DRAFT INITIAL STUDY

FOR THE PROPOSED NOVATO UNIFIED SCHOOL

DISTRICT GROUNDS MAINTENANCE AND OPERATIONS BUILDING

Prepared for:

Novato Unified School District
1015 Seventh Street
Novato, CA 94945

Prepared by:

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7008 Bristol Drive
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March 12, 2019

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
ADWF	average dry weather flow
APE	Area of Potential Effect
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CARB	California Air Resources Board
DPR	California Department of Parks and Recreation
FEMA	Federal Emergency Management Agency
HPD	Historic Property Directory
CO	carbon monoxide
CO2E	carbon dioxide equivalent
GHG	greenhouse gas
gpd	gallons of wastewater per day
LOS	level of service
MCFCWCD	Marin County Flood Control and Water Conservation District
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
mgd	million gallons per day
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NFPD	Novato Fire Protection District
NO_x	nitrogen oxides
NPD	Novato Police Department
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
OHP	State Office of Historic Preservation
O_3	ozone
PM_{10}	particulate matter less than 10 microns
$PM_{2.5}$	particulate matter less than 2.5 microns
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
SFBAAB	San Francisco Bay Area Air Basin
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SLF	Sacred Lands File
SO_x	sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
TMDL	Total Maximum Daily Load
UCMP	University of California Museum of Paleontology
VOC	volatile organic compound
WWTP	Wastewater Treatment Plant

ENVIRONMENTAL DETERMINATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION: On the basis of this initial evaluation:

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

Michael Woolard, NUSD **Date**

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I. INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the Novato Unified School District (NUSD or District), 1015 Seventh Street, Novato, CA 94945, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations). It provides documentation to support the conclusion that the proposed Grounds Maintenance and Operations Building ("the Project"), with mitigation identified herein, would not cause a potentially significant impact to the physical environment. The proposed site is located in the former Hamilton Air Force Base area, in the City of Novato, in Marin County.

This IS/MND describes the location of the Project site, the Project sponsor's objectives, and the details of the proposed Project. The Environmental Checklist Form included as Appendix G of the CEQA Guidelines serves as the basis for the environmental evaluation contained in the IS/MND. The Checklist Form examines the specific potential Project-level physical environmental impacts that may result from the construction and operation of the proposed new and expanded facilities onsite. Mitigation measures have been identified to reduce any potentially significant impacts that would otherwise occur with development and operation of the new facilities to a less-than-significant level.

The District will serve as the "lead agency" (the public agency that has the principal responsibility for carrying out and/or approving a Project) for the proposed Project. The governing board of the District is responsible for ensuring that the environmental review and documentation meet the requirements of CEQA. The draft IS/MND is subject to review and comment by responsible agencies and the public during a statutory public review period (30 days). Any necessary revisions will be incorporated in the Final IS/MND.

Should the District approve the Project, it will be required to file a "Notice of Determination" for posting by the County Clerk and the State Clearinghouse. The filing of the notice and its posting starts a 30-day statute of limitations on court challenges to the CEQA review of the Project.

Organization of the IS

This document is organized into the following sections:

SECTION I – INTRODUCTION: Provides background information about the Project name, location, sponsor, and the date this Initial Study was completed.

SECTION II – PROJECT DESCRIPTION: Includes a Project background and detailed description of the proposed Project.

SECTION III – INITIAL STUDY CHECKLIST AND DISCUSSION: Reviews the proposed Project and states whether the Project would have potentially significant environmental effects.

SECTION IV – MANDATORY FINDINGS OF SIGNIFICANCE: States whether environmental effects associated with development of the proposed Project are significant, and what, if any, added environmental documentation may be required.

SECTION V – REFERENCES: Identifies source materials that have been consulted in the preparation of the IS.

SECTION IV – REPORT PREPARERS: Identifies the firms and individuals who prepared the IS.

