adult education.[85] The project site is serviced by James Dougherty Elementary School (approximately 0.2 miles south of the site), Eleanor Murry Fallon Middle School (approximately 0.8 miles east of the site), and Dublin High School (approximately 2.0 miles west of the site).[86] The Dublin Unified School District is in the

[83] Alameda County Fire Department. "FAQS – Why does the ACFD need to have a 5 minute response time to fire and medical emergencies?." Access August 1, 2022. https://fire.acgov.org/faqs/.
[84] City of Dublin. *Annual Report on Dublin Police Services 2020-2021*. 2021.
[85] Dublin Unified School District. "Overview." Accessed August 1, 2022. https://www.dublin.k12.ca.us/apps/pages/index.jsp?uREC_ID=466634&type=d.
[86] Dublin Unified School District. "DUSD School Locator." Accessed August 1, 2022. https://dublinunifiedexplorer.azurewebsites.net/.

process of construction a new high school at 3700 Central Parkway (approximately 1.1 miles southeast of the site).[87]

Parks

The City of Dublin and East Bay Regional Park District (EBRPD) provide parklands, open space, and community facilities for public recreation and community services in the project area. The nearest park to the project site is Emerald Glen Park, operated by the City of Dublin, located approximately 0.4 miles east of the site. Tassajara Creek Regional Park, operated by EBRPD, is located approximately 0.8 miles northeast of the project site.

Libraries and Community Centers

The City of Dublin is served by the Alameda County Public Library System. The Alameda County Public Library System consists of 11 libraries including the Dublin public library.[88] The nearest library to the site is the Dublin Public Library, located approximately 1.9 miles southwest of the site in the City of Dublin.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☒	☐
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☒	☐

Impact PS-1: The project would not 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 protection services. **(Less than Significant Impact)**

[87] Phase 1 is expected to be completed in April 2024. Source: Dublin Unified School District. Emerald High School Construction Newsletter. September 2022. https://www.dublin.k12.ca.us/m/pages/index.jsp?uREC_ID=472280&type=d

[88] Alameda County Public Library. "Alameda County Library Locations". Accessed August 1, 2022. https://aclibrary.bibliocommons.com/locations/list.

The project proposes to construct a fire training facility, that when complete, would be occupied by approximately 18 employees on site each day. This project would intensify development at the project site, however, the project would be designed to provide fire training facilities to support the County's fire protection services. The project would develop a classroom building, training tower, SCBA room, and wildland fire training area to help maintain and improve, as necessary, the response times and performance objectives of the Department. The environmental impacts of the proposed project are evaluated throughout this Initial Study.

In addition, Alameda County Fire Station 17 is adjacent and east of the project site, and therefore fire protection services can be provided to the project site without affecting response times. Further, the project would be constructed in accordance with current state and local building and fire codes to ensure structural stability and safety. The Department would review the final site design for consistency with applicable fire department standards. **(Less than Significant Impact)**

Impact PS-2:	The project would not 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 police protection services. **(Less than Significant Impact)**

As discussed under Impact PS-1, the project would intensify development at the project site, however the project would be used as a training facility for fire fighters. It is not anticipated that the proposed fire training facility with rotating trainees and instructors would generate the need of additional police protection services. Therefore, the project would not result in the need for new police protection facilities or services. **(Less than Significant Impact)**

Impact PS-3:	The project would not 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. **(Less than Significant Impact)**

The proposed project does not include any residential development, and therefore no new students would be directly generated by implementation of the proposed project. Therefore, the proposed project would not result in an adverse physical impact due to the construction of new or physically altered school facilities. **(Less than Significant Impact)**

Impact PS-4:	The project would not 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. **(Less than Significant Impact)**

As mentioned under Impact PS-1, the project would intensify development at the project site, which would place more staff on-site during regular business hours in comparison with existing conditions. While Department staff may elect to use local parks and trails, this increase in usage would be minimal, since the proposed development includes a substantial amount of landscaped open space and on-site outdoor amenities. Therefore, the proposed project would not result in an adverse physical impact due to new or physically altered park facilities. **(Less than Significant Impact)**

Impact PS-5:	The project would not 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 other public facilities. **(Less than Significant Impact)**

The proposed project would construct a new fire training facility to replace the currently operating fire training facility in San Leandro. It is anticipated the project would expand the fire training opportunities for County firefighters and therefore likely contribute to improved fire protection services. As described in this Initial Study, the project would not lead to significant environmental impacts. Therefore, the project would have no adverse impact on the performance of public facilities. **(Less than Significant Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

4.16.1.2 *Existing Conditions*

The City of Dublin and the EBRPD provide parklands, open space, and community facilities for public recreation and community services in the project area. The nearest park to the project site is Emerald Glen Park, operated by the City of Dublin, located approximately 0.4 miles east of the site. Tassajara Creek Regional Park, operated by the EBRPD, is located approximately 0.8 miles northeast of the project site.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) 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?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐

Impact REC-1:	The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **(Less than Significant Impact)**

