
Admin Draft Initial Study/Mitigated Negative Declaration

for the

Zone 7 Trail Project

Livermore Area Recreation and Park District, Alameda County, CA

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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
Bay Plan	San Francisco Bay Plan
Bay Trail	San Francisco Bay Trail
BCDC	San Francisco Bay Conservation and Development Commission
BMP	Best Management Practice
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife (formerly California Department of Fish and Game [CDFG])
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
DPM	diesel particulate matter
EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
H:V	horizontal:vertical
I-580	Interstate 580
ISP	Invasive Spartina Project
LARPD	Livermore Area Recreation and Parks District
MBTA	Migratory Bird Treaty Act
mg/kg	milligrams per kilogram
MGD	million gallons per day
NO _x	nitrogen oxides

NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
OS	Open Space
PM _{2.5} or 10	Particulate Matter (fine or respirable)
PRC	Public Resource Code
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SFRWQCB	San Francisco Regional Water Quality Control Board
SWPPP	Storm Water Pollution Prevention Control Plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United State Geological Survey
VA Hospital	Livermore Division – Veteran’s Administration Palo Alto Health Care System
WRA	WRA, Inc.
Zone 7	Zone 7 Water Agency

1.0 INTRODUCTION AND PURPOSE

This Initial Study/Mitigated Negative Declaration (IS/MND) is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the Livermore Area Recreation and Park District (LARPD). This IS/MND evaluates the potential environmental impacts and mitigation measure, which might reasonably be anticipated to result from implementation of the Zone 7 Trail Project (proposed Project).

The LARPD is the Lead Agency under CEQA and has prepared this IS/MND to address the impacts of implementing the proposed Project. The purpose of the Project is to connect two existing LARPD trails within Sycamore Grove Park.

2.0 PROJECT INFORMATION

2.1 Project Title

Zone 7 Trail Project

2.2 Lead Agency Name and Address

Livermore Area Recreation and Park District
4444 East Avenue,
Livermore, CA 94550

2.3 Contact Person and Phone Number

Mathew Fuzie
Livermore Area Recreation and Park District
4444 East Avenue,
Livermore, CA 94550

2.4 Project Location

The Project is located at APNs 99-525-2, 99-500-2-14, 99-550-2-3¹ in unincorporated Alameda County, CA, in the hills south of Livermore. The proposed trail's eastern terminus would be situated approximately 0.2 miles south of the Livermore Division of the Veteran's Affairs (VA) Palo Alto Health System Hospital. The trail would then proceed downhill in a somewhat irregular, zigzagging pattern until terminating approximately 0.7 miles southwest of the hospital (Figure 1). The trail would be approximately 1.97 miles long and vary between three and five feet wide.

¹ Alameda County Assessor's Office, Parcel Viewer, n.d., n.d.,
http://gis.acgov.org/Html5Viewer/index.html?viewer=parcel_viewer.

2.5 Surrounding Land Uses and Setting

The Project Site is located south of Livermore in unincorporated Alameda County at APNs 99-525-2, 99-500-2-14, 99-550-2-3. The properties have an Alameda County use code of 0300 (Exempt Public Agency) and belongs to the Zone 7 Water Agency (Zone 7). Zone 7's Del Valle Water Treatment Plan occupies approximately 20,000 square feet in the northwestern portion of the property. Most of the property remains in an undeveloped state and is used for cattle grazing.

Land uses near the Project Site include the Livermore Division of Veterans' Administration Palo Alto Healthcare System (VA hospital) to the north, Wente Vineyards to the northwest, a shared campus for the Taylor Family Foundation (a camp for chronically ill and/or disabled children) and YMCA Camp Arroyo to the east, LARPD's Sycamore Grove Park to the northwest, and East Bay Regional Park District's (EBRPD) Del Valle Regional Park to the southeast. Sycamore Grove Park and Del Valle Regional Park contain an extensive network of pedestrian, equestrian, and bicycle trails in addition to other recreational facilities.

2.6 General Plan Designation and Zoning District

General Plan Designation: Parklands (East County Area Plan)
Alameda County Use Code: 0300 (Exempt Public Agency)

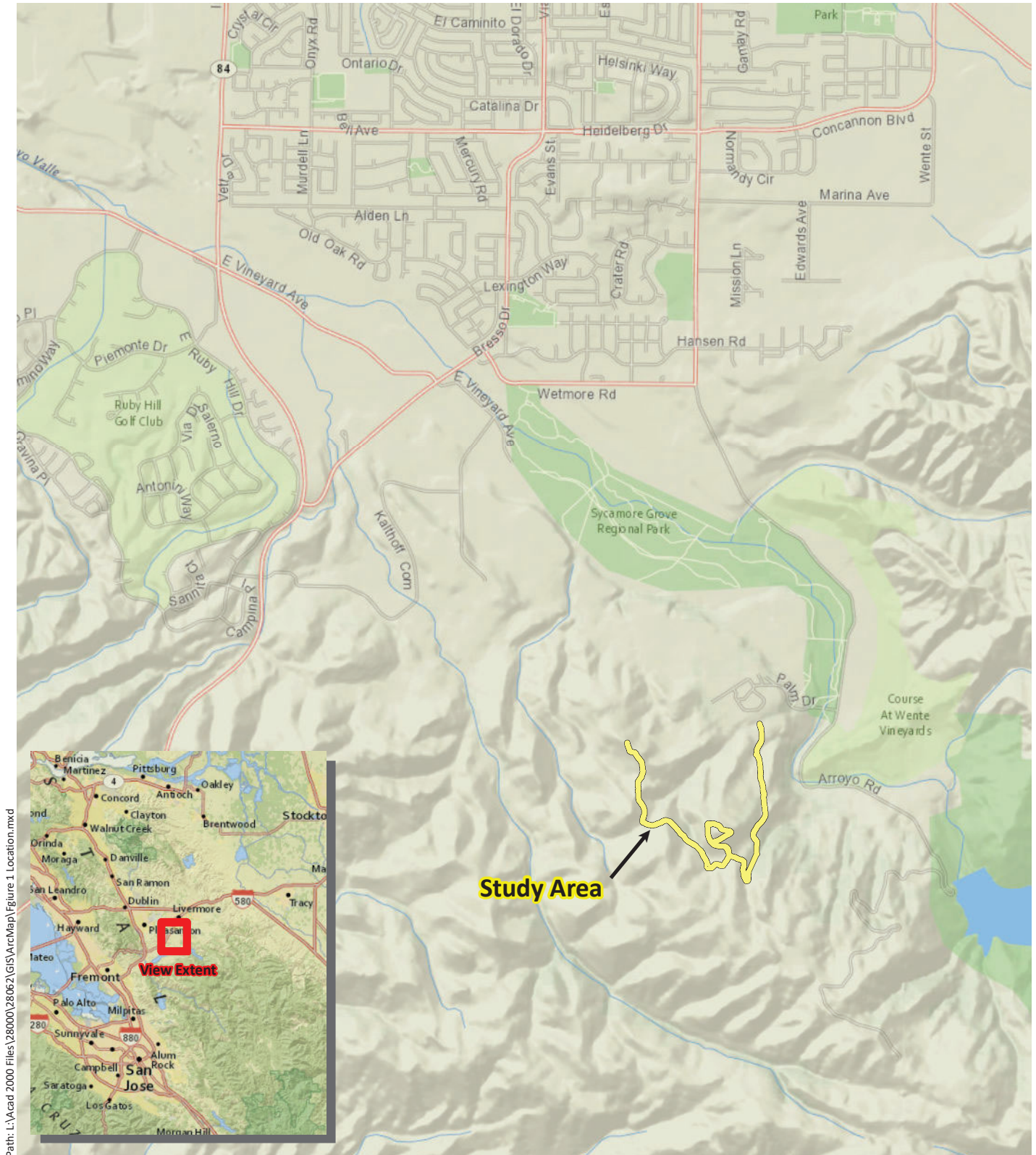
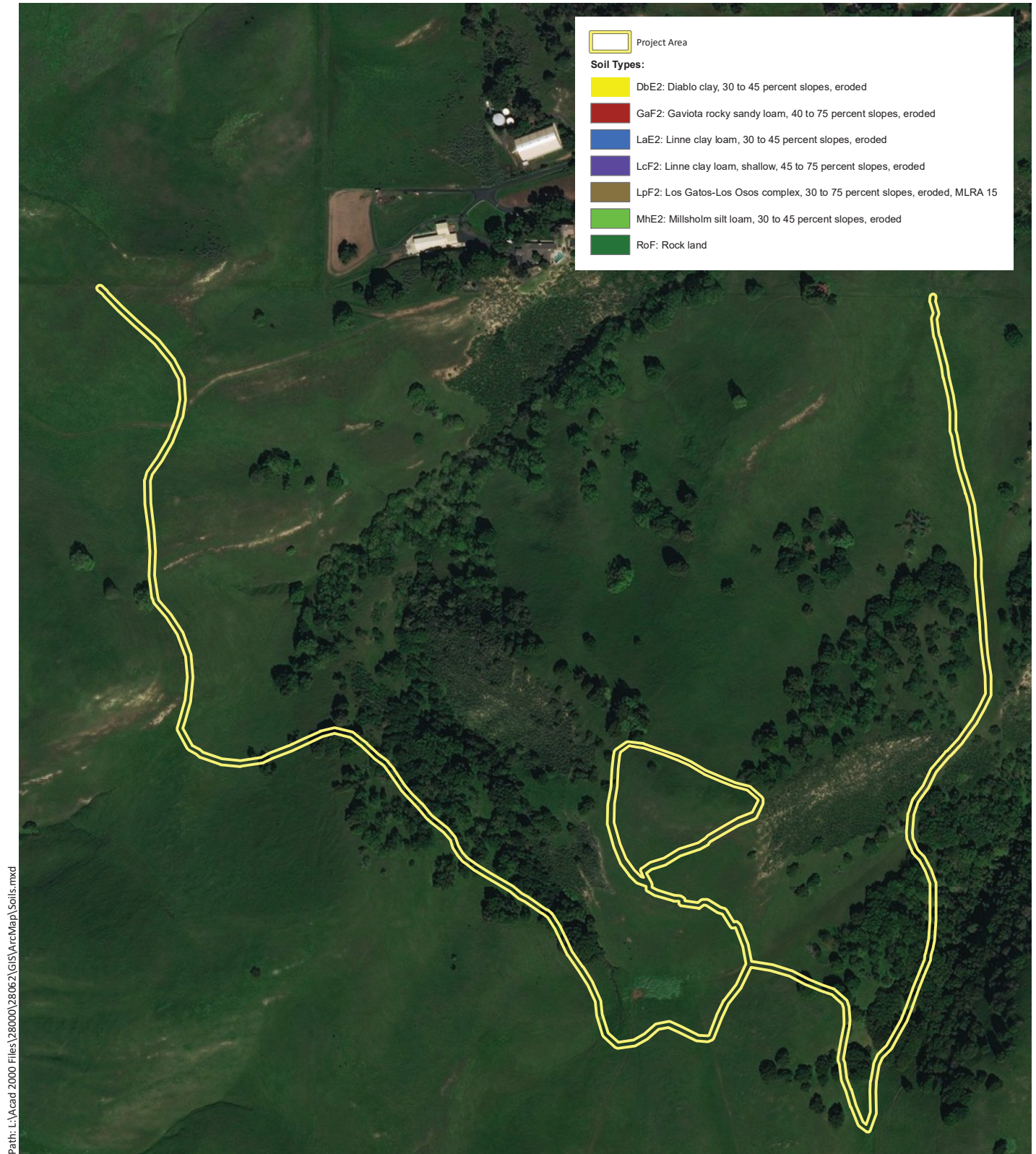


Figure 1. Study Site Location

Zone 7 Trail Project
Livermore, Alameda County, California

0 0.25 0.5
Miles





Sources: 2017 DigitalGlobe Aerial, SSURGO USGS, WRA | Prepared By: smortensen, 10/4/2018

Figure 2. Aerial Photograph of the Project Site

Zone 7 Trail Project
Livermore, Alameda County, California

0 250 500 1,000
Feet





View 1. View of the project site looking south, taken approximately 0.2 mile south of the VA hospital.



View 2. View of the project site looking northwest from the hilltop approximately 0.8 miles west of YMCA Camp Arroyo.



View 3. View of the project site looking northeast from a valley approximately 0.8 miles west of Del Valle Dam.



View 4. View of the project site looking north from approximately 1.0 mile west of the Del Valle Dam.

Figure 3. Views of the Project Site

Zone 7 Trail Project
Livermore Area Recreation and Park District



View 1. View of the VA hospital, orchards, and vineyards looking north from the hilltop approximately 0.5 miles south of the VA hospital.



View 2. View of Del Valle Regional Park, YMCA Camp Arroyo, and Wente Vineyards, facing southeast from the hill 0.5 miles south of the VA hospital.



View 3. View of Sycamore Grove Park taken near the proposed trailhead, facing southeast.



View 4. View of Arroyo del Valle Creek, taken just east of the proposed trail.

Figure 4. Views of Surrounding Land Uses

Zone 7 Trail Project
Livermore Area Recreation and Park District

3.0 PROJECT DESCRIPTION

3.1 Project Background

The proposed Project is located in unincorporated Alameda County between two existing portions of the Sycamore Grove Park (managed by LARPD). Each of these parks contains an array of recreational facilities, including an extensive network of trails for hiking, horseback riding, biking, and other activities. In 2016, LARPD adopted a Parks, Recreation, and Trails Master Plan², which outlines a variety of goals, policies, and actions to improve LARPD's facilities and trails. In the Plan, LARPD presents construction of trails to provide further linkage to existing trails within Sycamore Grove Park. The proposed Project would fulfill this objective by constructing a new linkage trail through Zone 7 property. Upon completion, the proposed trail would improve trail network connectivity, providing a connector between existing trails within the park.

3.2 Proposed Project

The proposed Project consists of constructing a new 1.97-mile multi-use trail through Zone 7 property in unincorporated Alameda County, approximately 0.8 miles south of the City of Livermore. Consistent with the objectives listed in LARPD's Parks, Recreation, and Trails Master Plan, the path would connect existing trails within LARPD's Sycamore Grove Park. This regional trail system provides recreational opportunities for hikers, equestrians, runners, and cyclists from throughout the East Bay, making network connectivity a high priority for stakeholders who manage and use the system.

The Zone 7 property houses a water treatment facility in its northwestern corner, but is mostly maintained as open space. Ungraded paths throughout the property are used by grazing cattle and to provide access trails for Zone 7 vehicles. As the property is largely undeveloped, has many pre-existing trails throughout, and sits between Sycamore Grove Park trails, it provides an ideal location for a connector trail between existing trails. The proposed trail would follow the path of existing trails to a large extent, with the creation of some additional trail where it does not already exist. The final trail's eastern terminus would be situated approximately 0.2 miles south of the VA Hospital. The trail would then proceed downhill in a somewhat irregular, zigzagging pattern until terminating approximately 0.7 miles southwest of the hospital. The trail would be approximately 1.97 miles long and connect the existing Valley View Loop Trail.

To construct the proposed trail, various actions would be required such as vegetation clearing, grading, and slope stabilization, most of which would be performed by volunteers with hand tools. Such actions would take place at various locations along the 1.97 mile route. Greater detail on construction actions and schedule are provided in Section 3.3, Construction.

² LARPD, "Parks, Recreation and Trails Master Plan," June 29, 2016, http://www.larpd.org/board/LARPD_Master_Plan/LARPD_PRTMP_Final_Document_Adopted_June_29_2016.pdf.

Trail Details

The proposed trail would be an approximately three to five-foot wide pedestrian path approximately 1.97 miles in length. New visitor amenities including benches would be installed intermittently along the pathway. The trail would be aligned to minimize vegetation removal and grading requirements, following existing cattle trails and access roads for much of its path. The new trail would connect Valley View Loop in Sycamore Grove Park to the trail adjacent to the Arroyo Road entrance parking lot and be designed to accommodate multiple recreational uses.

3.3 Construction

Site Access

Construction access to the Project Site would be from Arroyo Road (east side) via the Arroyo Road parking lot in Sycamore Grove Park and from Veterans Road (west side) via Veterans Park parking lot under the supervision of LARPD staff. The majority of access would be from the Arroyo Road parking lot in Sycamore Grove Park. The rest of Sycamore Grove Park would remain accessible to the public during construction. Temporary signage and barricades would be placed along the public access trails entering the Project Site during construction. Volunteers alongside LARPD staff would construct the trail. Construction would largely occur using hand tools, with the possibility of chainsaw use by LARPD staff. As no heavy machinery would be used, there would be no staging area for construction equipment.

Construction Schedule

Construction would take place over two dry seasons (May through October), with two days of construction per season. Construction would be scheduled to avoid breeding season of on-site wildlife. Construction would occur on weekdays and weekends between the hours of 7:00 a.m. and 6:30 p.m. Nighttime construction would not occur unless approved by LARPD on a case-by-case basis. Construction is anticipated to begin in the summer of 2019 and conclude in the summer of 2020.

Groundwork

To achieve a level, a trail compatible with multiple recreational uses, groundwork would be required along portions of the proposed path. Where existing trails are present, no vegetation would be removed. For land free of existing trails, grazing vegetation would be removed. These lands would not be revegetated. Vegetation clearing and ground leveling would be completed by volunteers and LARPD staff using hand tools. No heavy machinery would be used in the groundwork and vegetation clearing processes.

Lighting

Upon completion, the trail would only be open for public use during daytime hours. Thus, no permanent lighting would be constructed along the trail. As previously discussed, no nighttime construction would be completed, except on a case-by-case basis as approved by LARPD. As nighttime construction is not anticipated, no temporary lighting fixtures would be brought on-Site for construction.

Erosion Control Plan

An Erosion Control Plan would be part of the proposed Project. Erosion control measures would be implemented in select portions of the Project Site where erosion and sedimentation during construction are concerns, particularly in the vicinity of creeks and other water features. The following measures would be used during the construction phase of the proposed Project:

Fiber Roll

- Fiber rolls shall be biodegradable and weed free.
- On pavement: gravel bags weights shall be placed on unweighted fiber rolls.
- Off pavement: fiber roll shall be placed in a four inch minimum trench, with increased soil contact on uphill side, and wooden stakes for securing shall be bound at the top.
- On slope: fiber rolls shall be installed near the slope transition with a 6-inch minimum overlap of rolls. Vertical spacing along the face of the slope will vary between 10-feet to 40-feet.
- Fiber roll silt barrier shall be installed along contour and on slopes 2H:1V or flatter.
- Fiber roll shall be installed by shaping a four inch deep furrow to match the shape of the log, securing in furrow with wooden stakes, and tamping the ground around the fiber roll to fill voids between the log and the ground.

General Best Management Practices (BMPs)

LARPD would also implement general BMPs during construction to maintain safety; minimize impacts from hazardous materials spills; maintain emergency access; protect water quality, cultural resources, and biological resources; and prevent fires, including:

1. Sycamore Grove Park would remain open during construction and barricades would be installed at connection points between existing recreational trails and the active construction zone. Pedestrian detours and caution signs would be installed.
2. LARPD would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to limit erosion and protect water quality surrounding the Project Site.
3. LARPD would implement erosion control measures such as silt fencing in areas of ground disturbance.