APPENDICES: Includes technical reports, the Comments and Responses Addendum and Mitigation Monitoring and Reporting Program (in Final IS/MND)

II. PROJECT DESCRIPTION

Project Name:	Novato Unified School District Grounds Maintenance and Operations Building
Project Location:	971 C Street, Novato, CA 94947 APN # 157-980-07
Project Applicant and Lead Agency Contact:	Novato Unified School District Mr. Michael Woolard, Executive Director of Facilities Novato Unified School District 1015 Seventh Street Novato, CA 94945 (415) 415 493-4588
General Plan Designation:	City of Novato, Community Facilities (CF)
Zoning:	City of Novato, Community Facilities (CF)
Project Approvals:	NUSD approval of new buildings
Date Initial Study Completed:	March 12, 2019

PROJECT DESCRIPTION

Project Location

The project site is located in the Hamilton neighborhood within the City of Novato, in Marin County, east of Highway 101 and south of Highway 37. (See Figure 1). The project is proposed on a 2.67-acre parcel at the southwest corner of State Access Road (also known as Hamilton Parkway) and "C" Street. Local access to the site is provided by C Street from State Access Road. Regionally, the project site is accessed from US Highway 101, via Nave Drive and Main Gate Road.

Project Site History and Existing Conditions and Land Uses

The proposed new building and parking lot would be constructed on a 2.67-acre, mostly vacant site that had, up until 2012 contained a 41,140 square-foot warehouse building that was originally constructed in 1975. As shown in Figure 2, the project site is the northern portion of a larger parcel,

Insert Figure 1, Project Location Map

totaling 9.2 acres – known as Parcel 1A – conveyed to the District under a program established by the Department of Defense through the United States Department of Education.

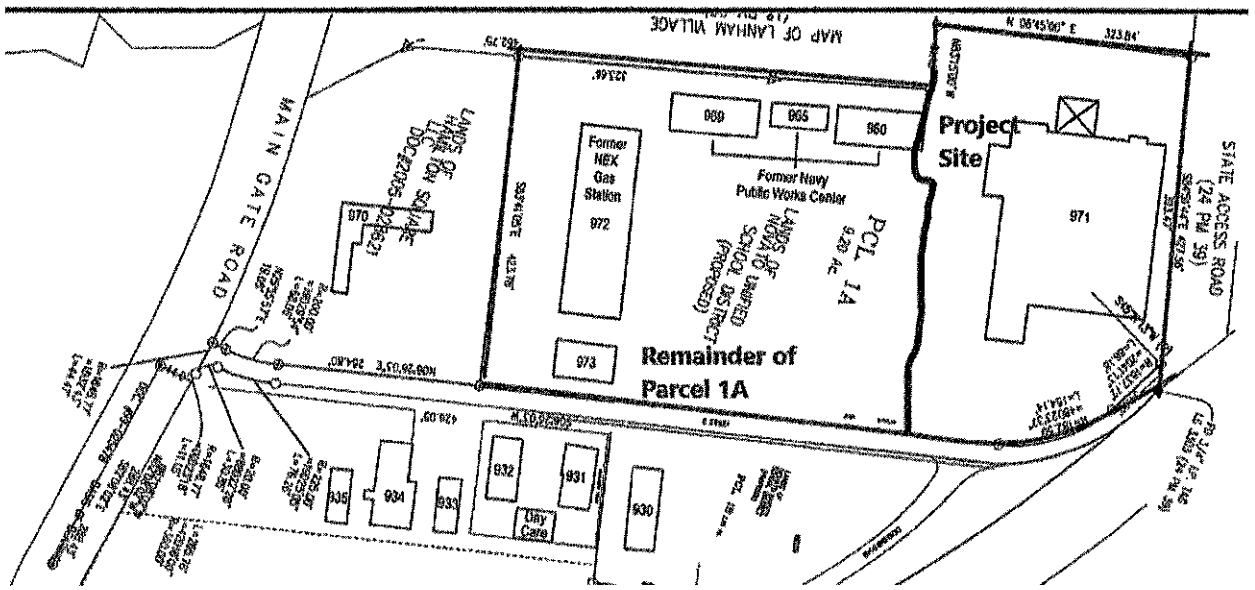


Figure 2. Site History – Former Buildings on Parcel 1A

As shown in Figure 3, the site has been cleared of the former warehouse, remediated, and currently, much of the mostly level site is covered with gravel.

Surrounding Land Uses

The project site is bounded on the north by State Access Road/Hamilton Parkway and a senior apartment project that is currently under construction; on the south by the remainder of Parcel 1A -- vacant land that once contained a Navy Public Works Center – which is periodically used for materials storage[1]; on the east by C Street, Smart Train tracks, and single-family homes; and west by multi-family housing. (See Figure 3.)