The project proposes to construct a fire training facility development that, when complete, would be occupied by approximately 18 employees each day. Future employees may elect to use nearby recreational facilities, however, this increase in usage would be minimal, since the proposed development includes on-site outdoor amenities including wooden benches in the entry plaza and

covered break area by the classroom building. Therefore, the proposed project would not increase the usage of recreational facilities such that construction of new facilities or expansion of existing recreational facilities would be required. **(Less than Significant Impact)**

Impact REC-2:	The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

As discussed above in Section 4.15 Public Services, the proposed project would not require the construction or expansion of recreational facilities. For these reasons, the proposed project would have no impact due to the construction or expansion of recreational facilities. **(Less than Significant Impact)**

4.17 TRANSPORTATION

Information in this section is based in part on the Transportation Analysis prepared by Hexagon Transportation Consultants, Inc. The report, dated May 24, 2022, is attached to this Initial Study as Appendix E.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Alameda County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2050 in October 2021, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2050.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

The Alameda County Transportation Commission (CTC) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. CTC has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to transportation and are applicable to the project.

East County Area Plan Policies – Transportation	
Policies	Description
179	The County shall adhere to provisions of the Regional Transportation Plan, Countywide Transportation Plan, and County Congestion Management Program, insofar as they are not inconsistent with the Initiative.
180	The County shall require that all new development in areas that are unincorporated as of the adoption of the East County Area Plan shall contribute their fair share towards the costs of transportation improvements shown on the Transportation Diagram, subject to confirmation in subsequent traffic studies, as a condition of project approval.
183	The County shall seek to minimize traffic congestion levels throughout the East County street and highway system.
184	The County shall seek to minimize the total number of Average Daily Traffic (ADT) trips throughout East County.
185	The County shall seek to minimize peak hour trips by exploring new methods that would discourage peak hour commuting and single vehicle occupancy trips.
190	The County shall require new non-residential developments in unincorporated areas to incorporate Transportation Demand Management (TDM) measures and shall require new residential developments to include site plan features that reduce traffic trips such as mixed use development and transit-oriented development projects.

Alameda County VMT Tool

SB 743 requires local jurisdictions to implement a VMT policy that can utilize analysis of VMT for proposed projects to determine the significance of transportation impacts. Alameda County currently does not have an adopted VMT Policy, however the Alameda CTC VMT Tool establishes procedures to evaluate projects based on their description, characteristics, and location. The VMT Tool also includes geographic screening criteria based on the countywide and East Planning Area VMT averages to identify projects which are presumed to not exceed the CEQA thresholds of significance.

4.17.1.2 *Existing Conditions*

Roadway Network

Regional access to the project is provided by I-580 and I-680. Local access to the project site is provided by Hacienda Drive, Tassajara Road, Central Parkway, Dublin Boulevard, Broder Boulevard, Madigan Road, Arnold Road, and Gleason Drive.

Bicycle Facilities

Existing bicycle facilities within the project vicinity include Class I and Class II bicycle facilities.[89] Class II bicycle facilities are installed on both sides of the street on Gleason Drive, Hacienda Drive, Central Parkway, Dublin Boulevard. The Tassajara Creek multi-use trail system is a Class I bicycle facility extends adjacent to the creek to the east of the project.

Pedestrian Facilities

Pedestrian facilities in the project vicinity consist of sidewalks along the surrounding streets, including the project site frontage along Gleason Drive. Sidewalks are missing on the north sides of Madigan Road, on Broder Boulevard, and on Arnold Road. Signalized pedestrian crossings are present at the intersection of Gleason Drive and Hacienda Drive to the west of the project frontage. There are no marked pedestrian crossings at the unsignalized intersection east of the project site frontage at Gleason Drive and Madigan Road.

Transit Services

Existing transit service to the project vicinity is provided by the Livermore Valley Transit Authority (Tri-Valley Wheels) with nearby transit connection to Bay Area Rapid Transit, Altamont Commuter Express, and Central Contra Costa County Transportation Authority (County Connection). Bus service near the project site is provided by Tr-Valley Wheels Route 1 and Route 501 which operate along Gleason Drive.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
4) Result in inadequate emergency access?	☐	☐	☒	☐

Impact TRN-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

[89] Class I bicycle facilities are shared by pedestrians and bicyclists that are separated from motor vehicle traffic. Class II bicycle facilities separate bicyclist from on-street motor vehicle traffic with a striped line.

Roadway System

While a project's effect on automobile delay is no longer considered an impact under CEQA, local jurisdictions can continue to have roadway LOS standards to ensure that roadways are sized to accommodate vehicle traffic where feasible, and that necessary roadway improvements to maintain acceptable LOS are identified so that the physical changes to the environment are disclosed as part of the CEQA process. Given the site is located within the City of Dublin and served by City streets, the traffic report evaluated the addition of project traffic on the surrounding roadways during the weekday peak hours using the City's LOS standards. As discussed in Section 4.17.3 Non-CEQA Effects, the results of the Trip Generation analysis indicated that that the project would generate, on average, approximately 56 daily trips, with 10 trips occurring during the AM peak hour and zero trips occurring during the PM peak hour. According to the City of Dublin's Transportation Impact Analysis Guidelines, projects that generate less than 50 peak hour trips are not required to perform an operational analysis. The project would generate 10 AM peak hour trips (and zero PM peak hour trips); therefore, the project would not result in adverse effects to the local roadway system.