Air Quality BMPs

The Bay Area Air Quality Management District (BAAQMD) recommends BMPs to ensure minimal impacts on regional air quality. The contractor would be responsible for implementing the following basic measures during construction:

1. A publicly visible sign with the telephone number and person to contact at LARPD regarding any dust complaints would be posted in or near the Project Site. The contact person would respond to complaints and take corrective action within 48 hours. The Air District's phone number would also be visible to ensure compliance with applicable regulations.
2. Any excavation would be performed during calm periods, and earth-moving activities would be suspended if winds exceed 25 miles per hour.

Noise BMPs

The contractor would also implement Noise BMPs during construction to ensure minimal impacts on park users and other nearby sensitive receptors.

1. Quiet construction equipment would be selected whenever possible. Motorized equipment would be fitted with proper mufflers in good working order and appropriate for the equipment.
2. All equipment used on-site would be muffled and maintained. All internal combustion engine-driven equipment would be fitted with mufflers that are in good condition. Mufflers would result in non-impact tools generating a maximum noise level of 80 dB when measured at a distance of 50 feet.
3. Unnecessary idling of internal combustion engines would be prohibited and all motorized equipment would be turned off when not in use.

3.4 Project-Related Approvals, Agreements, and Permits

The information contained in this Initial Study would be used by the LAPRD Board of Directors (the CEQA Lead Agency) as it considers whether or not to approve the proposed Project. If the Project is approved, the Initial Study would be used by the LAPRD and responsible and trustee agencies. At this time, no permits are anticipated to be required of the Project.

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is potentially significant unless mitigation is incorporated, as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Hazards/Hazardous Materials	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Agricultural Resources	<input type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Transportation/Traffic
<input type="checkbox"/>	Air Quality	<input type="checkbox"/>	Land Use/Planning	X	Tribal Cultural Resources
X	Biological Resources	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Utilities
x	Cultural Resources	<input type="checkbox"/>	Noise and Vibration	X	Mandatory Findings of Significance
<input type="checkbox"/>	Geology and Soils	<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	

Determination

On the basis of this initial evaluation:

- ☐ I find that the Project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the Project MAY have a "Potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature

Date

Mathew Fuzie, General Manager

Initial Study Checklist

This section describes the existing environmental conditions in and near the Project Site and evaluates environmental impacts associated with the proposed Project. The environmental checklist, as recommended in the CEQA Guidelines (Appendix G), was used to identify environmental impacts that could occur if the proposed Project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The cited sources are identified at the end of this section.

Each of the environmental categories was fully evaluated, and one of the following four determinations was made for each checklist question:

“No Impact” means that no impact to the resource would occur as a result of implementing the Project.

“Less than Significant Impact” means that implementation of the Project would not result in a substantial and/or adverse change to the resource, and no mitigation measures are required.

“Less than Significant with Mitigation Incorporated” means that the incorporation of one or more mitigation measures is necessary to reduce the impact from potentially significant to less than significant.

“Potentially Significant Impact” means that there is either substantial evidence that a Project-related effect may be significant, or, due to a lack of existing information, could have the potential to be significant.

Each question on the checklist was answered by evaluating the Project as proposed, that is, without considering the effect of any added mitigation measures. The checklist includes a discussion of the impacts and mitigation measures that have been identified. Sources used in this Initial Study are numbered and listed in Section 6.0.

4.1 Aesthetics

I. AESTHETICS — Would the Project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the Site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Project Site is located in eastern unincorporated Alameda County south of the City of Livermore. The Project Site is situated within the Zone 7 Water Agency's property at APNs 99-525-2, and LARPD's property 99-500-2-14. The project site is flanked by two parks. Sycamore Grove Park, an 847-acre open space park sits to the north. To the southeast is Del Valle Regional Park, a 4,395-acre park encompassing Lake Del Valle (also called Del Valle Reservoir). A VA hospital, vineyards, a golf course, one private residence, and YMCA Camp Arroyo/The Taylor Family Foundation neighbor the Project Site.

Views of the Project Site and its surroundings are characterized by open space and rolling, grassy hills. The hills are generally tan, except during rainy season, when they become green. They have several trails used by Zone 7 trucks and grazing cattle. Patches of trees of varying thickness spot the landscape.

Given the hilly landscape, the Project Site is visible from many vantage points, including the VA hospital parking lot, and at certain points along Arroyo Road. The Project would therefore be visible to hospital-goers, area residents, and motorists. Additionally, the Project would be visible from various vantage points in adjacent parks, where it would be observed by people visiting the area for recreation.

Within eastern Alameda County, Highway 680 is an officially designated state scenic highway and Highway 580 is an eligible state scenic highway. The Project Site is approximately 5.4 miles east of 580 and 5.5 miles south of 680. Scenic resources designated by the East County Area Plan include the ridgelines above the vineyards south of Livermore, which are visible from the Project Site. The East County Area Plan provides a variety of policies regarding the preservation of visual resources and protection of sensitive viewsheds. Those that are relevant to the Project are outlined below:

Regulatory Setting

East County Area Plan Relevant Policies

The East County Area Plan identifies sensitive viewsheds and provides policies regarding the preservation of visual resources and protection of sensitive viewsheds.

Policy 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;
5. The ridgelines above Happy Valley south of Pleasanton.

Policy 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.

Policy 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.

Policy 113: The County shall review development proposed adjacent to or near public parklands to ensure that views from parks and trails are maintained.

Policy 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.

Policy 117: The County shall require that where grading is necessary, the off-site visibility of cut and fill slopes and drainage improvements is minimized. Graded slopes shall be designed to simulate natural contours and support vegetation to blend with surrounding undisturbed slopes.

Policy 118: The County shall require that grading avoid areas containing large stands of mature, healthy vegetation, scenic natural formations, or natural watercourses. Policy 119: The County shall require that access roads be sited and designed to minimize grading.

Discussion of Impacts

a) Would the proposed Project have a substantial adverse effect on a scenic vista?

Less-than-Significant Impact. For the purposes of this analysis, a scenic vista is defined as a vantage point with a broad and expansive view of a significant landscape feature (e.g. lake), of a significant historical or architectural feature (e.g. a historic tower), or of any of the sensitive viewsheds identified in the East County Area Plan (e.g. ridgelines). Scenic vistas near the Project Site include the ridgelines north of Livermore wineries and Lake del Valle. While the proposed trail may be visible to observers of this vista, these ridgelines are not located within the Project Site and would not be adversely impacted.

The Proposed Project includes the construction of unpaved pedestrian trails along the hillside, many of which would exist within the footprint of existing paths and trails used by trucks and cattle. Minimal land would be disturbed, and disturbance would yield an unpaved path consistent with the current visual character of the hillside. No new structures would be constructed and the landscape would remain largely unchanged. As changes to views of the Project Site would be minimal, there would be **less-than-significant** impacts.

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

No Impact. The Project Site is roughly 5.5 miles away from the nearest designated state scenic highway and 5.4 miles from the nearest eligible state scenic highway. As there is no state scenic highway in the immediate vicinity of the Project Site, there would be **no impact** to scenic resources within a state scenic highway.

c) **Would the proposed Project substantially degrade the existing visual character or quality of the Site and its surroundings?**

Less-than-Significant Impact. Upon Project completion, the hillside would have approximately 1.97 additional miles pedestrian trail. This trail would follow existing paths used by trucks and cattle for large segments, resulting in minimal visual changes along these stretches. As similar trails are already common within this viewshed, changes from vegetation to trail would be consistent with the current visual character and quality of the Site.

Construction activity would result in a temporary, minimal degradation of existing visual quality. Volunteers and LARPD staff would traverse the area over the course of four non-consecutive days. At this time, they would use hand tools to clear vegetation and conduct groundwork. This temporary influx of people and the occurrence of ground disturbance may minimally impact views of the area. Upon completion of construction, the Project Site would be restored to an open space setting with trails and normal levels of pedestrian traffic along the hill. Apart from construction activity's temporary visibility, there would be no impacts to the area's visual character or quality. As such, the Project would result in **less-than-significant** impacts.

d) **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

No Impact. The Proposed Project does not include the construction of any lighting fixtures or structures that would introduce new sources of light to the area. Nighttime construction would not occur, so no light sources would be introduced for construction purposes. Given no new sources of light or glare would be created, there would be **no impact**.

4.2 Agricultural and Forestry Resources

II.	AGRICULTURAL AND FORESTRY RESOURCES — Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Project Site is in an open space area of unincorporated Alameda County used largely for cattle grazing and Zone 7 functions. The Project Site is classified by the state of California's Farmland Mapping and Monitoring Program (FMMP) as grazing land. The state describes grazing land as "land on which the existing vegetation is suited to the grazing of livestock"³. There is no prime farmland, unique farmland, or farmland of statewide importance present on the Project Site. The Project Site is, however, subject to a Williamson Act contract as non-prime farmland⁴.

Public resources code (PRC) section 12220(g) describes forest land as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources". PRC section 51104(g) defines timberland as "privately own land, or land acquired for state forest purposes, which is devoted to and used for growing and harvesting timber...". Although there are sporadic patches of trees throughout the landscape, there is no forestland or timberland present. No timber is harvested on-Site; and area tree cover is insufficiently dense to constitute forest land.

In 1994, Alameda County produced an Area Plan for unincorporated areas in eastern Alameda County. The Project Site is within this plan's jurisdiction and has a land use designation of Large Parcel Agriculture⁵ and a use code of 0300, Exempt Public Agency⁶.

Discussion of Impacts

a) *Would the proposed Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?*

No Impact. The Project Site is classified as grazing land by the FMMP. There is no prime farmland, unique farmland, or farmland of statewide importance present on the Project Site. As such, the Project would not convert any such lands to non-agricultural use and there would be **no impact**.

b) *Would the proposed Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Less-than-Significant Impact. The Project Site has a land use designation of large parcel agriculture. It is currently under a Williamson Act contract as non-prime farmland. Alameda County's planning department lays out a two-part test to determine whether a given land use is compatible with a Williamson Act contract. The test stipulates that 1) there must be existing commercial agricultural use as a precondition to development; and 2) the proposed development must be compatible with and incidental to the documented

³ California Department of Conservation, *Alameda County Important Farmland 2014*, December 2016, December 2016, <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/ala14.pdf>.

⁴ California Department of Conservation, *Alameda County Williamson Act FY 2014/2015, 2015*, ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Alameda_14_15_WA.pdf.

⁵ Alameda County Community Development Agency Planning Department, "East County Area Plan: A Portion of the Alameda County General Plan," May 5, 1994.

⁶ Alameda County Assessor's Office, "Parcel Viewer."

agricultural use of the property. The Project Site is currently used for grazing, and the proposed development is compatible with agricultural use, as described below.

The proposed Project is the construction of a pedestrian trail that would mostly follow pre-existing paths used by utility trucks and grazing cattle. These paths would be left unpaved but would undergo minor grading. In addition to the pre-existing paths, some additional paths would need to be graded, removing small stretches of land from grazing use. While some grazing vegetation would be removed, this would be minimal; and the newly graded paths would not interfere with agricultural use of remaining land. As such, there would be **less-than-significant** impacts.

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

No Impact. The Project Site has a land use designation of Large Parcel Agriculture. It is not zoned as forest land, timberland, or timberland production. As such, there would be no conflicts with zoning of forest land, timberland, or timberland production. There would therefore be **no impact**.

- d) ***Result in the loss of forest land or conversion of forest land to non-forest use?***

No Impact. There is no forest land in the Project Site. The Project is located in land predominately used for grazing, with sparse trees scattered throughout. Because there is no forest land in the Project Site, no forest land would be lost or converted to non-forest use. There would therefore be **No Impacts** regarding the loss of forestland or conversion of forestland to non-forest use.

- e) ***Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

Less-than-Significant Impact. The Project Site is designated for Large Parcel Agricultural Production. According to the East County Area Plan, recreation and public uses are compatible with this designation. The Proposed Project would yield roughly 1.97 miles of pedestrian trail for recreational use. Further, the introduction of new recreational trails would not interfere with agricultural use of the remainder of the property, which is currently used for grazing and public services; nor would it trigger the conversion of any additional agricultural land to non-agricultural uses. There is no forestland within the Project Site, so no forestland would be converted to non-forest use. Because existing changes are compatible with agricultural production, would not convert substantial quantities of farmland to non-agricultural use, and would convert no forestland to non-forest use, there would be **less-than-significant** impacts.

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4.3 Air Quality

III. AIR QUALITY— Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or Projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Regulation of air pollution is achieved through both national and State ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act, the U.S. Environmental Protection Agency (EPA) has identified criteria pollutants and has established the National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for the following pollutants: ozone (O₃); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); particulate matter less than 10 microns in diameter (PM₁₀); particulate matter 2.5 microns or less in diameter (PM_{2.5}); and lead (Pb). These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria. The State of California has also established its own more stringent set of air quality standards commonly referred to as the California Ambient Air Quality Standards (CAAQS). CAAQS have been established for the criteria pollutants identified above and for sulfates, hydrogen sulfide, and vinyl chloride.

Because the proposed Project is located in unincorporated Alameda County, California, it is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD is responsible for attainment and maintenance of the NAAQS and CAAQS in the San Francisco Bay Area Air Basin. The Bay Area is currently in non-attainment for the NAAQS and CAAQS for ozone and the CAAQS for particulate matter. Taking this non-attainment status and other considerations

into account, in April 2017, BAAQMD issued its most recent clean air plan (CAP), which outlines a comprehensive strategy to protect public health and the climate, reduce emissions of criteria pollutants and their precursors, and reduce emissions of toxic air contaminants (TACs). The Plan also provides thresholds of significance and screening criteria for criteria pollutants/precursors for Project construction and operation and greenhouse gases for Project operation.

Discussion of Impacts

a) *Would the proposed Project conflict with or obstruct implementation of the applicable air quality plan?*

Less-than-significant impact. The 2017 BAAQMD CAP aims to bring the Bay Area into attainment for the ozone and particulate matter NAAQS and CAAQS. It outlines a variety of control strategies to do so based on assumptions about area growth and vehicle miles traveled (VMT). Should a Project conflict with these assumptions, it might conflict or obstruct the implementation of the applicable air quality plan, resulting in a potentially significant impact.

The proposed Project would not result in any population increase, as it would not provide any additional housing or job opportunities. While the Project may result in an increase in vehicle miles traveled due to increased car trips to the Site to make use of the trail, this would be insubstantial. The proposed trail would connect two existing trails, and no additional parking would be added to accommodate additional recreationists. Any permanent increase in VMT would therefore be minimal. There would be a temporary increase in VMT during construction as workers and equipment make their way to and from the Site. The quantity of new trips generated to the Project Site would be insufficient to disrupt the CAP's VMT assumptions. Given the Project would not result in a substantial increase of people or VMT, there would be ***less-than-significant*** impacts.

b) *Would the proposed Project violate any air quality standard or contribute to an existing or Projected air quality violation?*

Less-than-Significant Impact. BAAQMD's CAP outlines daily and annual emissions for Project construction and operation that might make a cumulatively considerable contribution to the deterioration of air quality or an air quality violation. The Project would generate few emissions during its operation. Small quantities of particulate matter could be generated as loose dust is disturbed through trail use. Additionally, it is possible that there would be a small increase in VMT with increased use of the trail, although this is unlikely because the proposed trail merely connects two pre-existing trails and no additional parking would be added. Thus, any increases to existing air pollution during Project operation would be minimal and insufficient to contribute to violation of air quality standards.

During construction, there would be emissions associated with excess VMT traveled to the Site by volunteer construction personnel and LARPD staff, as well as possible fugitive dust from groundwork. Excess VMT associated with construction would be insufficient to contribute to an air quality violation; and implementation of BAAQMD construction BMPs outlined in the Project Description would maintain fugitive dust emissions at the less-than-significant level. Given the Project's negligible operational emissions and the

implementation of BMPs to minimize construction emissions, Project impacts on air quality violations would be **less than significant**.

- c) **Would the proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors?)**

Less-than-Significant Impact. The Bay Area is currently in non-attainment for the ozone NAAQS and CAAQS and the particulate matter NAAQS. As discussed in response to question 4.3-b, few emissions would be generated by the Project and construction air quality BMPs would be implemented, putting air pollutant emissions below a cumulatively considerable level, including for ozone and particulate matter. As such, impacts to increased emission of non-attainment criteria pollutants would be **less than significant**.

- d) **Would the proposed Project expose sensitive receptors to substantial pollutant concentrations?**

Less-than-Significant Impact. Sensitive receptors nearby include patients being treated at the VA hospital located approximately 0.30 miles north and children at the camp approximately 0.36 miles east of the Project Site. As discussed above, the Project would not result in substantial operational or construction emissions. Given the minimal emissions generated by the Project, sensitive receptors would not be exposed to substantial pollutant concentrations. As such, impacts would be **less than significant**.

- e) **Would the proposed Project create objectionable odors affecting a substantial number of people?**

Less-than-Significant Impact. According to the BAAQMD, typical uses that may result in significant odor impacts include: wastewater treatment plant, sanitary landfill, transfer station, composting facility, petroleum refinery, asphalt batch plant, chemical manufacturing, fiberglass manufacturing, painting/coating operations, rendering plant, and coffee roaster. The proposed Project does not include any of these uses, and trail use is not associated with production of odors. Given neither construction nor operation of the Project is anticipated to create objectionable odors that might affect a substantial number of people, there would be **less-than-significant** impacts.

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4.4 Biological Resources

IV. BIOLOGICAL RESOURCES — Would the Project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery Sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

This analysis of potential impacts to biological resources is based on the Biological Resources Assessment (BRA) conducted by WRA, Inc. (WRA). The BRA is included in Appendix A of this Initial Study. Prior to conducting field surveys, WRA reviewed available reference materials such as the USGS 7.5-minute quadrangle map for La Costa Valley, the USFWS National Wetland Inventory, the East Alameda County Conservation Strategy (EACCS), and aerial photographs of the Site. On August 23, 2018, WRA conducted a routine jurisdictional wetland delineation to determine the presence of potential wetlands and other water subject to federal jurisdiction under Section 404 of the Clean Water Act (CWA), a burrowing owl habitat survey, and an assessment of biological communities in the Project Site. These studies were conducted to determine which plant communities might be present within the Project Site, if existing conditions provide suitable habitat for special-status plant or wildlife species, and if sensitive habitats are present.