[1] The site was recently rented by an electrical contractor performing infrastructure work in the area for use as a staging and materials storage yard. This agreement concluded on February 1, 2019.

Proposed New Building and Site Improvements

The proposed Grounds, Maintenance, and Operations (GMO) building is described below and the site and floor plans are shown below in Figures 4 and 5.

The project includes construction of a 9,600 square foot, one-story,17' 3"-foot-high GMO building and associated improvements. The building dimensions would be approximately 60 by 160 feet and would contain three large shop spaces, two small offices, a meeting room, kitchen, locker room, shower, restroom, and file room. The building would house 15 employees.

Associated improvements include a 30,300 square foot parking lot measuring 212 by 134 feet, storage areas, a dumpster enclosure, landscaping, and utilities. An existing loading dock at the northwest corner of the site will be retained and used by the project.

Figure 3. Aerial Photograph

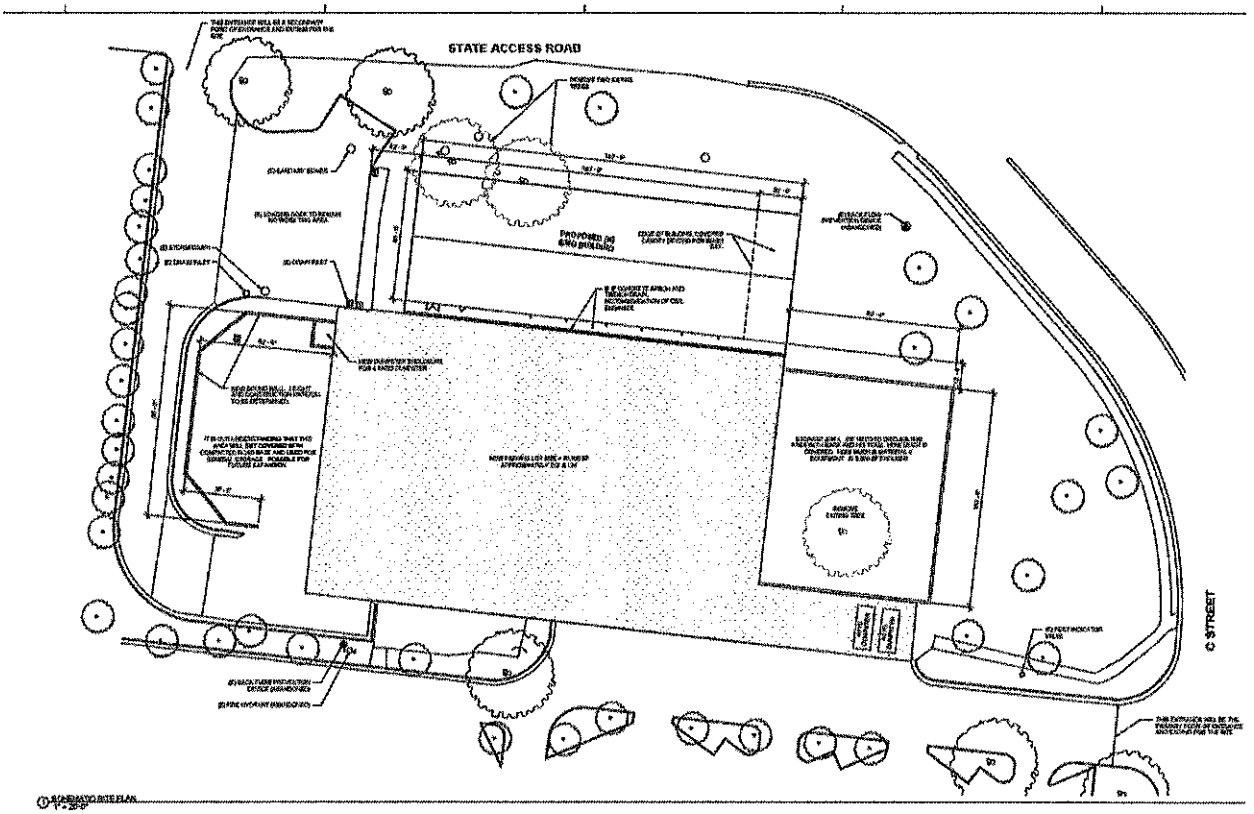


Figure 4. Proposed Site Plan **Source: CA+SA Studio**

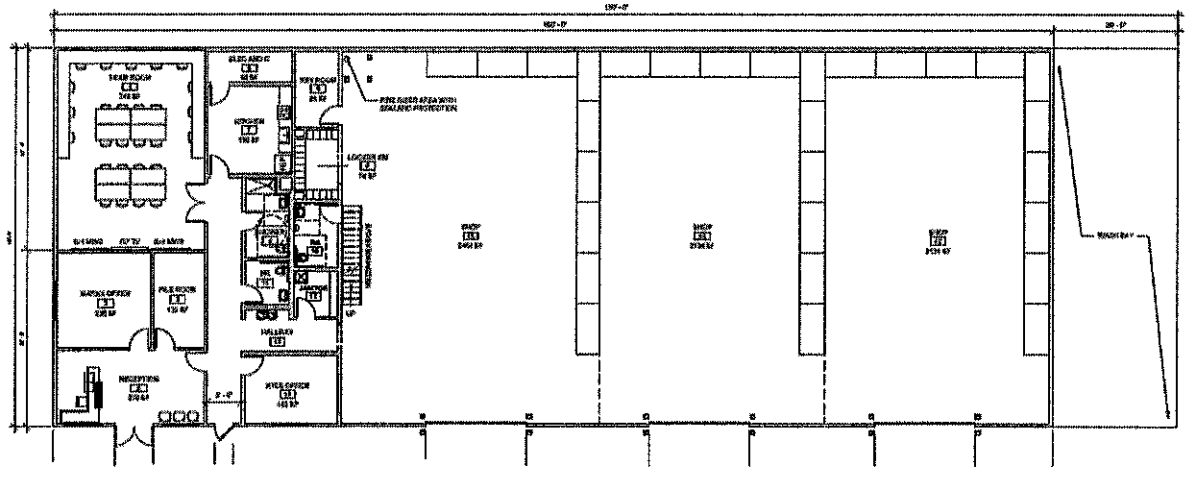


Figure 5. Proposed Floor Plan **Source: CA+SA Studio**

Primary site access will be provided via the existing access drive from C Street at the southeastern edge of the site. Secondary access, primarily for deliveries, would be provided via State Access Road at the northwestern end of the site near the existing loading dock.

Capacity Increases. No staff would be added to the District due to the project. Fifteen District employees would be relocated from the NUSD Grounds Department currently located on the Novato High School campus at 625 Arthur Street and the current Operations and Maintenance Facility at 819 Olive Avenue in Novato. The building on the Novato Campus would be demolished and the Olive Avenue space would be occupied by the Nutritional Services Department, which would move from its current location at Lynwood Elementary School (1320 Lynwood Drive).