Bicycle Facilities

As discussed in Section 4.17.1.2 Existing Conditions, Class I and II bicycle facilities are in the vicinity of the project site. These bicycle facilities would be unchanged by implementation of the project. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the bicycle circulation system.

Pedestrian Facilities

As discussed in Section 4.17.1.2 Existing Conditions, pedestrian facilities in the immediate site vicinity include continuous sidewalks on the project frontage and crosswalks with pedestrian signals at the signalized intersection to the west of the project at Hacienda Drive and Gleason Drive. The project would develop walking paths to provide pedestrian access from the project frontage to throughout the project site. For these reasons, the project would not conflict with a program, plan, ordinance, or
policy addressing the pedestrian circulation system.

Transit Facilities

As discussed in Section 4.17.1.2 Existing Conditions , the project site is well served by transit services that operate in the nearby vicinity. The project would not interfere with existing transit services serving the project site. Given the project would primarily serve Department staff from across the County and that staff typically would arrive via carpool in vans or firetrucks, it is anticipated that the project would not increase the demand for local transit services; however, any in increase would be accommodated by existing transit facilities. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the transit circulation system.

As described above, implementation of the project would not conflict with an existing policy addressing the circulation system for transit, roadways, bicycle lanes, and pedestrian facilities. **(Less than Significant Impact)**

Impact TRN-2:	The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

This question pertains specifically to VMT as the means of analyzing the transportation impacts of a project. As described in Section 4.17.1.1 Regulatory Framework, the County does not currently have an adopted VMT policy. However, according to the CEQA guidelines and the Office of Planning and Research (OPR) guidance, projects that generate fewer than 110 daily trips can be exempt from VMT analysis and can be presumed to have a less than significant impact. As noted above, the project would typically generate 56 daily trips.[90] Nonetheless, a VMT assessment was conducted utilizing the Alameda CTC VMT Tool. The project site is located in a traffic analysis zone (TAZ) where the VMT per employee are 12.37 and 11.65 for years 2020 and 2040, respectively. The Countywide average daily VMT per employee are 13.52 and 13.77 for years 2020 and 2040, respectively. Therefore, the project's VMT per employee would fall below the current and future County thresholds. For these reasons, the project's impacts on VMT would be considered less than significant. **(Less than Significant Impact)**

Impact TRN-3:	The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

Access to the project site is currently provided via Gleason Drive. The proposed project would construct a new 23-foot wide, two-way driveway that would lead to the classroom building parking area, training tower parking area, and other areas of the project site. The project plans would be reviewed by the Alameda County Fire Department to ensure proper turning radius would be allowed for the use fire engines and other emergency vehicles.

As shown on Figure 2.4-3, the project site is surrounded by a mix of government and residential uses. The proposed government use is not a new land use in the area. The project, therefore, does not propose a use that is incompatible with the existing mix of uses in the project area or propose a use that would bring unusual equipment on the roadways (e.g., farm equipment). For this reason, the project would not result in a significant impact due to incompatible uses. **(Less than Significant Impact)**

Impact TRN-4:	The project would not result in inadequate emergency access. **(Less than Significant Impact)**

Emergency vehicles access to the project site would be provided via a new two-way driveway. The driveway would be accessible from both directions of travel, and would accommodate emergency vehicles, including the fire apparatus. The project would be reviewed for consistency with applicable California Building Code and Fire Code requirements for access and safety. As such, the proposed project would have a less than significant emergency access impact. **(Less than Significant Impact)**

[90] California Governor's Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

As described in Section 4.5.1.2 Existing Conditions, there are no known TCRs on the project sites, however the project site has potential for archaeologically sensitive resources based on Alameda County study maps.[91] The County contacted local tribal representatives by letter on January 6, 2023, inviting them to initate consultation. The purpose of the letter was to inform tribes of the project. Following the 30-day period, the County received no responses.

[91] Alameda County. *Juvenile Justice Facility and East County Hall of Justice Environmental Impact Statement and Environmental Impact Report.* Draft. Page 15-22. January 2003.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Impact TCR-1:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact with Mitigation Incorporated)**

As previously discussed in Section 4.5.1.2 Existing Conditions, there are no known archeological resources on-site, however the project site has the potential for uncovering archeological resources. The project, as proposed, would implement MM CU-2.1 to reduce impacts to archaeological resources. The above mitigation measure, which is typically implemented by development projects, would reduce impacts to archaeological resources (including TCRs if discovered on-site) to a less than significant level by stopping construction and preparing a research design and treatment plan if any archaeological resources are found, thereby protecting the resource. Therefore, the project would not cause a substantial adverse change to a TCR. **(Less than Significant Impact with Mitigation Incorporated)**

Impact TCR-2:	The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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. **(Less than Significant Impact)**

As discussed above under Impact TCR-1, there are no known TCRs on-site and the project as proposed would not result in significant impacts to TCRs. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The Alameda County Water District adopted its most recent UWMP in May 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025. CalRecycle released an analysis titled "Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals" in August of 2020, which recommended maintaining the disposal reduction targets set forth in SB 1383.[92]

[92] California Department of Resources Recycling and Recovery (CalRecycle). Analysis of the Progress Toward the SB 1383 Organic Wase Reduction Goals. August 18, 2020. https://www2.calrecycle.ca.gov/Publications/Details/1693#:~:text=Analysis%20of%20the%20Progress%20Toward,(DRRR%2D2020%2D1693)&text=SB%201383%20establishes%20targets%20to,75%20percent%20reduction%20by%202025.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to utilities and service systems and are applicable to the project.