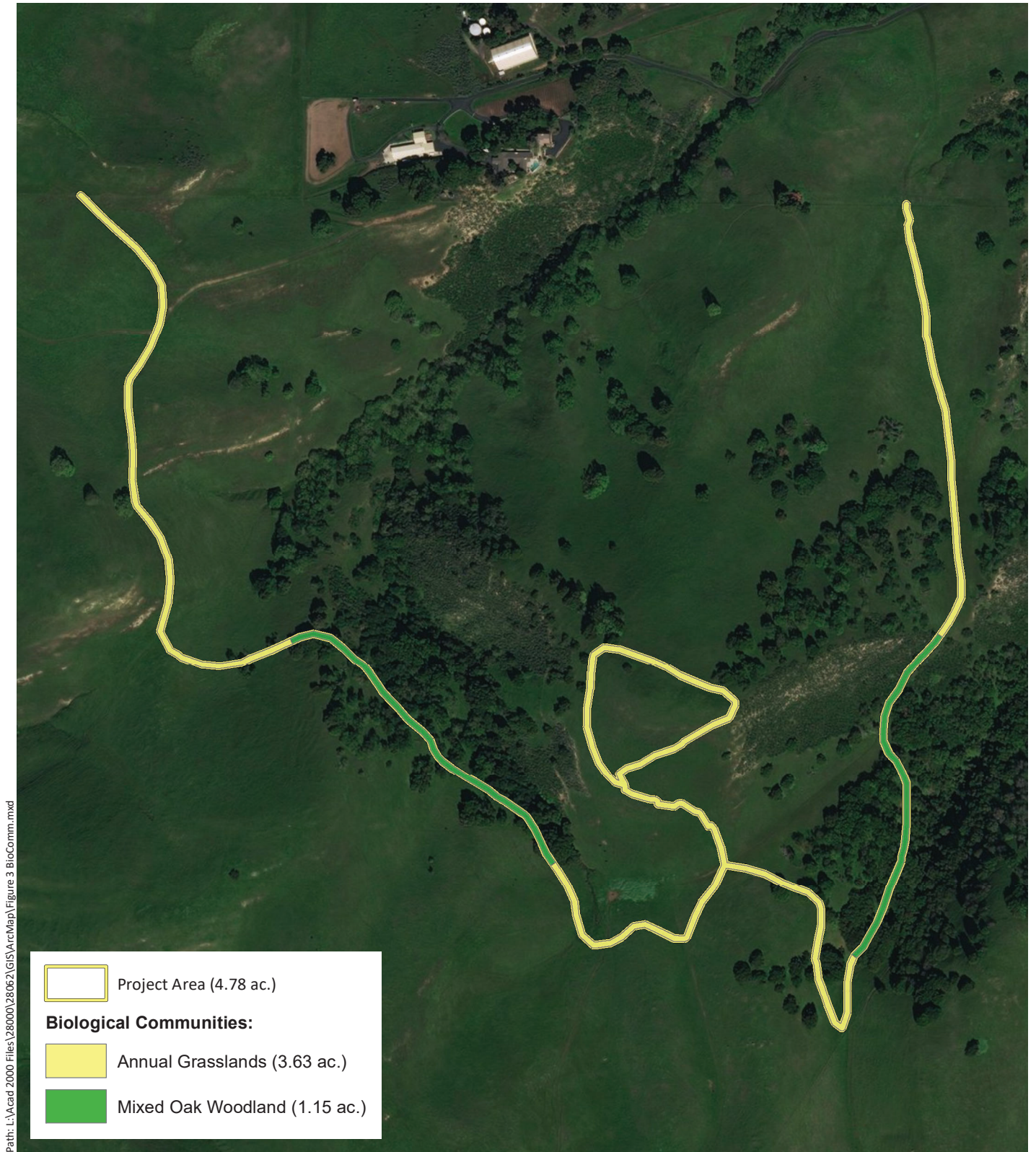
Biological Communities

Two biological communities were identified within the Project Site, annual grassland (non-sensitive) and coast live oak woodlands (locally sensitive). Table 1 summarizes the area of each biological community type observed in the Project Site and Figure 5 illustrates their locations. In addition to the biological communities discussed below, 0.08 acre of perennial wetland was identified close to but not within the Project Site. The trail was designed to avoid this wetland. The wetland is nonetheless discussed below.

Table 1. Summary of Biological Communities in the Project Site

Community Type	Area (acres)
Non-Sensitive	
Annual grasslands	3.63
Sensitive	
Coast live oak woodlands	1.15
Total	4.78

**0.08 acre of perennial wetland was identified in proximity to, but not within the Project Site*



Sources: 2017 DigitalGlobe Aerial, WRA | Prepared By: smortensen, 10/4/2018

Figure 5. Biological Communities Located within the Project Site

Zone 7 Trail Project
Livermore, Alameda County, California

0 250 500 1,000
Feet



Non-Sensitive Biological Communities

Non-native Annual Grassland

Non-native annual grasslands are common throughout California on all aspects and topographic positions underlain by a variety of substrates. In the Project Site, annual grasslands are dominated by non-native annual grass species, including wild oat grass (*Avena barbata*, California Invasive Plant Council [Cal-IPC; 2018] moderate), ripgut brome (*Bromus diandrus*, Cal-IPC Moderate), foxtail brome (*Bromus madritensis*, Cal-IPC High), and Medusa head (*Elymus caput-medusae*, Cal-IPC High).

Very low densities (less than 5 percent cover) of native grasses, including Purple needlegrass (*Stipa pulchra*) and blue wild-rye (*Elymus glaucus*), were found within this community. Forbs within this community included yellow star thistle (*Centaurea solstitialis* Cal-IPC High), black mustard (*Brassica nigra*, Cal-IPC Moderate), vinegar weed (*Trichostema lanceolatum*), and wild mustard (*Hirschfeldia incana*, Cal-IPC Moderate). These annual grasslands are located on all aspects and topographic positions, and are underlain by all nearly all mapped soil units in the Project Site. Disturbance in this community was primarily caused by erosion and grazing, and a network of cattle trails exists throughout the grasslands. Within the Project Site, annual grasslands intergrade with oak woodlands.

Sensitive Biological Communities

Sensitive biological communities are defined as those communities that are given special protection under CEQA and other applicable federal, state, and local laws, regulations and ordinances.

Coast live oak woodland (*Quercus agrifolia* Woodland Alliance).

Coast live oak woodlands are known from the outer and inner Coast Ranges, Transverse Ranges, and Southern Coast from northern Mendocino County to San Diego County. This community is typically located on terraces, canyon bottoms, slopes, and flats underlain by deep, well-drained sandy or loam substrates with high organic content. Within the Project Site, coast live oak woodlands occupy approximately 1.15 acres, and intergrade with annual grasslands. These woodlands are most extensive on west-facing slopes from the ridgeline to mid-elevation. The underlying substrate is primarily composed of well-drained loam with high organic content and a thin, scattered duff layer of leaves and thatch from annual forbs and grasses. Disturbance in this community appears to be relatively low, and primarily from cattle grazing, with no fire scarring or excessive wood-cutting observed.

Dominant species in the tree layer include coast live oak (*Quercus agrifolia*), blue oak (*Q. douglasii*), and California buckeye (*Aesculus californica*), with coast live oak comprising greater than 50 percent of the relative cover in this stratum. This community contains a relatively dense and well-developed tree canopy, which reduces the density of the shrub layer to scattered individuals. Shrub species observed in the coast live oak woodland include poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), and toyon (*Heteromeles arbutifolia*). The herbaceous layer is dominated by a mix of shade-tolerant invasive forbs, including Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*, Cal-IPC Moderate). Though not considered globally or state sensitive (as it is a G5/S4 community), coast live oak

woodland qualifies as an EACCS CZ-12 conservation priority community, making it locally sensitive.

Freshwater emergent wetland.

One isolated perennial freshwater herbaceous wetland totaling 0.08 acre was identified near the Project Site. It is situated at the base of several sloping hills and is partially impacted by a seep box used for filling a nearby trough to support on-going drainage. Vegetation within the seasonal wetland is moderately sparse and is dominated by a mixture of native and non-native rushes, grasses and forbs. The most frequently observed species include spike rush (*Eleocharis macrostachya*), watercress (*Nasturtium officinale*), and annual beard grass (*Polypogon monspeliensis*). Though these species are typically found in seasonal wetlands, the hydrology of the Site presented as a perennial system.

Special-Status Species

Plants

Based on a review of biological resource databases conducted by WRA biologists, 60 CNPS special-status plant species have been documented in the vicinity of the Project Site, which was defined to include the La Costa Valley USGS 7.5-minute quadrangle and the eight surrounding quadrangles, an area encompassing approximately 335,757 acres and extending up to 33 miles from the Project Site boundary. Special-status plant species that have been documented within a 5-mile radius of the Study Area are shown on Figure 6. Potential for occurrence of these species are discussed below.

Bent-flowered fiddleneck (*Amsinckia lunaris*). Rank 1B.2. Moderate potential. This March through June blooming species occurs in coastal bluff, cismontane woodland, valley and foothill grasslands. The species is known to occur in Alameda County (CNPS 2018b) and has a moderate potential to occur in the Project Site.

California Androsace (*Androsace elongata* ssp *acuta*). Rank 4.2. High Potential. This species occupies chaparral, cismontane woodland, scrub, grasslands, seeps, and pinyon and juniper woodlands at elevations between 490 and 4,280 feet. This species blooms between March and June. The species is known to occur near the headwaters of nearby Arroyo de Valley Stream, which flows west of the Project Site (CDFW 2018b).

Alkali milkvetch (*Astragalus tener* var. *tener*). Rank 1B.2. Moderate potential. This species occurs in grasslands, particularly with adobe clay soils, at elevations up to 195 feet. It blooms between March and June. The species is known to be sensitive to non-native plant invasion, trampling, and agricultural conversion (CNPS 2018b). Though the grasslands in the Project Site are disturbed by on-going cattle grazing, there is moderate potential for this species to occur in the Project Site

Crownscale, (*Atriplex coronata* var. *coronata*). Rank 4.2. Moderate potential. This species occurs in valley and foothill grasslands with clay or alkaline soils at elevations up to 1,935 feet and blooms between March and October (CNPS 2018b). This species has moderate potential to occur within the Project Site.

Brittlescale (*Atriplex depressa*). Rank 1B.2. Moderate potential. This species occurs in valley and foothill grasslands and seeps at elevations up to 1050 feet. It can occupy clay in meadows or annual grasslands. Though grazing and trampling present known threats in the Project Site, the species has moderate potential to occur in the Project Site. The species blooms from April through October (CNPS 2018b).

Big-scale balsamroot (*Balsamorhiza macrolepis*). Rank 1B.2. High potential. This species can occur in cismontane woodland and valley and foothill grasslands at elevations between 145 and 5,100 feet. The open grassy slopes and cismontane woodland provide potential habitat, and the species was documented approximately five miles away in 1993, but was determined to be extirpated in 2010 after installation of a golf course. The open grassy slopes and woodlands habitats have high potential to support this species. It blooms between March and June.

Big tarplant (*Blepharizonia plumosa*). Rank 1B.1. High potential. This species occurs in grasslands, including annual grasslands, between 95 and 1,655 feet with clay to clay-loam soils. It has high potential to occur within the Project Site, and blooms between July and October (CNPS 2018b).

Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). Rank 1B.1. Moderate potential. Congdon's tarplant is an annual herb in the composite family (Asteraceae) that blooms from May to October. It typically occurs on alkaline soils, sometimes described as heavy white clay in valley and foothill grassland habitats ranging from 0 to 755 feet (CDFW 2018b, CNPS 2018b). The Project Site supports grassland habitat with alkaline clay loam and silt loam, and has moderate potential to support the species.

Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*). Rank 4.3. High potential. Santa Clara red ribbons occurs in chaparral and cismontane woodlands at elevations between 295 and 4,920 feet, typically on slopes and near drainages (CNPS 2018b). Several observations of the species exist roughly 15 miles south of the Project Site (CDFW 2018b). Because the Project Site's oak woodlands provide suitable habitat for the species, Santa Clara red ribbons have a high potential to occur in the Project Site.

Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*). Rank 1B.2. High potential. Hospital Canyon larkspur is a perennial herb in the buttercup family (Ranunculaceae) that blooms from April to June. It typically occurs on slopes of open woodlands, mesic, boggy meadows, and openings in chaparral at elevations ranging from 900 to 3,300 feet (CDFW 2018, Koontz 2014). Hospital Canyon larkspur is known from 15 USGS 7.5-minute quadrangles in Alameda, Contra Costa, Merced, Monterey, San Benito, San Joaquin, Santa Clara, and Stanislaus counties, and is endemic to California (CNPS 2015). Hospital Canyon larkspur has been documented from the La Costa Valley USGS 7.5-minute quadrangle (CDFW 2018b) with occurrences approximately three miles east of the Project Site. Hospital Canyon larkspur was determined to have a high potential to occur in the Project Site due to the presence of cismontane woodland.

Stinkbells (*Fritillaria agrestis*). Rank 4.2. High potential. This species occurs in cismontane woodlands and grasslands, including those dominated by non-native grasses and on clay soils. The species is threatened by grazing and non-native plant invasion, both of which occur in the Project Site. It blooms between March and June (CNPS 2018b). Based on suitable habitat at the site, this species has a high potential of occurrence.

Fragrant fritillary (*Fritillaria liliacea*). Rank 1B.2. Moderate potential. This species occurs in cismontane woodlands and grasslands at elevations up to 1,345 feet, occasionally on serpentine though usually on clay soils. It blooms between February and April, and is threatened by grazing and foot traffic, which are present in the Project Site (CNPS 2018b). The species has moderate potential to occur within the Project Site.

Diablo helianthella (*Helianthella castanea*). Rank 1B.2. High potential. This species occurs in broad-leafed upland forest, cismontane woodland, and grasslands at elevations between 195 and 4,265 feet. It typically occurs in chaparral and oak woodland interface in rocky soils and partial shade. The species blooms between March and June, and is threatened by grazing and non-native plant invasion, both of which occur in the Project Site (CNPS 2018b). This species has high potential to occur within the Project Site in areas with rocky soils.

Bristly leptosiphon (*Leptosiphon acicularis*). Rank 4.2. High potential. This species inhabits cismontane woodland, grasslands, and chaparral at elevations between 180 and 4,290 feet (CNPS 2018). The nearest occurrence records are over a century old (CDFW 2018b), though this species has high potential to occur in the Project Site based on habitat suitability.

Serpentine leptosiphon (*Leptosiphon ambiguus*). Rank 4.2. Moderate potential. Serpentine leptosiphon occurs in cismontane woodlands and grasslands, typically on serpentine soils. The species blooms March through June, and is found at elevations between 390 and 3,705 feet (CNPS 2018). Though the Project Site does not support serpentine, the grasslands and woodlands within the Project Site have moderate potential to support the species.

Woolly-headed lessingia (*Lessingia hololeuca*). Rank 3. Moderate potential. Woolly-headed lessingia occurs in broad-leafed upland forest, scrub, lower montane coniferous forest, and grasslands at elevations between 45 and 1,000 feet. The species blooms between June and October. It has been observed on clay and serpentine, and along roadsides and in fields (CNPS 2018b). This species has moderate potential to occur within the Project Site, though it was not observed during the August 23rd site visit, which is inside the species blooming period.

Arcuate bush-mallow (*Malacothamnus arcuatus*). Rank 1B.2. Moderate potential. This species occurs in chaparral and cismontane woodland at elevations between 45 and 1,165 feet, typically in gravelly alluvium. It blooms between April and September, and was not observed during the August 23 site visit (CNPS 2018b). The closest observation of the species is located approximately 20 miles away and was made more than 50 years ago (CDFW 2018b). The Project Site has moderate potential to support this species.

San Antonio Hills Monardella (*Monardella antonina* ssp. *antonina*). Rank 3. High potential. This species occurs in chaparral and cismontane woodlands at elevations between 1,045 and 3,280 feet. This species blooms between June and August, and is commonly confused with *Monardella villosa* ssp. *villosa*, which was observed during the August 23rd site visit (CNPS 2018b). Given the habitat suitability, there is high potential for the species to occur in the Project Site.

Little mousetail (*Myosurus minimus* ssp. *apus*). Rank 3.1. Moderate potential. Little mousetail occurs in grasslands and alkaline vernal pools at elevations between 65 and 2,100 feet. It blooms between March and June, and is threatened by agriculture (CNPS 2018b). There is moderate potential for the species to occur in the Project Site.

Adobe navarretia (*Navarretia nigelliformis* ssp. *nigelliformis*). Rank 4.2. Moderate potential. Adobe navarretia occurs in vernal mesic grasslands and vernal pools at elevations between 325 and 3,280 feet. The species blooms April and June (CNPS 2018b). There are no known records of this species occurring near the Project Site (CDFW 2018b), but grassland habitat and clay soils are present, providing suitable habitat for the species. It has moderate potential to occur in the Project Site.

Saline clover (*Trifolium hydrophilum*). Rank 1B.2. Moderate potential. Saline clover occurs in marshes, swamps, vernal pools, and mesic and alkaline grasslands. The species occurs at elevations up to 985 feet and blooms between April and June. It is threatened by trampling and many known sites are likely extirpated (CNPS 2018b). The Project Site supports limited mesic patches in dry grasslands and clay soil. This habitat provides moderate potential for occurrence at the Project Site.

Caper-fruited Tropidocarpum (*Tropidocarpum capparideum*). Rank 1B.1. Moderate potential. This species occurs in hilly alkaline grasslands with clay soils at elevations up to 1,495 feet. The species blooms between March and April, and is threatened by trampling and non-native plant invasion (CNPS 2018b). The species has moderate potential to occur in the Project Site.