Operational Characteristics. The proposed GMO Building would be the District's central location for the Operations and Maintenance Department. The 15 employees would report to the project site at 6:30 AM to prepare District vehicles for dispatch to the District's 13 schools and the District Office. The GMO employees engage in landscaping and grounds maintenance, carpentry, plumbing, electrical work, heating and ventilation, and painting. Some fabrication work would be undertaken onsite, although a majority of the Department's work takes place at the individual school sites. Employees would return to the project site at approximately 2:00 PM to return the District vehicles and equipment, and finish by 2:30 PM to depart in their personal vehicles.

Energy Conservation Features. The building would comply with Title 24, which includes requirements for energy conservation and green building design.

Tree Removal. Four mature trees would be removed as a result of the project. No new trees would be planted as part of the project, although as shown in Figures 3 and 4, about 40 other existing trees on and adjacent to the site would remain.

Hardscape. The project would have approximately 9,600 square feet of new building area, 2,690 square feet of concrete paving, and 39,321 square feet of asphalt paving.

Grading and Earthwork. The preliminary Project grading scheme results in an estimated balance of earthwork of 2,500 cubic yards of cut and 2,500 cubic yards of fill. Minimal topographic changes would occur as a result of the project as the site is relatively flat.

Drainage. The project would result in new impervious surfaces being created on the site. Drainage would be directed into an on-site storm drain system that would discharge into the large drainage pipe just north of the project site. Peak flows would not be expected to exceed those from prior site conditions, before the Exchange Building and associated parking lot were removed.