East County Area Plan Policies – Utilities and Service Systems	
Policies	Description
247	The County shall conform its solid waste policies and programs to the Recycling Plan prepared by the Recycling Board, and generally coordinate its hazardous and solid waste management with the Alameda County Waste Management Authority's goals, policies, and plans, except to the extent that they are inconsistent with the Initiative or the Recycling Plan.
248	The County shall promote use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.
249	The County shall support efforts to provide solid waste resource recovery facilities and household hazardous waste collection facilities convenient to residences, businesses, and industries.
253	The County shall approve new development only upon verification that an adequate, long-term, sustainable, clearly identified water supply will be provided to serve the development, including in times of drought.
257	The County shall support more efficient use of water through such means as conservation and recycling, and shall encourage the development of water recycling facilities to help meet the growing needs of East County.
259	The County shall include water conservation measures as conditions of approval for subdivisions and other new development.

East County Area Plan Policies – Utilities and Service Systems	
260	The County shall require major projects (see definition in Table 1) to mitigate projected water consumption by applying one or more Best Management Practices that reduce water consumption off-site.
261	The County shall encourage the efficient use of water for landscape irrigation, vineyards and other cultivated agriculture. To this end, the County shall encourage the use of recycled water, treated by the reverse osmosis or other process and meeting groundwater basin standards set forth by the Regional Water Quality Control Board, for agricultural irrigation.
275	The County shall condition the approval of new development on verification that adequate wastewater treatment and export and/or reclamation capacity exists to serve the development.
285	The County shall facilitate the provision of adequate gas and electric service and facilities to serve existing and future needs while minimizing noise, electromagnetic, and visual impacts on existing and future residents.
287	The County shall require new developments to locate utility lines underground, whenever feasible.

Alameda County Administrative Code

The County's Construction Debris Management and Green Building Practices in Chapter 4.38 of the Administrative Code requires at least 50 percent of the total debris generated by the project shall be diverted from landfill via reuse or recycling.

4.19.1.2 *Existing Conditions*

Water Service

Water service to the project site is provided by the Dublin San Ramon Services District (DSRSD) which purchases potable water from the Zone7 Water Agency. The DSRSD includes Dublin and a partial area of San Ramon. Potable water provided is sourced from groundwater, imported treated water, and local surface water. DSRSD estimates that total system demand was 10,330 acre-feet per year (AFY) in 2020 and is project to increase to 14,034 in 2045.[93] There is no existing water demand on site. Existing potable water facilities in the project area include 12- and six-inch water lines in Gleason Drive, eight-inch water line on Madigan Road, and 16-inch water main on Broder Boulevard.

Sanitary Sewer/Wastewater Treatment

Wastewater from the project site would be treated at a wastewater treatment plant (WWTP) administered and operated by the DSRSD which treats wastewater from Dublin, South San Ramon, and Pleasanton. The WWTP has the capacity to treat 17.0 million gallons of wastewater per day (mgd) during dry weather flow.[94] The WWTP has capacity to process wastewater into recycled water

[93] Dublin San Ramon Services District. *Urban Water Management Plan 2020*. June 2021.
[94] Ibid.

up to 16.2 mgd. Wastewater that is not recycled is sent to a discharge system for dichlorination and discharge in a deep-water outfall into the San Francisco Bay.

Existing sanitary sewer facilities in the project area include 24-inch sewer main in Gleason Drive.

Recycled Water

Existing recycled water services is provided by DSRSD. Existing recycled water facilities in the project area include 20-inch recycled water main in Gleason Drive, a 10-inch recycled water line in Madigan Road and Broder Boulevard. The WWTP processes wastewater into recycled water and the plant's advance recycled water treatment facilities.

Storm Drainage

The project site is currently undeveloped with a pervious surface area of approximately 139,630 sf, including the areas with compacted gravel.

The project is in the Arroyo Mocho Canal watershed. The Arroyo Mocho Canal watershed drains the project's surrounding area that extends from the creek's headwaters in the Mt. Diablo watershed. Surface runoff from the site primarily infiltrates into the pervious ground surface. Runoff in the project vicinity is collected by storm drain manholes and inlets in the adjacent parking lots and streets, including a 24-inch storm drain on Gleason Drive where it is then conveyed to the drainage system. Flows drain into the Arroyo Mocho Canal are ultimately discharged into the San Francisco Bay Area.