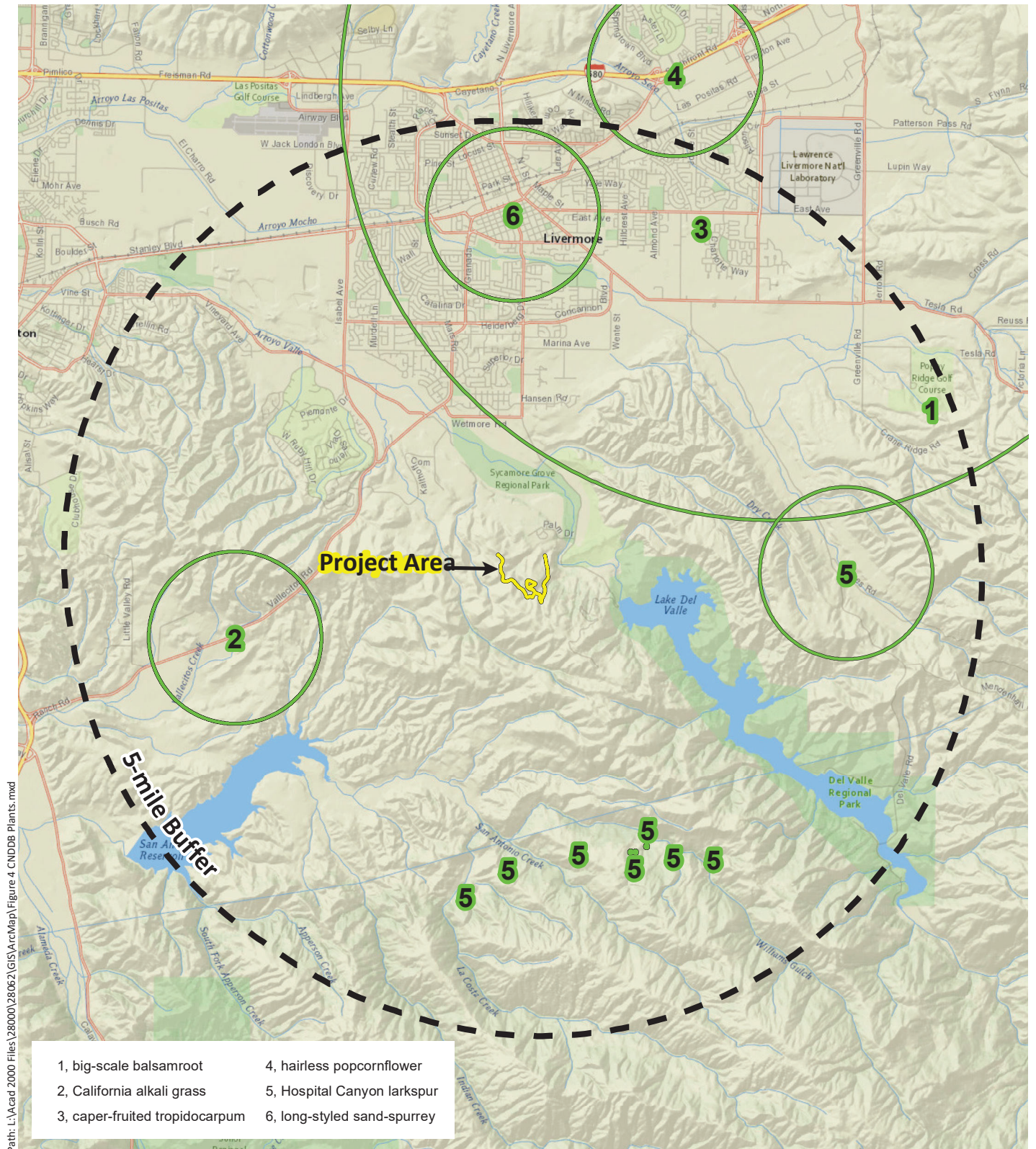


Figure 6. Special-Status Plant Species Documented within 5-miles of the Project Site

Zone 7 Trail Project
Livermore, Alameda County, California

0 1 2
Miles



Wildlife

Based on a review of resource databases by WRA biologists, 61 special-status wildlife species have been documented in the vicinity of the Project Site. Of these, 23 species have been documented in the CNDDDB as occurring within a 5-mile radius of the Project Site. Nine of these species have no potential to or are considered unlikely to occur in the Project Site due to lack of suitable soil or habitat and/or inconsistency with the species' known or historic range. The 14 remaining special-status wildlife species have been observed in or have high or moderate potential to occur in the Project Site and are discussed below: Special-status wildlife species that have been documented within a 5-mile radius of the Study Area are shown on Figure 7.

Pallid bat (*Antrozous pallidus*), CDFW Species of Special Concern, Western Bat Working Group (WBWG) High Priority. Moderate Potential. Pallid bats are distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species occurs in a number of habitats ranging from rocky arid deserts to grasslands, and into higher elevation coniferous forests. They are most abundant in the arid Sonoran life zones below 6,000 feet, but have been found up to 10,000 feet in the Sierra Nevada. Pallid bats often roost in colonies of between 20 and several hundred individuals. Roosts are typically in rock crevices, tree hollows, mines, caves, and a variety of man-made structures, including vacant and occupied buildings.

Tree roosting has been documented in bole cavities of large oak trees like those found within, and adjacent to the Project Site. Such trees rarely support maternity colonies, but may provide suitable day or night roosts for the species. Additionally, the Project Site provides suitable open foraging habitat, as well as a source of water for the species. Considering the proximity of these factors, this species has a moderate potential to occur within the Project Site.

Hoary bat (*Lasiurus cinereus*), WBWG Medium Priority. Moderate Potential. Hoary bats are highly associated with forested habitats in the western United States, particularly in the Pacific Northwest. They are a solitary species and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches, usually at the edge of a clearing. Roosts are typically 10 to 30 feet above the ground. They have also been documented roosting in caves, beneath rock ledges, in woodpecker holes, in grey squirrel nests, under driftwood, and clinging to the side of buildings, though this behavior is not typical.

Hoary bats are thought to be highly migratory, however, wintering sites and migratory routes have not been well documented. This species tolerates a wide range of temperatures and has been captured at air temperatures between 0 and 22 degrees Celsius. Hoary bats probably mate in the fall, with delayed implantation leading to birth in May through July. They usually emerge late in the evening to forage, typically from just over one hour after sunset to after midnight. This species reportedly has a strong preference for moths, but is also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps.

The Project Site provides suitable open foraging habitat, a nearby source of water, and potential roost sites in the form of tree cavities. Considering these factors, this species has a moderate potential to occur within the Project Site.

Townsend's big-eared bat (*Corynorhinus townsendii*), CDFW Species of Special Concern, WBWG High Priority. Moderate potential. This species is primarily found in rural settings in a wide variety of habitats, including oak woodland. The species day roosts are highly associated with caves and mines, and individuals are very sensitive to human disturbance. It typically forages on nocturnal insects such as moths, lacewings, and flies, catching its prey near the foliage of trees and shrubs. The species has been documented on a property adjacent to the Project parcel in an abandoned wine storage cave. The Project Site provides suitable foraging habitat, as well as a source of water for the species.

Western red bat (*Lasiurus blossevillii*), CDFW Species of Special Concern, WBWG High Priority. Moderate Potential. This species is highly migratory and broadly distributed, ranging from southern Canada through much of the western United States. Western red bats are believed to make seasonal shifts in their distribution, although there is no evidence of mass migrations. They are typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas possibly and association with riparian habitat (particularly willows, cottonwoods, and sycamores. Males and females maintain different distributions during pupping, where females take advantage of warmer inland areas and males occur in cooler areas along the coast.

The Project Site contains broad-leaved tree species typically associated with this species (e.g. oaks). The Project Site also includes edge habitat for foraging, and water sources for drinking. Considering the proximity of all of these factors, the species has a moderate potential to occur within the Project Site.

Fringed myotis (*Myotis thysanodes*), WBWG High Priority. Moderate Potential. The fringed myotis ranges through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota. This species is found in desert scrubland, grassland, sage-grass steppe, old-growth forest, and subalpine coniferous and mixed deciduous forest. Oak and pinyon-juniper woodlands are most commonly used. The fringed myotis roosts in colonies from 10 to 2,000 individuals, although large colonies are rare. Caves, buildings, underground mines, rock crevices in cliff faces, and bridges are used for maternity and night roosts, while hibernation has only been documented in buildings and underground mines. Tree-roosting has also been documented in Oregon, New Mexico, and California.

The Project Site includes trees with suitable hollows to provide day or night roosts for the species as well as edge habitat for foraging, and water sources for drinking. Considering the proximity of all of these factors, the species has a moderate potential to occur within the Project Site.

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. High Potential. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities. Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to

trees greater than 150 feet tall. This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates.

The Project Site provides open foraging habitat, and trees within the Project Site may support nesting. With the presence of both nesting and foraging habitat, this species has a high potential to occur within the Project Site.

Western burrowing owl (*Athene cunicularia*), CDFW Species of Special Concern, USFWS Bird of Conservation Concern. Low Potential. Burrowing owl typically favors flat, open grassland or gentle slopes and sparse shrubland ecosystems. These owls prefer annual or perennial grasslands, typically with sparse or nonexistent tree or shrub canopies; however, they also colonize debris piles and old pipes. Burrowing owls exhibit high site fidelity and usually nest in abandoned burrows of ground squirrels or pocket gophers.

Burrowing owls require burrows or burrow surrogates for nesting and low-stature grassland which provides expansive views. Burrowing owls were reported to have occurred outside the Project Site at the northern base of a hill with low-growing vegetation. During the August 23, 2018 site visit, very few ground squirrel burrows were found in the Project Site, and all were surrounded by tall and thick vegetation, typically *Avena* sp. No habitat surrogates such as debris piles or exposed pipes were found within the Project Site. The oak woodlands scattered throughout the Project Site provide extensive habitat for owl predators.

Nuttall's woodpecker (*Picoides nuttallii*). USFWS Bird of Conservation Concern. High Potential. Nuttall's woodpecker, common in much of its range, is a year-round resident throughout most of California west of the Sierra Nevada. Typical habitat is oak or mixed woodland, and riparian areas. This species forages on a variety of arboreal invertebrates. Nesting occurs in tree cavities, principally those of oaks and larger riparian trees.

The Project Site provides mixed oak woodland with tree cavities potentially suitable for nesting. The species has also been observed frequently in the immediate vicinity of the Project Site. Considering the commonality of this species and the presence of both foraging and nesting habitat, this species has a high potential to occur within the Project Site.

Loggerhead shrike (*Lanius ludovicianus*). CDFW Species of Special Concern, USFWS Bird of Conservation Concern. High Potential. Loggerhead shrike is a year-round resident and winter visitor in lowlands and foothills throughout California. This species is associated with open country with short vegetation and scattered trees, shrubs, fences, utility lines and/or other perches. Although they are songbirds, shrikes are predatory and forage on a variety of invertebrates and small vertebrates. Captured prey items are often impaled for storage purposes on suitable substrates, including thorns or spikes on vegetation, and barbed wire fences. Loggerhead shrike nests in trees and large shrubs with nests usually placed three to ten feet off the ground.

Open grassland foraging habitat is available within the Project Site and suitable cavity bearing trees area present. With the presence of adjacent foraging habitat and nesting habitat, the species has a high potential to occur.

Yellow-billed magpie (*Pica nuttalli*), USFWS Bird of Conservation Concern. High Potential. The yellow-billed magpie is endemic to California, occurring year-round in the Central Valley and associated foothills, and the central-southern Coast Ranges. This species inhabits oak savanna, open oak woodland and similar park-like areas including the margins of stream courses and some agricultural areas. Breeding typically occurs in loose colonies. The large, dome-shaped nests are placed high in trees, usually oaks, and often in clumps of mistletoe. This species is an omnivore and an opportunistic feeder.

This species is known to inhabit the Livermore area including an adjacent property. The Project Site also contains trees with spreading canopies which typically support nesting as well as nearby open grassland to support foraging. With the nearby presence of the species as well as suitable nesting and foraging habitat, this species has a high potential to occur within the Project Site.

Oak titmouse (*Baeolophus inornatus*), USFWS Bird of Conservation Concern. High Potential. This relatively common species is year-round resident throughout much of California including most of the coastal range, the Central Valley and the western Sierra Nevada foothills. Seeds and arboreal invertebrates make up the birds' diet. Its primary habitat is woodland dominated by oaks. Local populations have adapted to woodlands of pines and/or junipers in some areas. The oak titmouse nests in tree cavities, usually natural cavities or those excavated by woodpeckers, though they may partially excavate their own.

The Project Site provides oak woodland habitat with cavities suitable for nesting. The species has also been observed frequently in the immediate vicinity of the Project Site. Considering the commonality of this species and the presence of both foraging and nesting habitat, this species has a high potential to occur within the Project Site.

California red-legged frog (*Rana draytonii*), Federal-Threatened, CDFW Species of Special Concern. Moderate Potential. The current distribution of this species includes only isolated localities in the Sierra Nevada, northern Coast and Northern Traverse Ranges. It is still common in the San Francisco Bay Area and along the central coast. This species requires four habitat components: aquatic breeding, upland, aquatic non-breeding, and dispersal habitats.

Aquatic breeding habitat consists of low-gradient freshwater bodies, including natural and manmade ponds, backwaters within streams and streams, and marshes. Upland habitats include areas within 300 feet of aquatic and riparian habitat and are comprised of grasslands, woodlands, and/or vegetation that provide shelter, forage, and predator avoidance. These upland features provide feeding and sheltering habitat for juvenile and adult frogs (e.g. shelter, shade, moisture, cooler temperatures, a prey base, foraging opportunities, and areas for predator avoidance). Upland habitat can include structural features such as boulders, rocks, and organic debris (e.g. downed trees, logs), as well as small mammal burrows and moist leaf litter.

Aquatic non-breeding habitat may or may not hold water long enough for this species to hatch and complete its aquatic life cycle, but it provides shelter, foraging, predator avoidance, and aquatic dispersal for juvenile and adult CRLF. Dispersal habitat includes upland or riparian habitats within 2 miles of breeding habitat that allow for movement between these sites. Dispersal habitat includes various natural and altered habitats, such

as agricultural fields, which do not contain barriers to dispersal. Moderate to high density urban or industrial developments, large reservoirs, and heavily traveled roads without bridges or culverts are considered barriers to dispersal.

Breeding has been documented at two sites within 2 miles of the Project Site, and twenty two adult or juvenile observations are documented in CNDDDB within a 5 mile radius of the Project Site - including less than 1 mile northwest and east of the Project Site. Though the Project Site does not provide suitable aquatic features for breeding, the perennially wet emergent wetland and moist valley bottoms may provide upland refugia for the species during dispersal. The nearest documented observation of breeding activity is from 2003 and is located 0.75 miles from the Project Site, and adults or juveniles have been observed northeast and west of the Project Site within a 1 mile radius.

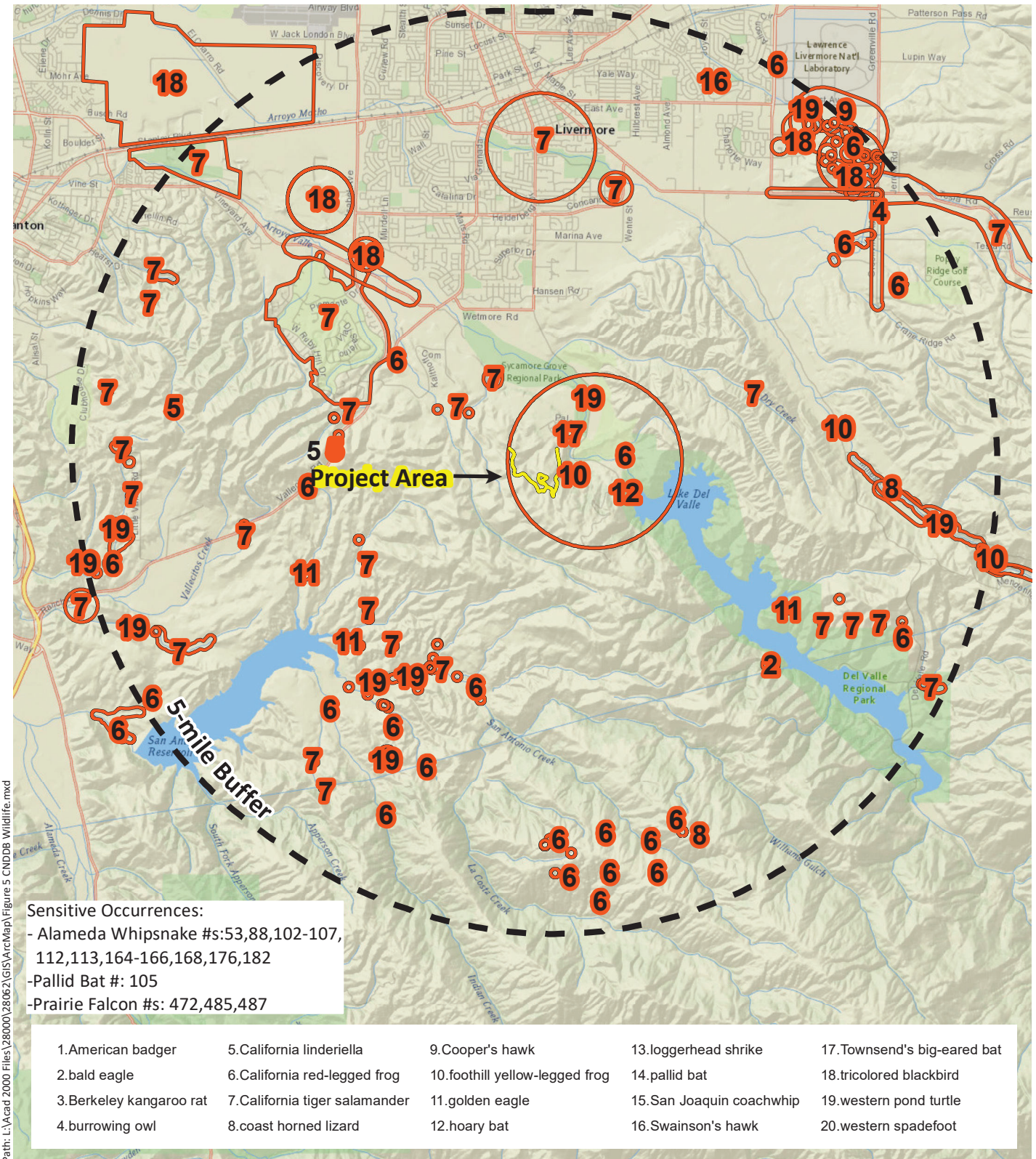
Some level of bullfrog management has occurred on adjacent lands, though predation may continue to impact CRLF populations in the area. The Project Site is inside mapped CRLF critical habitat. CRLF require still, deep ponds that hold water until at least July to be able to support breeding. Given this depth requirement, the wetland adjacent to the Project Site does not offer sufficient breeding habitat for the species. Given the known observations of CRLFs in adjacent watersheds, habitat connectivity with those watersheds, and observed potential refugia, there is moderate potential that CRLF will occur within the Project Site.

California Tiger Salamander (*Ambystoma californiense*), Federal Threatened, State Threatened. Moderate Potential. CTS is a California endemic species that historically occurred in grassland habitats throughout much of the state. This species inhabits valley and foothill grasslands and the grassy understory of open woodlands, usually within one mile of water. CTS requires two primary habitat components: aquatic breeding sites and upland terrestrial refuge sites. Adult CTS spend most of their time underground in upland subterranean refugia. Underground retreats usually consist of ground-squirrel burrows but may also be beneath logs and piles of lumber. CTS emerge from underground to breed and lay eggs primarily in vernal pools and other ephemeral water bodies. These sites must remain inundated for at least 10 weeks, the minimum time needed for larvae to complete metamorphosis. Adults migrate from upland habitats to aquatic breeding sites during the first major rainfall events, between November and February, and return to upland habitats after breeding. This species has been known to disperse up to 1.3 miles from a breeding site.

In 2003, breeding was documented within half of a mile of the Project Site, and the separation between these two areas supports grassy rolling hills with scattered trees at the valley bottoms. Though the Project Site lacks suitable aquatic features, connectivity to source populations is present, making the Project Site potential dispersal habitat. CTS require seasonal ponds that hold water for a minimum of 20 weeks, and yet still have suitable water depth to provide cover from predators. Ideal water depths range from 2 to 4-feet. Given the depths required for breeding, the wetland adjacent to the Project Site does not support suitable habitat for breeding by the species. The Project Site is outside of the mapped critical habitat zone for CTS. Given this information, CTS is moderately likely to occur within the Project Site.

Alameda Whipsnake (*Masticophis lateralis euryxanthus*). **Federal Threatened Species, State Threatened Species, EACCS. Moderate Potential.** The range of the AWS is restricted to the inner Coast Range in western and central Contra Costa and Alameda Counties. AWS is associated with scrub communities, including mixed chaparral, chamise-redshank chaparral, coastal scrub, and annual grassland and oak woodlands that lie adjacent to scrub habitats and contain areas of rock outcroppings. Rock outcroppings are important as they are a favored location for lizard prey. Whipsnakes frequently venture into adjacent habitats, including grassland, oak savanna, and occasionally oak-bay woodland. This species is now known to be more common, especially for corridor movement. Thus, habitat adjacent to scrub (including grassland and riparian communities) are considered essential to AWS conservation. Four individuals have been observed within one mile of the Project Site.