Schedule and Timing

This Project would be constructed in one phase. It is anticipated that construction would begin as early as May of 2019 and would take approximately 6 months to complete.

Construction Details

Equipment Use. Equipment used during construction would vary by phase, but would include excavators, backhoes, dump trucks, graders, compactors, water trucks, and similar equipment.

Construction Hours. Typical construction hours would be 7:00 am to 4:30 pm, weekdays only.

Construction Staging Areas. Construction staging area would be located immediately south of the site on the remainder of NUSD Parcel 1A.

Construction Workers. There would be ten to 12 construction workers onsite on an average day.

Land Use Entitlements and other Agency Approvals

NUSD Approvals. The School District is a local agency with independent discretionary authority over the site's land use for education-related purposes. The District would take approval actions for the Project at a noticed NUSD Board of Trustees Meeting.

Other Approvals. The building plans would be reviewed for approval by the District. The project does not house students or teachers, so it does not require Field Act compliance, and is exempt from review by the Division of the State Architect. Because the project is proposed on NUSD property, and part of a Master Planned Educational Facility, it is exempt from City of Novato land use regulations. It is, however, required to comply with Title 24 and the California Building Code.

III. INITIAL STUDY CHECKLIST

The initial study checklist recommended by the CEQA Guidelines is used to describe the potential impacts of the proposed Project on the physical environment.

I. Aesthetics

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

Discussion

a, b) The project site and vicinity are in a mostly flat urbanized area lacking in visual unity, with mixed visual quality. As shown in Figures 3, 7, 10, and 12, the site is mostly vacant and covered with gravel, several trees, and shrubs, and limited paved area. The site contains one metal storage container, some deteriorating fencing, and old electrical equipment. Most of the land in the area, including the project site, has been or is in the process of

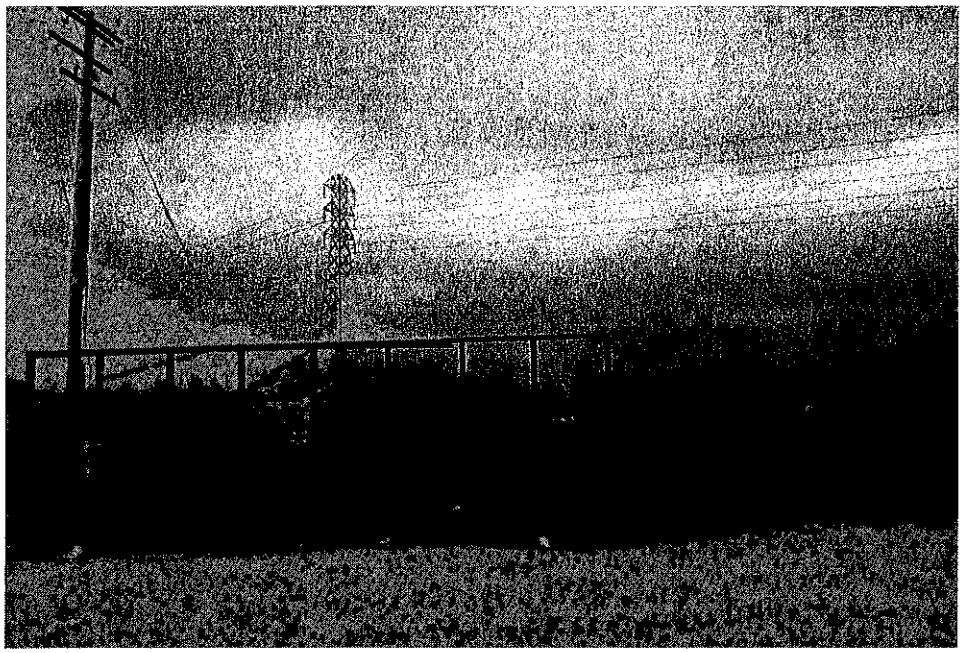
being redeveloped and transformed from the former military support uses to a mix of residential, educational, and institutional uses. There are a number of mature trees in the area. Intermittent distant views of the hillsides to the west are also available from the project area. There are no view corridors to unique or large-scale natural or dramatic scenic features within the Project viewshed.