Solid Waste

The Alameda County Countywide Integrated Waste Management Plan (CoIWMP) serves to guide Alameda County's solid waste management and recycling programs, including collection, transport, processing facilities, and landfills. Based on the Alameda County Materials Flow Map, landfill waste from the City of Dublin is transferred to Altamont Landfill.[95] The City of Dublin's garbage and recycling collection services are provided by Amador Valley Industries.

Electricity, Natural Gas, and Telecommunications

Electricity in Dublin is sourced and transported to businesses and residences via PG&E's existing utility infrastructure. PG&E distributes electric power primarily through underground systems extending from various high voltage transmission lines in the area. An existing electric substation is located on Horizon Parkway near the intersection of Arnold Road. PG&E also sources and delivers natural gas to Dublin through a series of gas distribution lines located within streets right-of-way. Telephone service infrastructure in Dublin is provided by AT&T, Sprint, T-Mobile, and Verizon Wireless.[96]

[95] Alameda County. "Alameda County Materials Flow Map." Accessed August 5, 2022. https://flowmap.stopwaste.org/.
[96] City of Dublin. "FAQ – What is a Wireless Communications Facility?". Accessed August 25, 2022. https://www.dublin.ca.gov/Faq.aspx?QID=370

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

Water Facilities

The water demands of the project would be met by Dubin San Ramon Services District, as is discussed under Impact UTL-2 below. The project would install an eight-inch water lateral to the existing 12-inch water lines in Gleason Drive. The project would not require the construction or expansion of water delivery systems or the expansion of the boundaries of the Dubin San Ramon Services District service area. Therefore, the project would not result in significant environmental effects related to the relocation or construction of new or expanded water facilities.

Recycled Water

The project would be served by the DSRSD's recycled water system and connect to the existing recycled water line in Gleason Drive to provide irrigation for the project landscaping. In order to connect to the existing recycled water system, the project would install a one-inch irrigation water lateral into a 20-inch recycled water main. Installation of recycled water lines to supply irrigation water needs at the project site would implement East County Area Plan Policy 261. Therefore, the project would not result in significant environmental effects related to the relocation or construction of new or expanded recycled water facilities.

Wastewater Treatment Facilities

The project would be served by the DSRSD's sanitary sewer system and connect to the existing sanitary sewer lines in Gleason Drive. To connect to the existing sanitary sewer system, the project would install six- and nine-inch sanitary sewer laterals during grading of the site, which would result in minimal impacts. It is estimated that the project, which would have a water demand of 323 gpd (refer to Impact UTL-2), would generate approximately 275 gpd of wastewater.[97,98] The project would not require the construction of any additional sewer mains or sewer lines that could cause significant environmental effects. Refer to checklist question c) for a discussion of the availability of treatment capacity at the WWTP for the project.

Stormwater Drainage Facilities

As discussed in Section 3.10 Hydrology and Water Quality, the project would result in a net increase of impervious surface at the project site. This net increase in impervious surfaces would result in a corresponding increase in stormwater runoff. As a result, the proposed existing storm drainage system would install stormwater control facilities, as depicted in Figure 3.3-4, that would minimize stormwater runoff from the project site. To connect to the existing storm drainage system, the project would install eight-, 10- and 12-inch storm drainpipes to connect to a 24-inch storm drain main on Gleason Drive. On-site storm drainage also includes manholes, with landscaped areas, infiltration trench, bioretention areas or planters, and compacted gravel. On-site drainpipes would collect overflow of stormwater collected within infiltration trenches, landscaped areas, and bioretention areas. Installation of storm drains would occur during grading of the site and would result in minimal impacts. Therefore, the project would not require the construction of additional storm drainage facilities that could cause significant environmental effects.

Electric Power and Telecommunication Facilities

Existing utility lines would be utilized by the project for electric power, natural gas, and telecommunications services. Connecting to the City of Dublin's energy and communications grid would require trenching on the site, which would not require substantial excavation and would result in minimal impacts. Emergency power would be provided by a 180-kW diesel generator with a double wall sub-base fuel tank located in the Utility Yard on the southeast corner of the Classroom Building. The project would be required to detail the exact locations for all utility connections and utility plans would be subject to review by the City. The project would coordinate with the

[97] Alameda Conty Fire District. Historic Water Usage Details (2020-2022).
[98] Based upon the California Emissions Estimator Model (CalEEMod) standard wastewater generation rate of 85 percent of total water usage. 323 gallons water per day multiplied by 0.85 equals 275 gallons wastewater per day.

appropriate electric power and telecommunication providers, including PG&E, on providing service to the site. The project would exclude new gas utilities lines to the project. Therefore, the proposed project would not result in significant impacts from construction or relocation of new or expanded electric power, natural gas, or telecommunications utilities.

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

As discussed under Impact UTL-1, the proposed project would have an increased water demand of approximately 323 gallons per day or 0.001 acre feet.[99] In comparison with DSRSD's water supply source from Zone 7, overall water demand is 10,330 AFY.[100] The project would increase demand by 0.008 percent, which DSRSD considers to be within normal growth projections for the system and would not require new or expanded water facilities. In addition, water use would be further reduced if recycled water was used for irrigation purposes.