The Project Site and surrounding biological communities includes a mosaic of grass, chaparral, and oak woodlands which may provide suitable foraging and dispersal habitat for whipsnake. As such, this species has moderate potential to occur within the Project Site. The Project Site falls within mapped AWS critical habitat.



Sources: National Geographic, CNDDB Oct 2018, WRA | Prepared By: smortensen, 10/4/2018

Figure 7. Special-Status Wildlife Species Documented within 5-miles of the Project Site

Zone 7 Trail Project
Livermore, Alameda County, California

0 1 2
Miles



Regulatory Setting

Sensitive Biological Communities

Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or riparian habitat. These habitats are protected under federal regulations, such as the CWA; state regulations, such as the Porter-Cologne Act, Section 1600-1616 of the California Fish and Game Code (CFGF), and CEQA; Habitat Conservation Plans (HCPs), or local ordinances or policies, such as city or county tree ordinances, and General Plan Elements.

Waters of the United States

The Corps regulates “Waters of the United States” under Section 404 of the CWA. Waters of the U.S. are defined in the Code of Federal Regulations (CFR) as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated at a sufficient depth and for a sufficient duration to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as “other waters” and are often characterized by an ordinary high water mark (OHWM), and herein referred to as non-wetland waters. Non-wetland waters generally include lakes, rivers, and streams. The placement of fill material into Waters of the U.S. generally requires an individual or nationwide permit from the Corps under Section 404 of the CWA.

Waters of the State

The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB protects all waters in its regulatory scope and has special responsibility for wetlands, riparian areas, and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. RWQCB jurisdiction includes wetlands and waters that may not be regulated by the Corps under Section 404. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit or fall under other federal jurisdiction and have the potential to impact Waters of the State are required to comply with the terms of the Water Quality Certification determination. If a proposed Project does not require a federal permit but does involve dredge or fill activities that may result in a discharge to Waters of the State, the RWQCB has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements.

Other Sensitive Biological Communities

Other sensitive biological communities not discussed above include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified by the CDFW in local or regional plans, policies, or regulations. The CDFW ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in its

California Natural Diversity Database (CNDDDB). Sensitive plant communities are also identified by CDFW and California Native Plant Society (CNPS). Vegetation alliances are ranked 1 through 5 by CNDDDB based on NatureServe's (2015) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or United States Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). Specific habitats may also be identified as sensitive in city or county general plans or ordinances.

Relevant Local Policies, Ordinances, and Regulations

East Alameda County Conservation Strategy

Although not formally adopted, the East Alameda County Conservation Strategy (EACCS) is intended to provide an effective framework to protect, enhance, and restore natural resources. In the document, conservation priorities are given as guidelines to protect the resources known to occur in the conservation zones. The EACCS includes provisions for “focal species”—species that are protected under federal and state laws. The goal is to protect and enhance the habitats of these species. The EACCS is a framework for guidance by regulatory agencies. It does not include incidental take permits for threatened or endangered species similar to those provided by a Habitat Conservation Plan (HCP). The USFWS issued a Programmatic Biological Opinion in 2012 for Corps permitted Projects utilizing the EACCS. The Programmatic Biological Opinion offers a streamlined permitting process with the USFWS for Projects considered suitable to be appended. The Project Site is located in Conservation Zone 12 (CZ-12). Conservation priorities for this zone are listed below:

- Protection of Coulter pine woodland land cover type.
- Protection of perennial freshwater marsh and coast live oak forest and woodland land cover types.
- Protection and enhancement of ponds to protect breeding habitat for tricolored blackbird, California tiger salamander, and California red-legged frog, with primary focus on currently occupied habitat and secondary focus on habitat that can be enhanced to encourage occupation.
- Protection of critical habitat for Alameda whipsnake.
- Complete surveys in annual grassland habitat for Callippe silverspot butterfly larval host/food plants and map occurrences of plant populations.

Alameda County Municipal Code

“Tree” or “trees” shall mean any tree that meets the following criteria: any woody perennial plant characterized by having a single trunk or multi-trunk structure at least ten feet high and having a major trunk that is at least two inches in diameter taken at breast height (DBH) taken at 4.5 feet from the ground. It shall also include those plants generally designated as trees and any trees that have been planted as replacement trees under the County Tree Ordinance or any trees planted by the County.

12.11.140 Tree Removal

A. It shall be prohibited for any person or utility to remove or cause to be removed any tree from the right-of-way unless so authorized by an encroachment permit issued by the Director pursuant to this Chapter.

B. The Director shall have the authority to require that a tree be removed from the right-of-way under any of the following circumstances:

1. If the tree is dead or dying or is damaged by storm, accident or disease as to be beyond the point of recuperation as determined by a certified arborist.
2. If the tree has damaged the roadway facilities (including but not limited to the sidewalk, curb, gutter and pavement) and further damage cannot be prevented by reasonable tree maintenance procedures such as root pruning or sidewalk curb realignment.
3. If the tree constitutes a hazard to the public.
4. In conjunction with an approved development of the adjacent property.

C. The Director shall have the authority to approve the removal of a tree from the right-of-way as part of a scheduled tree removal and replacement program or in conjunction with an approved roadway improvement Project.

East County Area Plan

Policy 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

Discussion of Impacts

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

Less than Significant with Mitigation Incorporated. The Project Site has moderate or high potential for occurrence of 22 special-status plant species and 14 special-status wildlife species. General avoidance and impact minimization measures for special-status species are provided in Mitigation Measure BIO-1.

The determination of potential presence of special-status plant species within the *Project Site* is based upon the August 2018 site visit and knowledge of species habitats and distribution; protocol-level rare plant surveys were not conducted. No special-status species were encountered during the August 2018 site visit. If the trail were to be installed where special-status plants occur, the Project could result in impacts to special-status plant populations, which could be considered significant under CEQA. However, through the adoption of Mitigation Measure BIO-1 and BIO-2, Project activities would reduce the potential impacts special-status plant species to a ***less-than-significant*** level.

Alameda whip snake (AWS) and California red-legged frog (CRLF) occur on parcels adjacent to the Project Site or have moderate or high potential to occur within the Project Site. Project construction would generally be low impact, with no significant ground vibration or major vegetation removal. Nonetheless, harm or harassment of AWS or CRLF would constitute a substantial adverse effect and a potentially significant impact. Mitigation Measures BIO-1 and BIO-3 would reduce this impact to a **less-than-significant** level.

The Project has the potential to impact special-status and non-special-status native nesting birds protected by the MBTA and/or the California Fish and Game Code. Project activities such as vegetation removal and ground disturbance associated with Project activities would have the potential to affect these species by causing direct mortality of eggs or young, or by causing auditory and/ or visual disturbance of a sufficient level to cause abandonment of an active nest. If Project Activities occur during the bird nesting season, which generally extends from February 1 through August 31, nests of both special-status and non-special-status native birds could be impacted by construction and other ground-disturbing activities.

Mitigation Measure BIO-1 – General Avoidance and Minimization Measures

- All equipment (i.e., hand tools) shall be cleaned and free of debris prior to entering the Project Site.
- Volunteer managers shall participate in a worker environmental awareness program. Under this program, volunteer managers will be informed about the potential presence of listed species and will be instructed that unlawful take of the special-status species or destruction of associated habitat is a violation of the ESA. The program will also include species identification, life history, habitat requirements of these species during various life stages, the importance of their associated habitats, and a list of measures being taken to reduce impacts on these species during construction. A fact sheet conveying this information will be available to volunteers at their request.
- If take of any federally protected species occurs during project implementation, the USFWS shall be notified by telephone and electronic mail within one (1) working day.

Mitigation Measure BIO-2 – Avoidance of Special Status Plants Within Project Site

Impacts to special-status plant species shall be avoided to the maximum extent possible. A pre-construction survey for potentially present special-status plant species shall be performed within the Project Site prior to Project activities. If special-status plant species are observed during the survey, individuals shall be flagged and avoided by the trail alignment to the maximum extent possible.

Mitigation Measure BIO-3 – Avoidance of AWS and CRLF

The following measures shall be implemented to avoid and minimize potential impacts to AWS and CRLF during proposed Project Activities:

- *Pre-construction survey:* Pre-construction surveys for CRLF and AWS shall be conducted immediately prior to initiation of project activities. Surveys are to be conducted by a qualified biologist with experience surveying for each species.
- *Work only during dry weather:* No work shall take place during rain events when there is potential for accumulation greater than 0.25 inch in a 24-hour period.
- *Biological monitoring:* A qualified biologist shall be required to inspect the work area daily prior to start of work and be present during all ground disturbing activities. If a CRLF or AWS is observed, all work will stop and the individual will be allowed to leave the area on its own. No harassment of the individuals to leave the area is allowed. Once the biologist has determined the individual is out of harm's way, work may resume. If a CRLF or AWS does not or cannot move out of the work area or if a CRLF or AWS are injured, work will be halted and the USFWS and the CDFW will be contacted immediately following notification to project managers for next steps.
- *Erosion Control Materials:* Tightly woven fiber netting or similar material shall be used for erosion control or other purposes to ensure amphibian and reptile species do not get trapped. Plastic mono-filament netting (erosion control matting), rolled erosion control products, or similar material shall not be used.

Mitigation Measure BIO-4 – Avoidance of Nesting Birds

Project Activities such as vegetation removal and grading shall be conducted between September 1 and January 31 (outside of the February 1 to August 31 nesting season) to the extent feasible. If such activities must be conducted during the nesting season, a pre-construction nesting-bird survey shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any nests that could potentially be affected either directly or indirectly by Project activities.

If active nests of protected species are found within the survey area, a work exclusion zone shall be established around each nest by the qualified biologist. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes shall be determined by a qualified biologist and vary dependent upon the species, nest location, existing visual buffers, noise levels, and other factors. An exclusion zone radius may be as small as 50 feet for common, disturbance-adapted species or as large as 250 feet or more for raptors. Exclusion zone size may be reduced from established levels if supported with nest monitoring findings by a qualified biologist indicating that work activities outside the reduced radius are not adversely impacting the nest and that a reduced exclusion zone would not adversely affect the subject nest.

- b) ***Would the proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less-than-Significant Impact. The Project Site contains approximately 1.15 acre of coast live oak woodland. This natural community would not be impacted by the Project, as no trees would be removed and only small portions of the grassland understory would be affected. Although not considered a global, federal, or state sensitive natural community, coast live oak is a conservation CZ-12 priority community per the EACCS. The EACCS is not a legally binding regulatory document; rather, it is an optional guidance document outlining conservation priorities in Eastern Alameda County. Given coast live oak woodland would not incur any substantial adverse effects from the Project and does not have any legally binding federal, state, or local protections, impacts to this sensitive natural community would be less-than-significant.

Approximately 0.08 acre of perennial wetland was identified adjacent to the Project Site but outside the Project work area. The trail was designed to avoid direct and indirect impacts associated with this federally protected natural community. Given coast live oak and perennial wetland are the only sensitive natural communities proximate to the Project Site and neither would incur substantial adverse effects, impacts to sensitive natural communities would ***be less than significant.***

- c) ***Would the proposed Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

No Impact. As previously discussed, approximately 0.08 acre of perennial wetland was identified adjacent to the Project Site. As wetlands are located outside the Project Site, impacts would not occur. The trail was been designed with adequate buffers to avoid all impacts associated with this feature. There would be ***No Impacts*** to seasonal wetlands.

- d) ***Would the proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery Sites?***

Less-than-Significant Impact. The Project would minimally change the landscape. The proposed trail follows the path of existing trails for much of its course, and changes to the landscape are sufficiently minor as to be carried out predominately with hand tools. Primary changes would include leveling and vegetation removal; and no structures or other impedances to wildlife movement would be constructed. It is possible that increased human presence on the Site during construction could deter wildlife from entering the Project Site, for migratory purposes or otherwise. However, this would only occur for four days total, two in 2019 and two in 2020. Increased human presence following construction would be limited by existing parking, and should therefore not be sufficiently large to interfere with wildlife movement. As there would be no substantial permanent alterations to the landscape and increased human presence on the Site would be minimal, the Project

would not interfere substantially with wildlife movement, resulting in less-than-significant impacts.

e) ***Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

No Impact. No local policies or ordinances adopted to protect biological resources are applicable. The EACCS provides conservation guidance for an area which includes the Project Site, but does not have any legally binding protections for biological resources. Further, Alameda County's tree protection ordinance does not apply to trees outside the county's right-of-way. As there are no applicable policies or ordinances protecting biological resources, there would be no impact.

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

No Impact. The Project Site is located in eastern Alameda County. There are no HCPs or NCCPs applicable to this geographic region⁷. The Project is, however, located within the geographic region covered by the EACCS. The intent of the EACCS is to provide guidance to local agencies to ensure that Project planning and permitting impacts are offset in a biologically effective manner. While HCPs and NCCPs issue a programmatic Incidental Take Permit and enable agencies to automatically approve actions impacting covered species, the EACCS is predominantly a guidance document for local agencies. Given it is an optional guidance document, the Project is not obligated to comply with the conservation strategies outlined in the EACCS. As there are no HCPs, NCCPs, or local, regional, or state conservation plans applicable to the Project, there would be no conflict and no impact.

⁷ California Department of Fish and Wildlife, *California Regional Conservation Plans*, October 2017, October 2017.

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4.5 Cultural Resources

V. CULTURAL RESOURCES — Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or Site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The following analysis is based upon a cultural resource report prepared by Basin Research Associates (Basin 2019), Appendix C.

Native American Resources - Prehistoric

In northern California, human occupation extends back in time for at least 9,000-11,500 years BP with Native American occupation and use of the Bay Area extending over 5,000-8,000 years and possibly longer. Evidence for early occupation along the bayshores has been hidden by rising sea levels from about 15,000 to 7,000 years BP, or was buried under sediments caused by bay marshland infilling along estuary margins from about 7,000 years onward. Prehistoric use of the general area was heavily influenced by the presence of springs, creeks and rugged terrain. Archaeological information suggests a slow steady increase in the prehistoric population within Central California over time with an increasing focus on permanent settlements with large populations in later periods. This change from hunter-collectors to an increased sedentary lifestyle is due both to more efficient resource procurement as well as a focus on staple food exploitation, the increased ability to store food at village locations, and the development of increasing complex social and political systems including long-distance trade networks.

Native American Resources - Ethnographic

The Project Site was occupied by aboriginal inhabitants of the group known as the *Chochenyo* or the "Costanoan." Costanoan is derived from the Spanish word *Costanos* ("coast people" or "coastal dwellers") who occupied the central California coast as far east as the Diablo Range (Kroeber 1925; Hart 1987). Descendants of the Costanoans currently reside in the greater San Francisco Bay Area and now prefer to be referred to as *Ohlone* (Galvan 1967/68; A. Galvan, personal communication 1990).

The *Ohlone* were subdivided into tribelets. In 1770, these tribelets were politically autonomous groups containing some 50-500 individuals, with an average population of 200. Tribelet territories, defined by physiographic features, usually had one or more permanent villages surrounded by a number of temporary camps. The camps were used to exploit seasonally available floral and faunal resources (Levy 1978:485, 487).

The closest *Ohlone* tribelet was the *Sewnen* (El Valle) centered near Livermore (Bennyhoff 1977:Map 2 [*Seunen*]; Levy 1978:485, Fig. 1, #7). Milliken (1995) notes a number of *Ohlone* groups in the general project vicinity with the *Souyen* were the closest to the Project Site. The *Souyen* held the north side of the marsh that once existed in the western Livermore Valley and area north up the Tassajara Creek drainage into the southern foothills of Mount Diablo. Hall (n.d.:Map 1) places the *Ssouyen* [*sic*] between Las Positas Creek and the *Arroyo Mocho*.⁸ No known Native American villages, traditional use areas or contemporary use areas have been identified in, adjacent or near the project (e.g., CAL/OHP 1988; Totton 2019).

Historic Era Resources - Hispanic Period

The history of the general area can be divided into the Hispanic Period (Spanish Era 1769-1821 and the Mexican Era 1822-1846) followed by the American Period (1848-onward). During the Hispanic Period, Spanish government policy in northwestern New Spain was directed at the founding of presidios (forts), missions, and *pueblos* (secular towns) with the land held by the Crown while the later Mexican policy (1822-1846) stressed individual ownership of the land with grants of vast tracts of land to individual citizens (Hart 1987).

Spanish exploration lasted from 1769 to 1776. Early travelers through the general Livermore area included the expeditions of Pedro Fages and Father Crespi in 1772 and Anza and Font in 1776 (Beck and Haase 1974:#17, 20; Milliken 1995:33, Map. 3). Milliken (2008:28) noted that the Native American villages observed by Fages in the Livermore Valley “probably belonged to the *Seunens*, *Pelnens*, or *Caburans*, all of whom lived in the present-day Dublin-Pleasanton vicinity.” Part of Fage’s route skirted the western edge of the Livermore Valley along the *Arroyo de la Laguna*, trending up the Amador and San Ramon valleys to the site of Concord, then on to the San Joaquin Valley and the other more traveled route crossed the Livermore Valley and passed through the hills into the San Joaquin Valley (Hoover et al. 1966:5-6).

The Second Expedition of Juan Bautista de Anza [1775-1776] (including Lt. Jose Moraga and Fray Pedro Font) followed the earlier route mapped by Fages in 1772 which skirted the foothills around the present-day Veterans Administration Hospital complex north of the proposed project (USNPS 1995:Sheet 46).

The favorable reports of the various exploring expeditions between 1769 to 1776 resulted in the founding of several missions in the Bay Area whose locations were selected with the purpose of conducting expeditions against “hostile Indians” as well as a serving as a place to convert them. The specific tribelet or village affiliation of converts was of minor consequence to the Mission

⁸ Their main or only village may have been located at archaeological site CA-ALA-28 along the Arroyo Mocho at the south edge of the valley or alternatively near the springs of Las Positas Creek (Hall n.d.:19).

fathers who, until 1803, identified their "new souls" simply by cardinal direction (Beck and Haase 1974; Hart 1987). Mission San Jose in the City of Fremont had the greatest effect on the Native Americans of the Livermore area and surrounding valleys which were primarily used for grazing land until the secularization of the California missions from 1834-1837.

The proposed trail alignment was within the *Rancho El Valle de San Jose* (Sunol & Bernal). *Rancho El Valle de San Jose* (N.D. #121) was granted to Antonio Maria Pico, Agustin Bernal and M.D. Bernal on February 23 and April 10, 1839 by Governor Juan B. Alvarado.⁹ The rancho was later confirmed to Antonio Sunol, Juan Bernal, and Agustin Bernal on March 15, 1856. None of the Hispanic Period known dwellings or features were located within or adjacent to the project alignment (Healy 1863; Hendry and Bowman 1940:630-639; Hoover et al. 1966:16-17). The Rancho Del Valle de San Jose is listed as a Cultural Resource in the City of Livermore General Plan Update (LSA Associates, Inc. 2003:186, Table 8-4).