The proposed building would not affect views from or to nearby hillsides or ridgelines. Views of the proposed building from the existing townhomes to the west would be limited or blocked by new perimeter fencing and the mature trees located between the townhomes and the project site. The project would be visible from the from the apartments under construction north of the project site, however, the proposed building would be approximately 17 feet high and would not block any scenic features or vistas from the future residents of the apartments.

There are no rock outcroppings, historic buildings, or scenic highways on or immediately adjacent to the project site. There are also no designated scenic highways with views of the site. In addition, the two-story multi-family housing, fencing, and mature trees located between the project site and Highway 101 obscure views of the site. Therefore, the Project would have **no impact** on scenic vistas or scenic resources.

c) As shown in Figures 3, the Project site is within an urbanized area. Although the site has been withdrawn by the NUSD from City of Novato planning jurisdiction, plan compliance can be used as an indicator of impact significance. The project site is zoned Community Facilities (CF) and the project is consistent with the zoning. Scenic resources in Novato, include hillsides, ridgelines, bay plains, and bay shorelines. The City of Novato General Plan 2035 identifies Scenic Hills and Ridges and Scenic Conservation Areas (Public Review Draft, Figure EL-6, 2016). The project site is not within one of these designated areas. The City of Novato Hillside Ordinance (Zoning Code Section 19.26) was adopted to protect views of undeveloped hillsides and ridgelines, which are a key component of the city's identity. The Ordinance limits grading and development in hillside areas. The project would not conflict with any of the City of Novato ordinances or policies governing scenic quality. Since there would be no conflicts, the project would have **no impact** on visual-related plans or policies.

d) The Project would include security lighting for the proposed new building, however this lighting would be shielded and would not be expected to generate significant sources of light visible to existing and future residents west and north of the site. Therefore, light and glare impacts would be **less than significant.**



Figures 6 and 7: Views from the Project Site to the north towards apartments under construction across State Access Road

Figure 8: View from the Project Site to the south towards the remainder of Parcel 1A

Figure 9: View from the Project Site to the southeast towards the remainder of Parcel 1A, the South Novato Library, and single-family homes in the background

Figure 10: Looking east across the site towards C Street (existing loading dock onsite in foreground)

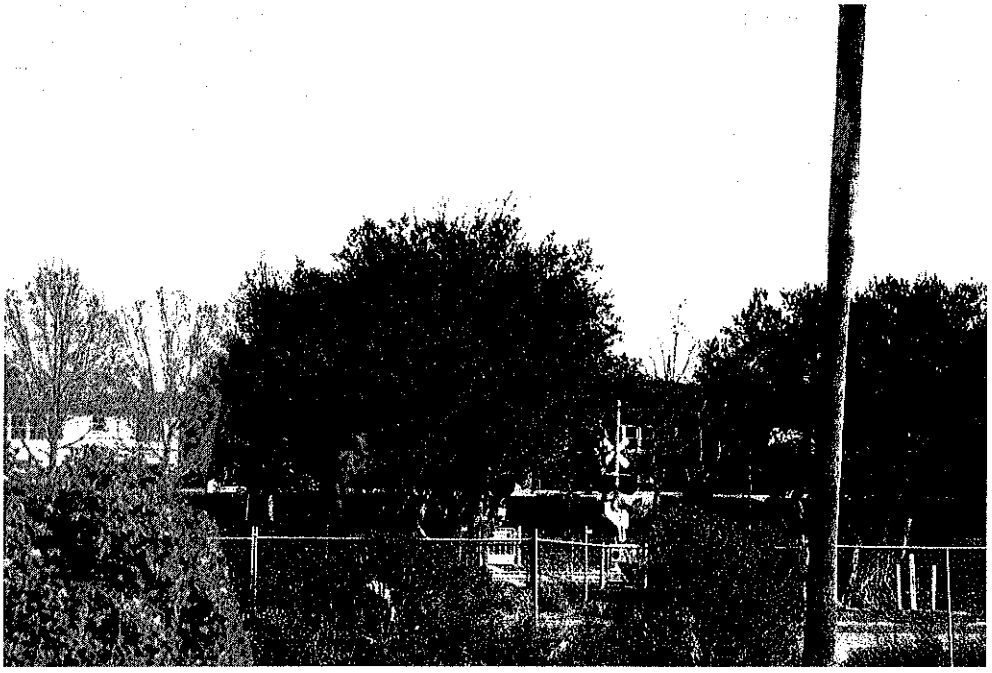


Figure 11: Looking east across the site towards the SMART Train Tracks with single-family homes on the other side of the tracks