For normal, single-dry years, multiple dry-year scenario, Zone 7 anticipates that demands of the service area can be met through 2045 without the use of any conservation measures. Therefore, DRSD as supplied by Zone 7 has the capacity to serve the project through buildout based on current water supply capacity and future water supply projects. **(Less than Significant Impact)**

Impact UTL-3:	The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

The WWTP currently has a capacity of 17 mgd of dry weather flow available to its service area. The fire training facilities proposed by the project would have a gross wastewater demand of approximately 275 gpd.[101] The wastewater demands of the proposed project would not result in an exceedance of wastewater treatment capacity at the WWTP. Increased demand at the WWTP created by planned development with DSRSD service area is expected and accounted for in long term infrastructural planning by the partner agencies. The proposed project is consistent with the PD designation; therefore, the proposed project would not result in an unanticipated increase in wastewater treatment requirements at the WWTP.

The construction of new wastewater treatment facilities would not be required as a result of the proposed project. Environmental impacts from the construction of new or expanded facilities would be avoided by utilization of existing facilities, which are currently below capacity.

The projected wastewater demand of the project, by itself, would not result in an exceedance of capacity at the WWTP. A determination of excess treatment capacity at the WWTP considers current uses within the DSRSD service area and within the treatment plant's service boundaries. The

[99] Alameda County Fire District. Historic Water Usage Details (May 17, 2020 - September 12, 2022).
[100] Dublin San Ramon Services District. *Urban Water Management Plan 2020*. June 2021.
[101] Based on the CalEEMod standard estimate of wastewater comprising 85 percent of indoor water use.

treatment capacity of the WWTP would not be exceeded because of the proposed project or the project's contribution to existing treatment commitments; therefore, the project would have a less than significant impact on wastewater treatment capacity. **(Less than Significant Impact)**

Impact UTL-4:	The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

Alameda County's IWMP was most recently adopted in April 2020. Each jurisdiction in the County has a landfill diversion requirement of 50 percent per year. According to the IWMP, the County has adequate disposal capacity for the next 15 years.[102]

The proposed fire training facility would generate solid waste at a rate of approximately 18.14 tons of solid waste per year.[103] The proposed project would be required to conform to County plans and policies to reduce solid waste generation and increase waste diversion, such as the California Green Building Standards Code. The project would be required to conform to County plans and policies to reduce solid waste generation and would be served by the Altamont Road Landfill which, as described in Section 4.19.1.2 Existing Conditions, has adequate capacity. For these reasons, the project would have a less than significant impact on solid waste disposal and landfill facilities. **(Less Than Significant Impact)**

Impact UTL-5:	The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

The proposed project would implement the County's Construction Debris Management and Green Building Practices (which ensures that at least 50 percent of this construction waste is recovered and diverted from landfills) and providing readily accessible areas for recycling that serve the buildings on-site. By adhering to the requirements of the County's Construction and Demolition Diversion Program, the proposed project would not conflict with applicable statutes and regulations related to solid waste, including CALGreen, AB 939, AB 341, and local waste diversion requirements. **(Less than Significant Impact)**

[102] Alameda County Waste Management Authority. *Alameda County Integrated Waste Management Plan.* April 22, 2020.
[103] Illingworth & Rodkin, Inc. *Alameda Conty Fire Department Training Center Air Quality and Greenhouse Gas Assessment*. August 11, 2022.

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs).

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided onsite for various types of work W in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Code of Regulations Title 14

The California Board of Forestry and Fire Protection has adopted regulations, known as SRA Fire Safe Regulations, which apply basic wildland fire protection standards for building, construction, and development occurring in a SRA. The future design and construction of structures, subdivisions and developments in SRAs are required to provide for the basic emergency access and perimeter wildfire protection measures discussed in Title 14.

Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. CAL FIRE has developed a strategic fire management plan for the Santa Clara Unit, which covers the project area and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. The plan includes stakeholder contributions and priorities and identifies strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire issues.

Local

East County Area Plan

The following policies in the County's East County Area Plan have been adopted for the purpose of reducing or avoiding impacts related to wildfire and are applicable to the project.

East County Area Plan Policies – Wildfire	
Policies	Description
318	The County shall limit residential development to very low densities in high fire hazard zones as identified by the Fire Hazard Severity Scale (see definition in Table 1).
320	The County shall consider, in reviewing development projects and subdivision of agricultural lands, the severity of natural fire hazards, potential damage from wildland and structural fires, the adequacy of fire protection services, road access, and the availability of an adequate water supply and pressure.
324	The County shall require the use of fire resistant building materials, fire-resistant landscaping, and adequate clearance around structures in "high" and "very high" fire hazard areas.