Historic Era Resources – American Period

The proposed project is located south of the City of Livermore, a railroad town, named in honor of early settler, Robert Livermore, a naturalized Mexican citizen of English birth who established viticulture and horticulture in the Amador Valley. William M. Mendenhall is credited with the developing the town plat around the "new" Central Pacific Railroad station. Though the post office was established as "Nottingham" in January 1869, it was renamed Livermore, the name officially adopted upon the town's incorporation in 1876 (Mosier and Mosier 1986; Patera 1991).

A limited review of historic maps indicates no development in or adjacent to the proposed trail alignment (Thompson and West 1878; Oakland Tribune 1880; USGS v.d.; US War Dept 1941; Mosier and Mosier 1986:51). Goddard's 1857 *Map of the State of California* shows "Livermore's", at the time as a rancho on the route to the Sierra Nevada gold mines through the Livermore Valley.

Livermore is the easternmost city in the greater San Francisco Bay Area with a residential, agricultural and technological/industrial/commercial base. It is a bedroom community for both the East Bay and San Francisco as well as an active agricultural area noted for its wineries, farm lands and ranches. Science and technology centers include the Lawrence Livermore National Laboratory and Sandia National Laboratories. Smaller industrial and commercial facilities' are present serving both the general Bay Area and the global economy.

Livermore Veterans Administration Hospital Complex

A portion of the Livermore Veterans Administration Hospital complex (4951 Arroyo Road) is within the 0.25 mile records search buffer. The 221-acre facility, now part of the United States Department of Veterans Affairs (US/VA) Palo Alto Health Care System, opened in 1925 to treat tubercular patients. The original buildings constructed in the 1920s were demolished due to severe earthquake damage prior to World War II. The new hospital (Building #62) was completed in 1947 with a number of additions in the late 1970s and 1980. The complex now includes a Community Living Center (CLC) and administrative support building, but is to be decommissioned

⁹ Hoover et al. (1966:16) differs: granted to Antonio Maria Pico, brothers-in-law Agustin Bernal and Juan Pablo Bernal and sister-in-law Maria Dolores Bernal de Sunol.

upon the completion of construction of facilities in Fremont, Stockton, and Palo Alto (Billat and Supernowicz 2008/S-34922a; Supernowicz 2008/form; Tri-Valley History Council 2011:133; US/VA 2018). The resource is recorded as P-01-010893 and appears eligible for the National Register of Historic Places (NRHP) under criteria a, b and c with a period of significance from 1847-1960.

Individuals, Agencies and Groups Consulted

The Native American Heritage Commission (NAHC) was contacted for a search of the *Sacred Lands Inventory* on file with the Commission (Busby 2018) with negative results (Totton 2018). Queries via email soliciting additional information were sent to the eight Native Americans individuals/groups listed by the NAHC (Canzonieri 2019a-h) [see Attachments].

Four responses were received. One Native American (Ketchum) noted that the Project Site was outside of his tribal territory. One Native American (Perez) recommended monitoring by a qualified archaeologist and Native American. One Native American (Zwierlein) requested information on cultural resources in the area and was informed that another Native American had family based information on the area. Mr. Andrew Galvan (The Ohlone Tribe) indicated that the area along the arroyo was known as “camp comfort” based on family information and that proper protocols should be followed in the event of a discovery. He also recommended cultural sensitivity training for the construction crew in areas with a potential for prehistoric cultural materials. Furthermore, Mr. Galvan recommended that the archaeologists have experience with northern and central California archaeology and that only a Native American monitor who can prove genealogical relationship to the Greater San Francisco Bay Area be used for monitoring.

Field Review

An archaeological field inventory of the proposed trail alignment was conducted by Mr. Stuart A. Guedon (M.A.), Basin Research Associates on January 29, 2019. He was guided and accompanied by Mr. Eric Whiteside, Park Ranger, LARPD.

The pedestrian field survey utilized 10 ± meter wide transects to visually inspect the trail alignment. Several minor rock outcrops were inspected, but had no evidence of cultural modification. Topography is rolling hills with several deep valleys. The northwest end of the trail is 1025± feet above sea level (ASL), the highest point in the trail is 1253± feet ASL, and the lowest part of the trail is 550± feet ASL at the LARPD Ranger Office adjacent to the Veteran’s Administration Hospital complex at 4951 Arroyo Road. Approximately 75 percent of the trail is located in Grasslands with the remainder in Mixed Oak Woodland. At the time of the inventory, the area was in dense winter/spring grasses and weeds.

Visibility was very poor with little native soil available for inspection. None of the valleys near the trail had flowing water. An improved spring is located near the mid-point and highest point of the proposed trail. No evidence of prehistoric and historic materials and/or culturally modified sediments was observed during the field review. No buildings/structures are within or adjacent to the proposed trail.

Archaeological Sensitivity/Potential

The project is located within an area of "moderate" sensitivity for archaeological resources (Quaternary Research Group 1976). This study used site records and reports on file with the CHRIS/NWIC for Alameda County to develop an archaeological sensitivity model for use by county planners in 1975 based on the presence/absence of resources as well as the perceived potential for resources. The model has not been updated for over 43 years to reflect the current data but is useful as an initial review of archaeological sensitivity. The potential for inadvertent discoveries of buried archaeological deposits during subsurface construction appears very low based on the proposed project impacts, the local terrain and the lack of reported archaeological resources within, adjacent to or within 0.25 miles of alignment.

Discussion of Impacts

a) *Would the Project cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?*

No Impact. Pursuant to State CEQA guideline 15064.5, record searches, field surveys, and research were conducted to determine the potential presence of historic resources as part of the Cultural Resources Records Search and Field Review Report, (Basin 2019). The Project Site does not contain any resource listed in, or determined to be eligible by, the State Historical Resource Commission and does not contain a resource included in a local register of historic resources or identified as significant in a historical resource survey. Additionally, the Project Site does not contain any object, building, structure, site, area, place, record, or manuscript that a lead agency determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Therefore, **no impact** would occur.

b) *Would the Project Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

Less than Significant with Mitigation Incorporated. The project site does not contain any known archaeological resources. However, the project could uncover such materials during construction.

Potential impacts on unknown buried cultural resources or human remains would be less than significant with compliance with Mitigation Measure CULT-1.

Mitigation Measure CULT-1:

The contractor shall comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., regarding the discovery and disturbance of cultural materials or human remains, should any be discovered during project construction.

In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery shall be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g.,

slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

The following actions are promulgated in Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location shall be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

c) *Would the Project directly or indirectly destroy a unique paleontological resource or Site or unique geologic feature?*

Less-than-Significant Impact. Most of the project site follows existing cattle and ranch trails. The Proposed Project would include minimal grading using hand tools. The Project Site has a low potential for unique paleontological resource to occur. Given the pre-disturbed nature of the Project Site and low potential unique paleontological resource to occur, impacts would be ***less than significant***.

d) *Disturb any human remains, including those interred outside of formal cemeteries?*

Less than Significant with Mitigation Incorporated. The project site has a low potential to contain buried cultural deposits or human remains based on past disturbances. However, the project could uncover such remains during construction.

Potential impacts on unknown buried human remains would be less than significant with compliance with Mitigation Measure CULT-1.

4.6 Geology and Soils

VI. GEOLOGY AND SOILS — Would the Project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-Site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Soils

According to the East County Area Plan, the bay plain and the valley areas of Alameda County are underlain by Quaternary (from the present to 2 to 3 million years ago) unconsolidated deposits which, in turn, are underlain by sedimentary metamorphic and igneous rocks of up to 150 million years in age. The Quaternary deposits consist primarily of alluvial and estuarine sediments. The alluvial ranges from stream deposited sands, gravel, silts, clays, and intermixtures to fine windblown sand. Estuarine sediments consists of silty clays and some sand and shell layers deposited in the bay and marshlands. Adjacent to the San Francisco Bay the younger alluvial deposits grade into younger bay mud, a variable, semi-fluid to firm silty clay with lenses of water-saturated fine sand. Younger bay mud is covered by landfills that vary from dense, engineered fills to trash accumulations of uncertain geotechnical properties¹⁰.

The Project Site is mostly Millsholm silt loam, 30-40% slopes, eroded. This soil is characterized as well-drained with very high runoff, no flooding or ponding, and moderately poor erodibility¹¹. The next most abundant soil type is rock land, followed by Gaviota rocky sandy loam, 40-75% slopes, eroded. Gaviota rocky sandy loam is characterized as excessively drained with very high runoff. It does not flood or pond¹².

Seismicity

Earthquakes are generally expressed in terms of “intensity” and “magnitude.” Intensity is based on the observed effects of ground shaking on people, buildings, and natural features. By comparison, an earthquake’s magnitude is related to the amount of seismic energy released at the hypocenter of an earthquake. The Project Site is located near the San Andrea and Hayward faults, placing it in one of the most seismically active regions in the United States. However, the Project Site is not located within an Alquist-Priolo Fault Zone and no active faults run through the Site. The nearest fault is the Los Positas Fault, a buried quaternary fault located approximately one mile northwest of the Project Site.

Liquefaction

Liquefaction is a process in which water saturated sediments behave like a fluid, usually as a result of seismic ground shaking. During seismic events, liquefaction of fine-grained, unconsolidated sediments can be a serious hazard to structures built on these surfaces. Liquefaction frequently occurs in deposits where sediments are laid down in a quiet or calm water environment, such as historic lakebeds or inland sea areas. These deposits have a loose structure because undrained water remains between the pores of the sediments (the spaces between soil grains, usually filled with air or water), and groundshaking from earthquakes may

¹⁰ Alameda County Community Development Agency Planning Department, “East County Area Plan: A Portion of the Alameda County General Plan.”

¹¹ “SoilWeb,” accessed August 8, 2018,

https://casoilresource.lawr.ucdavis.edu/soil_web/ssurgo.php?action=explain_component&mukey=458729&cokey=14656053.

¹² “Web Soil Survey,” accessed June 20, 2018, <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

trigger rapid consolidation of the soils, resulting in a complete loss of strength. The Project Site has very low susceptibility to liquefaction¹³.

Landslides

Lands with slopes averaging 30 percent or more are not suitable for significant levels of development due to the risk of ground failure. The Project Site mostly has slopes ranging from 30-75%. Further, the Project Site has a history of many landslides and is a potential debris flow source during a landslide¹⁴.

Discussion of Impacts

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

Less-than-Significant Impact. The Project is not located within an Alquist-Priolo fault zone. The nearest fault is the Las Positas Fault, a buried quaternary fault not at risk for surface rupture. The Project would therefore not expose people or structures to substantial adverse effects involving the rupture of a known earthquake fault. Thus, there would be ***less-than-significant*** impacts.

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

Less-than-Significant Impact. The Project is located in the San Francisco Bay Area, one of the most seismically active regions in the country. In the event of an earthquake, the Project Site would be susceptible to ground shaking. The strength of such shaking would be contingent upon the magnitude of the earthquake and the distance from the epicenter. This is true of all development in the Bay Area. The Project, however, would not construct any new structures for human habitation or expose any additional people to hazards associated with seismic groundshaking. Given the Project's risk of ground shaking is in-line with that of the rest of the Bay Area and the Project would not result in any excess risk for users or introduce any structures which may be affected by ground shaking, there would be ***less-than-significant*** impacts related to substantial adverse effects involving seismic ground shaking.

¹³ "Bay Area Hazards," accessed December 8, 2018, <http://gis.abag.ca.gov/webSite/Hazards/?hlyr=liqSusceptibility>.

¹⁴ *Ibid*13

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

Less-than-Significant Impact. According to the Association of Bay Area Governments (ABAG) resiliency mapping tool, the Project Site has a very low susceptibility to liquefaction. There are no structures proposed as part of the Project and the trail would not expose people to the risk of ground failure. The risk of loss, injury, or death involving seismic-related ground failure including liquefaction is therefore minimal and no people or structures would be exposed to its substantial adverse effects. There would be **less-than-significant** impacts.

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

Less-than-Significant Impact. Historical distribution of landslides tends to be a strong indicator of an area's present landslide risk. According to ABAG, the Project Site has an extensive history of landslides¹⁵. The topography of the site is sloping and there are a number of areas proposed for stabilization, which would reduce risk of landslides. Thus, implementation of the project may have a beneficial effect on landslide risk. Further, no new structures would be constructed and the quantity of people that may be drawn to the area by the Project is limited by the amount of available parking, which would not be expanded. There would be **less-than-significant** impacts.

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

Less-than-Significant Impact. The proposed path would follow and improve existing informal trails used by grazing cattle and Zone 7 vehicles for portions of the route, but trail network expansion along other portions would necessitate the construction of brand new trail segments. Along the new trail, there is a possibility of erosion and loss of topsoil due to grading practices and vegetation removal, which may expose soils to the erosive effects of wind and water. Although, soils in the Project Site have poor wind erodibility and the Project design integrates BMPs to minimize erosion risk. An erosion control plan would be implemented throughout areas of potential erosion concern as part of the Project. Given unfavorable soil characteristics for erosion to occur and the Project's design, which features components to minimize erosion, the Project would not result in substantial erosion or loss of topsoil. As such, impacts would be **less than significant**.

¹⁵ "Bay Area Hazards," accessed December 8, 2018, <http://gis.abag.ca.gov/webSite/Hazards/>.

- c) ***Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-Site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

Less-than-Significant Impact. As discussed above, the Project Site has an extensive history of landslides, an indication that it may presently be at risk for landslide. There is a significant grade along parts of the proposed trail, and construction here may increase the current risk of landslide. However, the Project would comply with all applicable regulations to minimize the risk of on-site landslide. As such, the Project would only result in minimal increases to landslide risk and impacts would be ***less than significant***.

- d) ***Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?***

Less-than-significant Impact. Project Site soils are generally characterized as highly drained and non-hydric, while expansive soils tend to absorb water. Because the soil characteristics of the Project Site are not amenable to expansiveness, there would be ***less-than-significant*** impacts.

- e) ***Would the Project 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. There are no septic tanks proposed as part of the Project. No increase in wastewater production is anticipated to result from the Project. There would be adequate sewer service for any recreationists drawn to the proposed trail at the adjacent parks. As no septic tanks or alternative wastewater disposal systems would be constructed, there would be ***no impact***.

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4.7 Greenhouse Gas Emissions

VII. GREENHOUSE GAS EMISSIONS — Would the Project:	Potentially Significant Impact	Less Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires the CARB to design and implement emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions). The California Air Resources Board (CARB) has established several regulations aimed at guiding the state to meet this target. These strategies are outlined in the Scoping Plan and include various measures across numerous source categories aimed at reducing GHG emissions. Through this plan and subsequent enactment of regulations, the state is on the path toward meeting the goals of Assembly Bill 32.

CARB has enacted numerous regulations to address the goals of AB 32 in reducing statewide GHG emissions. These strategies include a cap and trade program for industrial sources and improvements in vehicle fuel economy. This includes the low carbon fuel standard which requires the carbon intensity of fuels to decrease in the state. This impacts the fuel used by vehicles used to commute to work and off-road equipment used in construction. The state has also implemented regulations that require the carbon intensity of electricity to improve through the incorporation of renewable energy sources and limiting the emissions from new electricity producing sources.

Discussion of Impacts

- a) ***Would the proposed Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

Less-than-Significant Impact. The Proposed Project would generate few GHG emissions during its operational phase. There would be occasional trucks driving the trail for maintenance purposes, which would generate some GHG emissions. It is possible that some additional vehicle trips would be generated by recreationists drawn to the area by the trail. However, such trips would likely be minimal, as there is already an extensive trail network in the area, this trail is not anticipated to draw more people, and no additional parking would be provided. BAAQMD's CEQA guidelines offer thresholds of significance for operational GHG emissions. Because new visits to the Site would be minimal, GHG emissions associated with excess car trips to the Site would be below this threshold, creating a ***less-than-significant*** impact.

During construction, there would be GHG emissions associated with gas-powered equipment and with transportation of construction workers and equipment to the Site. BAAQMD does not offer a threshold of significance for construction-related GHGs, but encourages lead agencies to examine construction emissions' impacts in the context of AB-32's goals. Given the relatively small scale of the Project, construction would not generate sufficient emissions to obstruct the attainment of AB-32 goals; so impacts would be less than significant. Since construction and operations-related emissions of GHG would both be less than significant, the Project would not generate GHGs that may have a significant impact on the environment. There would be **less-than-significant** impacts.

b) Would the proposed Project conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less-than-Significant Impact. Applicable policies and plans include AB-32 and the Alameda County Climate Action Plan. As previously discussed, construction emissions would be insufficient to conflict with the attainment of AB 32 goals. Project operational emissions would be negligible, and would not conflict with AB 32.

Alameda County's Climate Action Plan encourages agencies in the unincorporated county to consider the following when determining consistency between their Project and the Plan:

- 1) The extent to which the Project supports or includes applicable strategies and measures, or advances the actions identified in the CAP
- 2) The consistency of the Project with ABAG population growth Projections, which are the basis of the GHG emissions inventory's Projections
- 3) The extent to which the Project would interfere with implementation of CAP strategies, measures, or actions

Construction of the trail would not conflict with any CAP strategies, nor would it result in any population growth that might conflict with ABAG population growth Projections. Consistent with the Plan, the Project increases pedestrian facilities. As such, there is no conflict with the Alameda County Climate Action Plan.

As the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, there would be **less-than-significant** impacts.

4.8 Hazards and Hazardous Materials

VIII. HAZARDS AND HAZARDOUS MATERIALS — Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a Site which is included on a list of hazardous materials Sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VIII. HAZARDS AND HAZARDOUS MATERIALS — Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (California Code of Regulations, Title 22, Section 66261.10).

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosivity, and reactivity (as defined in California Code of Regulations, Title 22, Sections 66261.20-66261.24). The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies. Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance Sites. This list, referred to as the “Cortese List,” includes CALSITE hazardous material Sites, Sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination.

No hazardous materials have been documented by the DTSC within the Project Site and there are no hazardous substances Sites included on the Cortese List in the Project vicinity¹⁶. Additionally, the State Water Resource Control Board (SWRCB) Geo Tracker database was accessed to determine if there are any hazardous material Sites in the vicinity of the Project Site. According to the GeoTracker database, no hazardous materials are located at or near the Site¹⁷.

There are no private airstrips in the vicinity of the Project. The nearest airport is the Livermore Municipal Airport, approximately 6.1 miles north of the Project Site. The proposed trail is not within this airport’s area of influence.

¹⁶ California Department of Toxic Substance Control, “EnviroStor,” accessed December 8, 2018, <https://www.envirostor.dtsc.ca.gov/public/>.

¹⁷ California State Water Resources Control Board, “GeoTracker,” accessed December 8, 2018, <https://geotracker.waterboards.ca.gov/>.

Discussion of Impacts

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Less-than-Significant Impact. The Proposed Project is an unpaved pedestrian trail. Apart from the possibility of pesticide or herbicide use during maintenance activities, the Project would not necessitate the use, transport, or disposal of any hazardous materials; nor would its construction. On such occasions that pesticides and/or herbicides might be used to maintain the trail, all applicable laws and regulations would be followed to ensure their safe use. As such, there would be **less-than-significant impacts**.