Figure 12: View looking west from Project Site showing trees bordering the western boundary and apartments under construction across the State Access Road

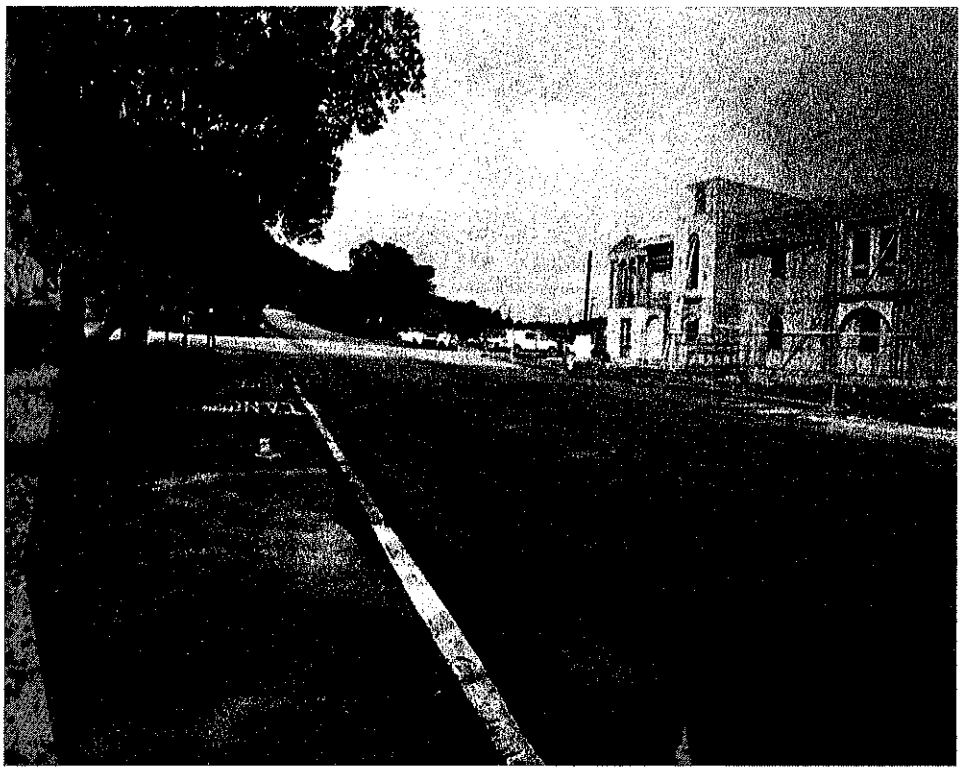


Figure 13: View looking west down State Access Road (Project Site is south and apartments under construction are north of the road)

Figure 14: View of site and the remainder of Parcel 1A from C Street looking northwest

Existing residents in the townhomes to the west and future residents of the apartments under construction to the north have and will have limited views of site from upper story windows. However, the existing trees and fencing that line the west and north edges of the project site obscure full views of the site. Moreover, the existing views of the site, which contains a storage container, and remnants of storage areas, fencing, electrical equipment, and wood framing (see Figure 7). These views would not be affected by the proposed Project.

Views from the rear windows of a limited number of residences north, west and possible, east of the project site would change. However, this change would not significantly diminish the visual quality of the site for the following reasons: the project site is currently in a dilapidated state, the proposed warehouse building would only cover approximately 9,600 square foot, or less than ten percent of the site, and would be one story, and all but four of the trees that border the site would be preserved and would continue to screen the site from view.

Based on the above analysis, the impact to the area's views and visual quality would be **less than significant.**

II. Agricultural and Forestry Resources

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

Discussion

a-e) Until recently, the Project site currently contained a warehouse building and the site was recently graded and covered with gravel. The site is designated Public Facility in the Novato General Plan (City of Novato General Plan 2035, Map GP-1, 2016) and Zoning maps (City of Novato 2001). The Project sites contains no Prime Farmland, Unique Farmland, Farmland of Statewide Importance, active agricultural operations, or forest resources (Marin County Important Farmland 2014, California Department of Conservation, Division of Land Resource Protection, July 2016). Four mature trees would be removed as part of the Project. In addition, the City of Novato Existing Conditions Report Figure 9-1 Vegetation, shows the site as "Urban/Developed Land." The project would not result in the conversion of farmland or forestland to non-agricultural uses. For these reasons, there would be **no impact** on agricultural and forestry resources.