4.20.1.2 *Existing Conditions*

The project site is located in a highly urbanized area that is not within a very high fire hazard severity zone.[104,105] The nearest fire hazard area is a moderate fire hazard severity zone located approximately 1.75 miles to east. Based upon CalFire's Wildland-Urban Interface (WUI) Fire Threat map, the

[104] California Department of Forestry and Fire Protection. *Alameda County Fire Hazard Safety Zone Map – State Responsibility Area*. November 2007.
[105] California Department of Forestry and Fire Protection. *Alameda County Fire Hazard Safety Zone Map – Local Responsibility Area.* September 2008.

project site is partially within an interface area of the wildfire influence zone which contributes to a moderate fire hazard.[106]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

[106] California Department of Forestry and Fire Protection. "GIS Data: Wildland-Urban Interface Fire Threat". Accessed July 29, 2022. https://frap.fire.ca.gov/mapping/gis-data/.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in prior sections of this Initial Study, the proposed project would not degrade the quality of the environment with the implementation of the identified mitigation measures.

As discussed in Section 4.4 Biological Resources, the project would not impact sensitive habitats or any special-status species. The project would be required to implement Mitigation Measure BIO-1.1 through BIO-1.4 to avoid abandonment of raptor and other protected migratory bird nests. In addition, the project would be required to implement standard tree protection measures. To avoid impacts to as yet unidentified archaeological resources, tribal cultural resources, and human remains, the proposed project would implement the mitigation measures (MM CUL-2.1 and MM CUL-3.1) discussed in Section 4.5 Cultural Resources.

To reduce significant seismic and seismic-related impacts, the project would be constructed in conformance with the recommendations of a site-specific geotechnical investigation (refer to Section 4.7 Geology and Soils). As discussed in Section 4.9 Hazards and Hazardous Materials, with the implementation of MM HAZ-1.1, the project would reduce impacts from lead and asbestos, as well as ensure that potentially contaminated materials are properly handled to avoid chemical releases into the environment. As discussed in Section 4.10 Hydrology and Water Quality, the project would submit an NOI to the RWQCB and a SWPPP would be developed to establish methods for controlling discharge associated with construction activities. In addition, the project would require conformance with Provision C.3 of the MRP and the County's Stormwater Management and Discharge Control (Chapter 13.08).

As discussed in Section 4.13 Noise, the project would be required to implement mitigation measure MM NOI-1.1 to reduce constriction noise levels by a minimum of 5 dBA.

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. **(Less than Significant Impact with Mitigation Incorporated)**

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

The project would result in localized and temporary biological, cultural, hazards and hazardous materials, hydrology and water quality, and noise during construction. With implementation of the identified mitigation measures, construction impacts would be reduced to a less than significant level. Because the nature of the identified impacts are temporary and would be mitigated and would not extend substantial distances beyond the site where impacts could overlap with the effects of other projects, the proposed project would not have a cumulatively considerable impact on these resources.

The project would not impact or result in less than significant impacts on aesthetics, agricultural and forestry resources, geology and soils, GHG, mineral resources, population and housing, public services, recreation, transportation, and wildfire. The project would not have a cumulatively considerable impact on these resources. The discussion of the project's demand on energy supplies in Section 4.6 Energy identifies that the project would not, in combination with other projects, exceed forecast energy supplies. The discussion of the project's impacts on utility and service systems in Section 4.19 Utilities and Service Systems identifies the project would not result in cumulatively considerable contributions to any of the utilities and service systems that the project would rely upon.

The project's contribution to cumulative air quality impacts is discussed further below.

Cumulative Air Quality Impacts

A community health risk assessment typically considers all substantial sources of TACs located within 1,000 feet of a project sites. These sources can include rail lines, highways, busy surface streets, and stationary sources identified by BAAQMD. A review of the project area based on provided traffic information indicated that Hacienda Drive and Gleason Drive would have ADT exceeding 10,000 vehicles. A review of BAAQMD's stationary source geographic information systems (GIS) map tool identified six stationary sources with the potential to affect the project MEI, which is a residence south of Gleason Drive. Figure 4.21-1 shows the location of the sources affecting the MEI. Table 4.21-1 below shows the cumulative community risk impacts.

Table 4.21-1: Cumulative Community Risk Impacts at the Project MEI

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Impacts			
Total/Maximum Project Impact (Years 0-30) Mitigated	3.88 (infant)	0.03	<0.01
BAAQMD Single-Source Threshold	*10*	*0.3*	*1.0*
Exceed Threshold?	No	No	No
Cumulative Impacts			
Hacienda Drive, ADT 13,890	0.19	0.02	<0.01
Gleason Drive, ADT 18,650	3.72	0.32	<0.01
Alameda County GSA (Facility ID #8996, Generator), MEI at 840 feet	10.70	0.26	0.02
Alameda County GSA (Facility ID #13931, Generator), MEI at 930 feet	2.28	<0.01	<0.01
Alameda County GSA (Facility ID #13932, Generator), MEI at 885 feet	0.52	<0.01	<0.01
California Highway Patrol (Facility ID #14568, Generator), MEI at 540 feet	<0.01	<0.01	<0.01
Judicial Council of CA, East County Hall Justice (Facility ID #23535, Generator), MEI at 880 feet	12.21	0.02	0.01
County of Alameda (Facility ID #108453, GDF), MEI at 805 feet	0.10	-	<0.01
Cumulative Total Mitigated	33.61	<0.68	<0.10
BAAQMD Cumulative Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?	No	No	No

As shown in Table 4.21-1, the project and cumulative sources' combined cancer risk, $PM_{2.5}$ concentration, and HI values would not exceed their respective cumulative thresholds.