- b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

No Impact. As stated in response to question a, no hazardous materials would be present during construction and operation of the Project. While asbestos occurs naturally in the state of California and is more likely to occur in hilly areas, there are no known natural occurrences of asbestos in the Project Site or its immediate vicinity¹⁸. Because hazardous materials would not be present, there would not be a possibility of upset or accident involving hazardous materials. There would be **no impact**.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

No Impact. There are no schools located within one-quarter mile of the Project Site. The nearest school is Sunset Elementary School, located approximately 3.1 miles north of the Project Site. Additionally, there are no schools proposed in the vicinity of the Project Site. Because there are no planned or present schools within one-quarter mile of the Project, there would be **no impact**.

- d) **Be located on a Site which is included on a list of hazardous materials Sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

No Impact. According to the GeoTracker and EnviroStore databases maintained by DTSC and DWR, there are no hazardous waste sites within or near the Project Site. As such, there would be **no impact**.

¹⁸ "California Geological Survey - Asbestos," accessed September 7, 2018, <http://www.conservation.ca.gov/cgs/Pages/Hazards/Hazardous-minerals/asbestos2.aspx>.

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

No Impact. The Project Site is not located within the jurisdiction of an airport land use plan, nor is it located within two miles of a public airport. As such, the Project would not expose people residing or working in the Project Site to aviation-related hazards. There would be ***no impact***.

- f) ***For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?***

No Impact. There are no private airstrips in the vicinity of the Project. As such, the Project would not expose people residing or working in the area to hazards related to aviation at the private airstrip. There would be ***no impact***.

- g) ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less-than-Significant Impact. The Proposed Project would not result in any structures or physical changes to roads that would physically interfere with an adopted emergency response or evacuation plan. The Project would not likely result in any increase in traffic during the operational phase, as the trail would connect existing trailheads and no additional parking would be provided; and increases in traffic due to construction would be minimal and temporary. Given the lack of physical changes in the path of an emergency response or evacuation plan and the low volume of traffic added to area roadways as a result of the Project, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or evacuation plan. There would therefore be ***less-than-significant*** impacts.

- h) ***Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?***

Less-than-Significant Impact. The Project Site is located in the hills south of Livermore. These hills are generally covered in grass that becomes very dry in the summer time, potentially creating a fire risk. However, the Project Site is not located at the urban-wildland interface and would result in no new structures and a limited quantity of additional people in the area. As such, there would be minimal exposure of people or structures to risk of loss, injury, or death involving wildland fires. There would be ***less-than-significant*** impacts.

4.9 Hydrology and Water Quality

IX. HYDROLOGY AND WATER QUALITY — Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-Site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-Site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IX. HYDROLOGY AND WATER QUALITY — Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j)	Inundation of seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Project Site is located in the Arroyo del Valle Watershed, a sub-watershed of the Alameda Creek watershed. The 168 square mile watershed includes water bodies such as Dry Creek, Shafer Creek, Trout Creek, Sycamore Creek, Colorado Creek, Arroyo Bayo, San Antonio Creek, Jumpoff Creek, Sulphur Springs Creek, Sweetwater Creek, Beauregard Creek, and Lake Del Valle. The Arroyo del Valle watershed heads in the Diablo Range and flows northwest toward Livermore Valley. Before reaching the valley, it is impounded to create Lake Del Valle. Once released at the dam, the creek flows along the south side of the valley to join Arroyo de la Laguna in Pleasanton¹⁹. Lake del Valle is located approximately 1.1 miles southeast of the proposed trail. Its dam is the nearest to the Project Site. Arroyo del Valle is impaired for the pesticide Diazinon due to urban runoff. Lake del Valle is impaired for mercury and polychlorinated biphenyls (PCBs)²⁰.

According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRM), the Project Site is located within Zone D. Areas zoned D have undetermined flood hazards. The Project Site is not located near the coast and therefore is not subject to tsunamis or seiches.

¹⁹ "Explore Watersheds | ACFC," accessed December 8, 2018, <https://www.acfloodcontrol.org/resources/explore-watersheds/>.

²⁰ State Water Resources Control Board, "Impaired Water Bodies," accessed December 8, 2018, https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CAR2066001320080626144111.

Discussion of Impacts

- a) ***Would the proposed Project violate any water quality standards or waste discharge requirements?***

Less-than-Significant Impact. Project implementation would not generate any waste water or discharges. Construction could necessitate watering of exposed soils to avoid erosion and fugitive dust. While this practice could generate runoff that could affect water quality downstream, it would not do so in sufficient quantities to violate any water quality standards or waste discharge requirements. As such, there would be ***less-than-significant*** impacts.

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

No Impact. A significant impact may occur if a Project includes deep excavations resulting in the potential to interfere with groundwater movement or includes withdrawal of groundwater or paving of existing permeable surfaces important to groundwater recharge. The Project does not propose major excavation work. Minor grading would be required at the Site on existing slopes, which would not intersect the groundwater table. The proposed Project does not include the use of wells or an increase in impermeable surface. Thus, ***no impacts*** would occur.

- c) ***Would the proposed Project substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-Site?***

Less than Significant with Mitigation. A significant impact may occur if a Project results in a substantial alteration of drainage patterns that would result in a substantial increase in erosion or siltation during construction or operation of the Project. The Project does not propose to alter the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner that would result in erosion or siltation. Further, the Project design integrates BMPs to minimize impacts related to erosion and water quality. Given the Project would result in minimal changes to drainage patterns and would implement appropriate BMPs, the Project would result in ***less-than-significant*** impacts related to erosion and siltation on- and off-site.

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

Less-than-Significant Impact. As previously discussed, the Project would not alter the course of a stream or river, nor would it introduce impervious surfaces that might increase the rate or amount of surface runoff. Because there would be no substantial alterations to existing drainage patterns, the Project would not result in flooding on- or off-Site. Thus, there would be ***less-than-significant*** impacts.

- e) ***Would the proposed Project 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 otherwise substantially degrade water quality?***

Less-than-Significant Impact. The proposed Project would not result in the introduction of any additional impervious surface to the area. The trail would be unpaved, allowing water to continue penetrating the ground and draining similarly to its natural drainage pattern. Although natural drainage patterns may be somewhat altered by grading and vegetation removal, the trail's path has been selected to minimize vegetation removal and ground disturbance and avoid water features. These design considerations minimize any potential disturbance to natural drainage patterns. Further, the Project would not create additional sources of polluted runoff. No water would be used during Project operation. Water would be used to minimize fugitive dust during construction, but there are no contaminants present on-site that would pollute this water. Further, the quantities used would not be large enough to create substantial runoff. As the Project would not create or contribute runoff water or polluted runoff, capacity of stormwater drainage systems would not be exceeded and water quality would not be degraded. There would therefore be ***less-than-significant*** impacts.

- f) ***Would the proposed Project otherwise substantially degrade water quality?***

Less-than-Significant Impact. The Project Site is in the Arroyo Del Valle Watershed. Arroyo del Valle is listed as impaired for the pesticide diazinon. The Project would not use diazinon or contribute to diazinon-polluted runoff, and would therefore not further degrade water quality with regard to this pollutant. Watering during construction could lead to additional sediment in runoff, which could slightly degrade water quality downstream. Implementation of construction BMPs would reduce impacts related to sedimentation and polluted runoff to a less-than-significant level. As such, impacts related to degradation of water quality would be ***less than significant***.

- g) ***Would the proposed Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?***

No Impact. The Project is not located in a 100-year flood area and would not include the construction of any housing. As such, the Project would not place any housing within a 100-year flood hazard area and there would be ***no impact***.

- h) ***Would the proposed Project place within a 100-year flood hazard area structures which would impede or redirect flood flows?***

No Impact. The Project is not located within a 100-year flood hazard area and does not involve the construction of any structures. The Project would therefore not place structures that might impede or redirect flood flows in a 100-year flood hazard area. Thus, there would be ***no impact***.

- i) **Would the proposed Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**

Less-than-Significant Impact. There are no levees located near the Project, but the Project Site is approximately 1.1 mile northwest of the Del Valle Dam and is within its inundation area. However, the proposed trail would be located high upon a hillside, with an approximate minimum elevation of 730 feet. Given the elevation of the proposed trail, inundation risk is minimal. Further, Project implementation is not anticipated to draw large quantities of additional people to the area and would not result in any new structures. During construction, workers would be positioned within the inundation area. However, as previously discussed, inundation risk is minimal at the elevations at which they would work. Thus, there would be **less-than-significant** impacts on exposure of people and structures to significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

- j) **Would the proposed Project be subject to inundation by seiche, tsunami, or mudflow?**

Less-than-Significant Impact. As previously discussed, the Project is located atop an inland hill. There is therefore no risk of tsunami and a negligible risk of seiche. The soil profile of the Project Site does not contain clays, which may be susceptible to mudflow (see Section 4.6: Geology and Soils). Because the Project Site is not at a significant risk of seiche, tsunami, or mudflow, there would be **less-than-significant** impacts.

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4.10 Land Use and Planning

X.	LAND USE AND PLANNING – Would the Project:				
		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Alameda East County Area Plan designates the Project Site for Large Parcel Agricultural land use. Large Parcel Agricultural lands have a minimum parcel size of 100 acres. Permitted uses on Large Parcel Agricultural Lands include agriculture, agricultural processing, limited agricultural support services, secondary residential units, visitor-serving commercial facilities, recreational uses, public and quasi-public uses, solid waste landfills, quarries, windfarms, and other agriculturally compatible uses.

Regulatory Setting

East County Area Plan

Land Use

Policy 13: The County shall not provide nor authorize public facilities or other infrastructure in excess of that needed for permissible development consistent with the Initiative. This policy shall not bar 1) new, expanded or replacement infrastructure necessary to create adequate service for the East County, 2) maintenance, repair or improvements of public facilities which do not increase capacity, and 3) infrastructure such as pipelines, canals, and power transmission lines which have no excessive growth-inducing effect on the East County area and have permit conditions to ensure that no service can be provided beyond that consistent with development allowed by the Initiative. "Infrastructure" shall include public facilities, community facilities, and all structures and development necessary to the provision of public services and utilities.

Policy 54: The County shall approve only open space, park, recreational, agricultural, limited infrastructure, public facilities (e.g., limited infrastructure, hospitals, research facilities, landfill Sites, jails, etc.) and other similar and compatible uses outside the Urban Growth Boundary.

Policy 60: The County shall encourage active public use of publicly-owned open space lands close to existing and planned communities in locations where such use does not conflict with the protection of biological resources.

Program 23: The County shall work with the Livermore Area Recreation and Park District (LARPD), the East Bay Regional Park District (EBRPD), and the San Francisco Water Department to incorporate continuous open space areas outside the Urban Growth Boundary into the Bay Area Greenbelt system.

Program 24: The County shall work with the East Bay Regional Park District, the Livermore Area Recreation and Park District, the San Francisco Water Department, California Department of Fish and Game, and cities to identify appropriate public and private uses that should be allowed within various portions of the open space system, including active and passive recreation, and grazing.

Policy 81: The County shall give the highest priority in areas designated "Large Parcel Agriculture" to agricultural operations. Visitor-serving commercial facilities (such as wineries, inns, and food and beverage stores) shall be limited to facilities that promote agriculture and are subordinate and directly related to the area's agricultural production.

Policy 82: In areas designated Large Parcel Agriculture, the County shall permit limited agriculture enhancing commercial uses that primarily support the area's agricultural production, are not detrimental to existing or potential agricultural use, demonstrate an adequate and reliable water supply, and comply with other policies and programs of the Initiative.

Policy 101: The County shall encourage public water management agencies to explore recreational opportunities on watershed lands, particularly reclaimed quarries, where recreational use would not conflict with watershed protection objectives.

Policy 102: The County shall encourage the San Francisco Water Department to provide limited public access on trail corridors through the watershed lands surrounding San Antonio and Calaveras Reservoirs, Sunol Watershed, and the Arroyo de la Laguna. The County shall work with the East Bay Regional Park District to incorporate these watershed corridors into the regional trail system, where recreational use would not conflict with watershed protection objectives.

Policy 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.

Policy 117: The County shall require that where grading is necessary, the off-Site visibility of cut and fill slopes and drainage improvements is minimized. Graded slopes shall be designed to simulate natural contours and support vegetation to blend with surrounding undisturbed slopes.

Policy 123: Where Site-specific impacts on biological resources resulting from a proposed land use outside the Urban Growth Boundary are identified, the County shall encourage that mitigation is complementary to the goals and objectives of the ECAP. To that end, the County shall recommend that mitigation efforts occur in areas designated as "Resource Management" or on

lands adjacent to or otherwise contiguous with these lands in order to establish a continuous open space system in East County and to provide for long term protection of biological resources.

Policy 125: The County shall encourage preservation of areas known to support special status species.

Policy 126: The County shall encourage no net loss of riparian and seasonal wetlands.

Policy 127: The County shall encourage the preservation of East County's oak woodland plant communities.

Policy 141: The County shall ensure that all new uses approved near the Veterans Administration (VA) Hospital in South Livermore are compatible with hospital operations.

Transportation

Program 83: The County shall work with the East Bay Regional Park District and the Livermore Area Recreation and Park District to complete a regional trail system consistent with their respective Master Plans and shall work with Zone 7 to complete the trail system identified in its Arroyo Management Plan.

Public Services and Facilities

Policy 218: The County shall allow development and expansion of public facilities (e.g., parks and recreational facilities; schools; child care facilities; police, fire, and emergency medical facilities; solid waste, water, storm drainage, flood control, subregional facilities; utilities etc.) in appropriate locations inside and outside the Urban Growth Boundary consistent with the policies and Land Use Diagram of the East County Area Plan.

Policy 223: The County shall support expansion of the existing regional park system according to the recreational facility standards contained in the EBRPD Master Plan, the LARPD Master Plan, and applicable County specific plans.

Policy 225: The County shall integrate East County trail plans with the California Recreational Trail System.

Policy 226: The County shall coordinate provision of regional park facilities and programs between existing special districts.

Policy 227: The County shall reserve a regional trail corridor through the "Chain-of-Lakes" area connecting Del Valle Regional Park with the Tassajara Creek open space corridor.

Policy 283: The County shall ensure that development proposals within designated dam inundation areas are referred to the Office of Emergency Services and to appropriate local police departments for evaluation and updating of emergency response and evacuation plans.

Program 98: The County shall require new development to set aside sufficient right-of-way and setback areas to accommodate multi-use objectives for storm drainage and flood control features.

Required rights-of-way and setback areas may exceed the 20 foot setback required under the County's Watercourse Protection Ordinance.

Environmental Health

Policy 288: The County shall endeavor to maintain acceptable noise levels throughout East County.

Policy 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.

Policy 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.

Policy 296: The County shall review the cumulative impact of proposed Projects for their potential effect on air quality conditions.

Policy 300: The County shall review proposed Projects for their potential to generate hazardous air pollutants.

Policy 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 creekside, 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.

Policy 308: The County shall not permit development within any area outside the Urban Growth Boundary exceeding 25 percent slopes to minimize hazards associated with slope instability.

Policy 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.

Policy 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.

Policy 313: The County shall require development in hilly areas to minimize potential erosion and disruption of natural slope stability which could result from grading, vegetation removal, irrigation, and drainage.

Alameda County Municipal Code

Tree Ordinance

The planting, maintaining, or removing of any tree in the right-of-way, and all associated facilities, such as irrigation systems, tree wells, root barriers and supports, are encroachments subject to the permitting and other requirements of this Chapter. It shall be unlawful for any person or utility to so encroach upon the right-of-way without first obtaining an encroachment permit as provided in this Chapter. The application for an encroachment permit under this Chapter shall be filed with the Director and approved by the Director prior to beginning the proposed activity or work.

East Alameda County Conservation Strategy

The EACCS designates the Project Site as “Type 3” Open Space, which includes public lands that may contain some land uses other than ecological protection such as parklands. This area is considered least protected out of the Open Space types identified in the EACCS. The Project Site is also located within Conservation Zone 12 (CZ-12). Conservation priorities for CZ-12 are as follows:

- Protection of Coulter pine woodland land cover type.
- Protection of perennial freshwater marsh and coast live oak forest and woodland land cover types.
- Protection and enhancement of ponds to protect breeding habitat for tricolored blackbird, CTS, and CRLF, with primary focus on currently occupied habitat and secondary focus on habitat that can be enhanced to encourage occupation.
- Protection of critical habitat for Alameda whipsnake.
- Complete surveys in annual grassland habitat for Callippe silverspot butterfly larval host/food plants and map occurrences of plant populations.

LARPD Parks, Recreation, and Trails Master Plan

Action A.3.1.1: Identify undeveloped segments in the trail system and collaborate with the City of Livermore, EBRPD, TVC, and other agencies to plan, prioritize, and encourage completion of these segments to create major multi-use trail corridors and provide connectivity to important destinations, including schools, parks, open space areas, transportation centers, and major employment and commercial centers.

- Encourage EBRPD to complete the Shadow Cliffs to Arroyo Del Valle Creek trail, specifically from Sycamore Grove northwest to the Isabel Avenue Trail;

- Plan for the completion of those remaining unconstructed segment of the South Livermore Valley Trail;
- Consider equestrian needs in the development of trails and the trail system and locations for potential staging areas in conjunction with EBRPD.

Action B.2.3.2: When designing and construction new facilities and improvements to existing facilities, comply with State and Federal requirements governing ADA parking and ramp accessibility for parking lot design, access to buildings, and when appropriate, use minimum grade and paving requirements for trail design.

Discussion of Impacts

a) ***Would the proposed Project physically divide an established community?***

No Impact. The Project Site is located on Zone 7 Water Agency land. There are no established communities present. Given there are no communities present, the Project would not physically divide an established community and there would be **no impact**.

b) ***Would the proposed Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

Less-than-Significant Impact. A significant impact would result from a conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. The Proposed Project is subject to several local policies, plans, and regulations, as described above. The Proposed Project would not alter or affect any of the existing land uses on the Site or in the surrounding area. The Proposed Project would not conflict with the land use designation for the Project Site. Furthermore, the Proposed Project would not conflict with any policies in the Alameda East County Area Plan and is designed to implement several of the goals of the LARPD Parks, Recreation, and Trails Master Plan, including improved trail connectivity within Sycamore Grove Park.

c) ***Conflict with any applicable habitat conservation plan or natural communities conservation plan?***

No Impact. The Project is located in unincorporated Alameda County. There are no active habitat conservation plans (HCP) or natural communities conservation plans (NCCP) in Alameda County. As the Project is not subject to an HCP or NCCP, there would be no conflict with any such plan. Thus, there would be **no impact**.

4.11 Mineral Resources

XI. MINERAL RESOURCES — Would the Project:				
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery Site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

According to the U.S. Geological Survey²¹ and the California Department of Conservation²², there are no known mines or mineral resources within the Project Site or the surrounding area. The Alameda East County Area Plan does not delineate any mineral resource recovery areas within the Project Site²³.

Discussion of Impacts

- a) ***Would the proposed Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

No Impact. There are no known mineral resources that would be of value to the region and the residents of the state in the Project Site or its vicinity. Were resources to be discovered at a later date, the construction of a pedestrian path would not preclude their extraction or utilization. As such, there would **no impact**.