Source: Illingworth & Rodkin, Inc., August 11, 2022.

PROJECT SITE AND NEARBY TAC AND $PM_{2.5}$ SOURCES

FIGURE 4.21-1

Impact MFS-3:	The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on individuals. While changes to the environment that could indirectly affect human beings would be represented by the designated CEQA issue areas, those that could directly affect human beings include air quality, hazardous materials, and noise. As documented throughout this Initial Study, implementation of the County policies and mitigation measures that have been identified would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified.

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

County of Alameda
General Services Agency – Capital Programs
Regina Park, *Capital Program Manager*
Patrick Lam, *Senior Project Manager*

6.1 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Akoni Danielsen, *Principal Project Manager*
Natalie Noyes, *Senior Project Manager*
Ryan Osako, *Graphic Artist*

HortScience | Bartlett Consulting
Arborist Consultant
James Clark, *Managing Consulting Arborist*
Darya Barar, *Managing Consulting Urban Forester*

Illingworth & Rodkin, Inc.
Noise and Vibration Consultant
Acoustical and Air Quality Consultant
James Reyff, *Principal*
Michael Thill, *Principal*
Casey Divine, *Consultant*

Rockridge Geotechnical
Geology & Soils Consultant
Craig Shields, *Principal Engineer*
Lind Liang, *Principal Engineer*
Katie Dickenson, *Project Engineer*

SECTION 7.0 ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-Containing Material
ADT	Average Daily Traffic
AFY	Acre Feet per Year
BAAQMD	Bay Area Air Quality Management District
BAARI	Bay Area Aquatic Resource Inventory
CAL FIRE	California Department of Forestry and Fire Protection
CalARP	California Accidental Release Prevention
Caltrans	California Department of Transportation
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Cal/OSHA	Division of Occupational Safety and Health of California
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Clean Air Plan
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	Chlorofluorocarbons
CFR	Code of Federal Regulations
CGS	California Geologic Society
CH_4	Methane
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CRHR	California Register of Historical Resources
CTC	County Transportation Commission
CUPA	Certified Unified Program Agency
dB	Decibel

dBA	Human Hearing Adjusted, A-Weighted Decibel
DBH	Diameter at Breast Height
DNL	Day-Night Level
DPD	Dublin Police Department
DPM	Diesel Particulate Matter
DSRSD	Dublin San Ramon Services District
DTSC	California Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
ECHJ	East County Hall of Justice
EIR	Environmental Impact Report
EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR Part 77	Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	Greenhouse Gas Emission
GWMP	Groundwater Management Plan
GWP	Global Warming Potential
HFC	Hydrofluorocarbon
HSWA	Federal Hazardous and Solid Waste Amendments
LID	Low Impact Development
L_{dn}	Average Equivalent Sound Level Over a 24-Hour Period
L_{eq}	Average Energy Level Intensity of Noise Over a Given Period of Time
L_{max}	Maximum A-weighted noise level during a measurement period
LOS	Level of Service
LRA	Local Responsibility Area
LUST	Leaking Underground Storage Tank

MBTA	Migratory Bird Treaty Act
mgd	Million Gallons per Day
MND	Mitigated Negative Declaration
$MMTCO_2e$	Million Metric Tons of Carbon Dioxide Equivalent
mpg	Miles per Gallon
MRP	Municipal Regional Stormwater NPDES Permit
MT	Metric Tons
MTC	Metropolitan Transportation Commission
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFA	No Further Action
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOD	Notice of Determination
NOI	Notice of Intent
NO_x	Nitrogen Oxides
NO_2	Nitrogen Dioxide
N_2O	Nitrous Oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ozone
OITC	Outdoor-Indoor Transmission Class
OPR	California Governor's Office of Planning and Research
PCB	Polychlorinated Biphenyl
PD	Planned Development
PDA	Priority Development Area
PFC	Perfluorocarbon
PG&E	Pacific Gas and Electricity
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Coarse Particulate Matter
ppm	Parts per Million
PPV	Peak Particle Velocity
RCRA	Resource Conservation and Recovery Act

RHNA	Regional Housing Need Allocation
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SCUBA	Self-Contained Breathing Apparatus
sf	Square Feet
SF_6	Sulfur Hexafluoride
SFHA	Special Flood Hazard Area
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SMGB	California State Mining and Geology Board
SO_x	Sulfur Oxides
SR	State Route
SRA	State Responsibility Areas
STC	Sound Transmission Class
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TDM	Transportation Demand Management
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zone
Title 24	Building Energy Efficiency, Title 24, Part 6, California Code of Regulations
TMDL	Total Maximum Daily Load
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VdB	Vibration Decibels
VMT	Vehicle Miles Traveled
Williamson Act	California Land Conservation Act
WUI	Wildland Urban Interface
WWTP	Wastewater Treatment Plan