- b) ***Would the proposed Project result in the loss of availability of a locally important mineral resource recovery Site delineated on a local general plan, specific plan or other land use plan?***

No Impact. As previously discussed, there are no known mineral resources Sites within or near the Project Site. The Alameda East County Area Plan does not designate the Project Site as a mineral resource recovery Site. Should a locally important mineral resource recovery Site be discovered and designated by the County at a later date, the proposed Project would not preclude its utilization. As such, there would be **no impact**.

²¹ US Geological Survey, "Mineral Resources Data System: US," accessed December 8, 2018, <https://mrdata.usgs.gov/mrds/map-us.html>.

²² "Mines Online," accessed December 8, 2018, <https://maps.conservation.ca.gov/mol/index.html>.

²³ Alameda County Community Development Agency Planning Department, "East County Area Plan: A Portion of the Alameda County General Plan."

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4.12 Noise

XII. NOISE — Would the Project result in:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Noise Element of the Alameda County Ordinance Code has established noise standards for residential and public institutional land uses. The maximum A-weighted decibel level (dBA) is 65 for a 1-hour period during the daytime and 60 dBA during nighttime hours (10 p.m. to 7 a.m.). For commercial properties, noise level standards are a maximum of 80 dBA and 75 dBA for daytime and nighttime, respectively. The provisions of the Alameda County Noise Element limit noise sources associated with construction between 7 a.m. and 7 p.m. on weekdays and between 8 a.m. and 5 p.m. on weekends.

Baseline noise at the Project Site is minimal, and includes noises associated with Zone 7 Water Agency operations such as the occasional movement of trucks through the Site. Nearby recreational land uses may result in spill-over noise into the Project Site. Noise associated with

the completed Project would include increased foot traffic and the associated noises. During construction, the trail would be graded with handtools, resulting in a minimal increase in ambient noise. LARPD staff may use a chainsaw as part of construction. This would be the only motorized tool used during the construction process. Chainsaws tend to reach a noise level of approximately 85 dBA at 50 feet of distance.

Discussion of Impacts

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

Less-than-Significant Impact. Noises generated by Project operation would be generally consistent with baseline noise levels and would not exceed standards established in the local noise ordinance. The construction activities associated with the Project would generally employ the use of handtools, with occasional use of a chainsaw. Equipment used during construction would generate temporary steady-state and episodic noise that would be heard both on and off the Project Site.

As with all construction equipment, noise levels would diminish rapidly with distance from the construction Site. Noise typically diminishes at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA measured at 50 feet from the noise source to the receptor would reduce to 78 dBA at 100 feet from the source to the receptor, and reduce by another 6 dBA to 72 dBA at 200 feet from the source to the receptor.

There are few residences located adjacent to the proposed trail. Along the majority of the route adjacent property is open space or ranch land. However, residents of the handful of homes near the Project Site and visitors to the nearby parks and hospital could experience temporary, periodic, noticeable increases in noise levels during the Project's construction period, even with implementation of the noise control measures.

Based on the average noise levels associated with chainsaws, the only motorized equipment to be used as part of the Project, noise levels could exceed 85 dBA at a distance of 50 feet if mufflers are not used. Patients at the VA Hospital are the nearest sensitive noise receptors. The closest point on the trail to the hospital is roughly 645 feet away. This puts maximum construction-related noise levels at the hospital at approximately 67 dBA without mufflers. Given the construction-related BMPs outlined in the Project description stipulate that LARPD would fit all motorized construction equipment with appropriate mufflers, noise levels associated with chainsaws would be below maximum levels permitted by the General Plan (65 dBA).

Given most construction would occur farther away from the hospital and would not require the use of chainsaws, noise levels would typically be lower. With implementation of BMPs and adherence to the schedule outlined in the Project description, Project-related construction would not expose people to noise in excess of established standards. Since Project implementation would only generate minimal quantities of noise and construction noise would not exceed applicable standards, there would be ***less-than-significant*** impacts.

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

Less-than-Significant Impact. Due to the limited nature of Project construction and because heavy equipment such as pile drivers would not be required, the Project is not anticipated to cause exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels during Project construction. Impacts during Project construction would be less than significant, and no impacts would occur during Project operation. As such, overall impacts related to the generation of or the exposure of people to excessive groundborne noise or vibration would be **less than significant**.

c) Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Less-than-Significant Impact. Most noise associated with the proposed Project would occur during construction through the use of hand tools. These noises would be temporary, minimal and would cease upon Project completion. During the operational phase of the trail, there would be minimal or no change in the area's baseline noise level. The Project would likely attract some additional people to the area for trail use, but the extent to which trail use may increase is constrained by existing parking, limiting the number of new trail users. There would be some noise associated with these recreationists' trail use and transportation to the trail. Given constraints on the anticipated quantity of new park users, any such increase in noise would be insubstantial. As such, there would be **less-than-significant** impacts regarding substantial permanent increases in ambient noise levels.

d) Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Less-than-Significant Impact. As previously discussed, operation of the Project would result in negligible increases in ambient noise and noise increases associated with Project construction would be minimal. The proposed trail would largely be constructed with hand tools, resulting in minimal noise. Where motorized equipment (i.e. chainsaws) is used, it would be fitted with a proper muffler as part of the Project design. Thus, impacts related to temporary increases in ambient noise levels would be **less than significant**.

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

No Impact. The Project is not located within the jurisdiction of any airport land use plan, nor is it located within two miles of an airport that does not have a land use plan. The nearest airport is approximately 6.1 miles from the Project Site. The Project would therefore not expose people residing or working near an airport to excessive noise levels. There would be ***no impact.***

- f) ***For a Project located in the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?***

No Impact. There are no private airstrips near the Project Site. The Project would therefore not expose people residing or working near an airstrip to excessive noise levels. There would be ***no impact.***

4.13 Population and Housing

XIII. POPULATION AND HOUSING — Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Impacts

- a) ***Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed pedestrian trail would not result in any population growth. No new homes or employment opportunities would be created through the Project. Thus, the Project would not induce substantial population growth directly or indirectly and there would be **no impact**.

- b) ***Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

No Impact. There is no housing along the proposed trail. As such, no housing would be displaced and no replacement housing would be needed. There would therefore be **no impact**.

- c) ***Would the Project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?***

No Impact. As previously discussed, there is no housing along the proposed trail. The Project is situated on Zone 7 land and would not displace any people. No construction of replacement housing would be necessary, and there would be **no impact**.

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4.14 Public Services

XIV. PUBLIC SERVICES — Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
i)	Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii)	Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii)	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv)	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v)	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Fire

The Alameda County Fire Department (ACFD) provides all-risk emergency services to the unincorporated areas of Alameda County (excluding Fairview), the cities of San Leandro, Dublin, Newark, Union City and Emeryville, the Lawrence Berkeley National Laboratory and the Lawrence Livermore National Laboratory. With 29 fire stations and 35 companies serving a population of 394,000, the ACFD serves the region. Over 400 personnel and 100 Reserve Firefighters provide fire services over roughly 508 square miles.

Sheriff

The Alameda County Sheriff would serve as police protection for the Project Site. The Sheriff's office has over 1500 authorized positions including in excess of 1000 sworn personnel. The Office of Emergency Services maintains a 24-hour response capability that includes their Air Squadron, Deputy Sheriff Reserve Unit, Communications Team, Mounted Posse, Search and Rescue Unit, and Underwater Recovery Unit.

Schools

The Project Site is located in unincorporated Alameda County between two large parks and recreation areas; there are no schools located within the Project Site or surrounding area. The

Site is within the Livermore Valley Unified School District and the closest school is Sunset Elementary School, approximately 3.1 miles north of the Project Site.

Parks

The Project Site is located between two portions of the Sycamore Grove Park. Sycamore Grove Park provides 847 acres of parks and recreation facilities for the area, and is owned and maintained by LARPD. Del Valle Regional Park, near the Project Site, is a regional park including Del Valle Lake and 4,395 acres of open space owned by the State of California, EBRPD operates and maintains the park.

Discussion of Impacts

a-i-v) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities?

No Impact. The proposed Project is a pedestrian trail connecting two existing LARPD trails. The proposed Project would not introduce new land uses and associated population that would significantly increase demands for public services. Therefore, the proposed Project would not result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, nor the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public service. Therefore, ***no impacts*** would occur.

4.15 Recreation

XV. RECREATION — Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

As discussed above, the Project Site is located between two large regional parks. Sycamore Grove Park, an 847-acre open space park sits to the north. To the southeast is Del Valle Regional Park, a 4,395-acre park encompassing Del Valle Lake. The Proposed Project would enhance existing recreational facilities in the area by constructing an approximately 1.97 mile unpaved pedestrian path through Zone 7 property, creating better connectivity of area trails.

Discussion of Impacts

- a) ***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 proposed Project is located between two large regional parks. The Project would provide improved connectivity of the area's pre-existing network of recreational trails by providing a connector between trails in Sycamore Grove and Del Valle Parks. This may lead to an increased use of the area's parks and recreational facilities, but any such increase would be constrained by existing parking, as no new parking would be added. Increase to recreational traffic would therefore not be sufficiently large to trigger or accelerate substantial physical deterioration of existing parks. Thus, there would be ***less-than-significant*** impacts.

- b) 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. The proposed Project is construction of a pedestrian trail to improve connectivity of the pre-existing recreational trail system. The environmental impacts of this proposed expansion of recreational facilities is examined throughout this initial study. No significant environmental impacts were identified through the study process; although mitigation was required for certain impacts that would otherwise be potentially significant. With implementation of the mitigation measures outlined in this document, expansion of recreational facilities would have a less than significant impact. Impacts associated with the construction or expansion of recreational facilities would therefore be **less than significant**.

4.16 Transportation and Traffic

XVI. TRANSPORTATION/TRAFFIC — Would the Project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Alameda County prepared a Congestion Management Program (CMP) in 2017. There are no CMP roadways within the vicinity of the Project Site.

Discussion of Impacts

- a) ***Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

Less-than-Significant Impact. During construction, there may be an increase in vehicle trips to the trail. Following construction, the trail improvements may result in an increase of trail users, but any such increase is constrained by the availability of parking, which would not be expanded as part of the Project. Area roadways are currently uncongested and traffic from the Project would not exceed the capacity of area roadways. Further, there are no CMP roadways near the Project Site. Thus, the proposed Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, impacts would be ***less than significant***.

- b) ***Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

Less-than-Significant Impact. As previously discussed, there are no CMP roadways near the Project Site. The Project would not result in any permanent increase in traffic, but may result in a temporary increase during construction. Such an increase would be insufficient to conflict with an applicable CMP. Therefore, there would be no conflict with applicable CMPs and there would be ***less-than-significant*** impacts.

- c) ***Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

No Impact. The Project involves construction of a trail to connect two existing trails. The Project would not increase air traffic levels, nor would it result in location changes to air traffic. As the Project would not change air traffic patterns, there would be no safety risks resulting from any such changes. There would therefore be ***no impact***.

- d) ***Would the Project substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

No Impact. No changes to area roadways outside of the pedestrian trail are proposed, so design features and incompatible uses would not increase hazard. As such, there would be ***no impact***.

e) **Result in inadequate emergency access?**

Less-than-Significant Impact. The small increase in traffic during Project construction would be insufficient to adversely impact emergency access. During Project operation, it is unlikely there would be any increase in traffic, and any such increase would be negligible. Given this information, there would not be any negative impacts on emergency access. To the contrary, improving trail connectivity should increase emergency access and better enable emergency services to reach recreationists who might need them. As such, there would be **less-than-significant** impacts regarding emergency access.

f) **Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

No Impact. The Project would not include modifications to public transportation and would not present obstacles for public transit, bicycle, or pedestrian facilities or conflict with any plans for alternative transportation. In fact, the Project would increase pedestrian and facilities by adding to the area's trail system. Thus, there would be **no impact**.

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4.17 Tribal Cultural Resources

XVII. TRIBAL CULTURAL RESOURCES — Would the Project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a Site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

In September 2014, the California Legislature passed Assembly Bill (“AB”) 52, which added provisions to the Public Resources Code (“PRC”) concerning the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze a project’s impacts on “tribal cultural resources,” separately from archaeological resources (PRC Section 21074; 21083.09). Under AB 52, “tribal cultural resources” include “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” that are either (1) listed, or determined to be eligible for listing, on the state or local register of historic resources; or (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource (PRC Section 21074). AB 52 also requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, 21082.3). If a project may have a significant impact on a tribal cultural resource, the lead agency’s environmental document must discuss (1) whether the proposed project has a significant impact on an identified tribal cultural resource and (2) whether feasible alternatives or mitigation measures avoid or substantially less the impact on the identified tribal cultural resource (PRC Section 21082.3(b)). Finally, AB 52 required the Office of Planning and

Research to update Appendix G of the CEQA Guidelines by July 1, 2016 to provide sample questions regarding impacts to tribal cultural resources (PRC Section 21083.09). AB 52's provisions apply to projects that have a notice of preparation filed on or after July 1, 2015.

Discussion of Impacts

- a-i) *Would the Project cause a significant adverse change in 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)?***

No Impact. Criteria for listing on the California Register of Historical Resources is described in Section 4.5 (Cultural Resources). No 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) are present on the project site. Therefore, the proposed project would not result in a substantial adverse change to any 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) and **no impact** would occur.

- a-ii) *Would the Project cause a significant adverse change in a tribal cultural resource that is 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.***

Less than Significant with Mitigation Incorporated. In accordance with AB-52, no tribe has provided LARPD with a formal request to be consulted under AB-52 for Project's under LARPD's jurisdiction. As such, no formal consultation is required under AB-52 and LARPD has met all the requirements of the regulation. No known tribal cultural resources are present on the project site. Mitigation Measures CULT-1 would ensure that impacts are **less than significant**.

4.18 Utilities and Service Systems

XVIII. UTILITIES AND SERVICE SYSTEMS — Would the Project:		<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Project Site is located in the jurisdiction of the San Francisco Bay Regional Water Quality Control Board. California Water Service would provide water service for the Site. California Water Service sources its water from Zone 7. Most of Zone 7's water supply comes from the South Bay Aqueduct, but a portion comes from local rain runoff stored in Lake del Valle and groundwater from the aquifer below the Livermore-Amador Valley.

Solid waste from the Project Site would be disposed of at the Altamont Landfill, located at 10840 Altamont Pass Road in unincorporated Alameda County. The Facility is owned and operated by Waste Management Inc. of Alameda County [WMAC], and has an expected closure date of 2025. As of December 21, 2014, Altamont Landfill had 65,400,000 cubic yards of capacity remaining.

Discussion of Impacts

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

No Impact. A significant impact may occur if a Project exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB). A significant impact may also occur if a Project would increase water consumption or wastewater generation to such a degree that the capacity of facilities currently serving the Project Site would be exceeded. The proposed Project does not involve any uses that would discharge wastewater to sanitary sewer or on-Site wastewater (septic) systems. Therefore, there would be **no impacts**.

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less-than-Significant Impact. Water usage and wastewater generation during Project construction and operation should remain comparable to preconstruction levels, as no new uses are being introduced and existing infrastructure constrains how many additional people may visit the park. Given the Project would not result in any appreciable increase in water use or wastewater generation, there would be no need for new or expanded facilities, and there would be **less-than-significant** impacts.

c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. The Project would not introduce any structures or impervious surfaces to the area that might result in excess stormwater runoff. The proposed trail would remain unpaved, so changes to stormwater patterns should be negligible. There are currently no on-site stormwater drainage facilities, and none would be created or expanded as part of the Project. As there are no anticipated changes to stormwater generation, no new or expanded facilities would be needed. Thus, there would be **no impact**.

- d) ***Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?***

Less-than-Significant Impact. As previously discussed, water use would minimally increase during construction, but not during operation. The temporary minimal increase during construction would be insufficient to require new entitlements and resources. The area's water supplier would have sufficient capabilities to serve the Project without expanding entitlements and resources; so there would be ***less-than-significant impacts***.

- e) ***Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?***

No Impact. The proposed Project would not result in an increased need for wastewater treatment. A small, temporary increase of people in the Project Site is anticipated during construction. Afterwards, an increase of people to the area is not anticipated. There would therefore only be a temporary, slight increase in wastewater generation, which would not be sufficiently large as to necessitate the construction of any new facilities. No restrooms or other wastewater-generating facilities are proposed as part of the Project. Therefore, the Project's wastewater treatment provider would have adequate capacity to serve the Project's Projected demand in addition to its existing commitments. There would be ***no impact***.

- f) ***Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?***

Less-than-Significant Impact. The Project would not result in permanent increases in solid waste generation, but may create solid waste during construction. Solid waste generated by the Project would be disposed of at Altamont Landfill, which is Projected to have capacity through 2025. The Project is therefore served by a landfill with sufficient permitted capacity to accommodate its solid waste disposal needs. There would be ***less-than-significant*** impacts.

- g) ***Comply with federal, state, and local statutes and regulations related to solid waste?***

Less-than-Significant Impact. The Project is not anticipated to result in a permanent increase in solid waste generation. While the proposed Project would generate a small amount of solid waste during construction activities, solid waste would continue to be disposed of in accordance with all federal, state, and local regulations related to solid waste disposal. Thus, there would be ***less-than-significant*** impacts.

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4.19 Mandatory and Findings of Significance

XIX. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion of Impacts

- a) **Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less than Significant with Mitigation Incorporated. The proposed Project could affect natural habitats or federally or state-listed species. However, Mitigation Measures **BIO-1, BIO-2, BIO-3, BIO-4**, would be required to be implemented that would reduce impacts to biological resources to *less than significant* levels. There are no known cultural resources within the Project Site. Furthermore, implementation of measures **CULT-1**, would ensure impacts are *less than significant*.

- b) ***Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?***

Less than Significant with Mitigation Incorporated. The proposed Project includes construction measures and BMPs to minimize the temporary impacts of construction activities, and no significant long-term adverse impacts would occur. With BMPs listed in Section 3.0 (Project Description), as well as Mitigation Measures **BIO-1**, **BIO-2**, **BIO-3**, **BIO-4**, and **CULT-1**, the Project would result in individually minor impacts and would not contribute substantially to cumulative impacts on any resource, resulting in a less than significant impact.

Section 15130 of the CEQA Guidelines requires an evaluation of potential environmental impacts when the Project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Project, and the effects of probable future Projects. These impacts can result from a combination of the proposed Project together with other Projects causing related impacts. The cumulative impact from several Projects is the change in the environment, which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probably future Projects.

A significant impact may occur if a Project, in conjunction with other related Projects in the area of the Project, would result in impacts which are less than significant when viewed separately, but would be significant when viewed together. The Project includes mitigation measure to minimize temporary impacts of construction activities, and no long-term adverse impacts are anticipated. With these measures, the Project would result in individually minor impacts and would not contribute substantially to cumulative impacts in conjunction with the implementation of other Projects in the area.

- c) ***Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?***

Less than Significant. The proposed Project, particularly during the construction phase, could result in temporary impacts to human beings. Potential adverse effects would be related to temporary increases in air pollution and noise during construction. However, implementation of BMPs included in the Section 3.0 (Project Description) would ensure impacts are less than significant.

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