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:

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

Background

According to the Bay Area Air Quality Management District (BAAQMD), Marin County is a distinct climatological sub-region of the Bay Area air basin. The air pollution potential is highest in eastern Marin where most of its population resides. In the southeast, where the influence of marine air is greatest, air pollutant levels are relatively low, but they increase as one moves north and the marine influence decreases. Marin County has few large-scale air polluting industries, rather most of the air pollutants affecting its population come from motor vehicles — especially from traffic using Highway 101 and the connecting major arterial roadways.

Ozone and suspended particulate matter (i.e., two types of the latter - particulate matter less than ten microns in diameter [PM_{10}] and particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]) are of particular concern in the Bay Area, which is currently designated "nonattainment" for state and national ozone ambient air quality standards, for the state PM_{10} standards, and for state and national $PM_{2.5}$ standards; it is "attainment" or "unclassified" with respect to all the other major air pollutants. The BAAQMD maintains a number of air quality monitoring stations, which continually measure the ambient concentrations of major air pollutants throughout the Bay Area. The closest such monitoring station to the Project site is at 534 4th Street in San Rafael, about 6 miles to the south. The data collected (BAAQMD. Air Quality Summary Reports) show violations of the $PM_{2.5}$ particulate standard on at most a few days per year over the last three years, see Table AQ-1.

Table AQ-1: Local Ambient Air Quality Monitoring Summary

Pollutant	Air Quality Standard	Maximum Concentrations and Number of Days Standards Exceeded		
		2015	2016	2017
Ozone				
Maximum 8-hour concentration (ppm)		70	67	63
# Days 8-hour California standard exceeded	70 ppb	0	0	0
Nitrogen Dioxide (NO_2)				
Maximum 1-hour concentration (ppb)		44	46	53
# Days national 1-hour standard exceeded	100 ppb	0	0	0
Suspended Inhalable Particulates (PM_{10})				
Maximum 24-hour concentration ($\mu g/m^3$)		42	27	94
# Days national 24-hour standard exceeded	150 $\mu g/m^3$	0	0	0
Suspended Fine Particulates ($PM_{2.5}$)				
Maximum 24-hour concentration ($\mu g/m^3$)		36.3	15.6	74.7
# Days national 24-hour standard exceeded	35 $\mu g/m^3$	2	0	8

Notes:

As monitored at the BAAQMD station at 534 4th Street in San Rafael.

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

ppb = parts per billion.

Source: BAAQMD Annual Bay Area Air Quality Summaries http://www.baaqmd.gov/about-air-quality/air-quality-summaries

The Project site is located in southern Novato in northeast Marin County. The largest group of local stationary air pollutant sources, which operate under BAAQMD permits, cluster in Novato's commercial/industrial areas about a mile north of the Project site and east of Highway 101 (BAAQMD. Stationary Source Screening Analysis Tool). Highway 101 passes about 1000 feet west of the project site; it is the major local source of air pollutants, emitted by the thousands of motor vehicles using it daily, that affect the existing local population and would affect future Project site occupants.

Analysis Methodology and Significance Criteria

The air quality analysis addressing this Initial Study checklist items was performed using the methodologies and significance thresholds recommended in *CEQA Air Quality Guidelines* (*Guidelines*; BAAQMD, May 2017, Table 2-1). The air pollutant impacts evaluated in the items a and b discussion below are from precursors to ozone formation

(i.e., reactive organic compounds [ROG] and nitrogen oxides [NO_x]) and small-diameter particulate matter (i.e., PM_{10} and $PM_{2.5}$).

According to the *Guidelines*, any Project would have a significant potential for obstructing air quality plan implementation or making a cumulatively considerable contribution to a regional air quality problem if its pollutant emissions would exceed any of the thresholds presented in Table AQ-2 during construction or operation.

TABLE AQ-2: CEQA Air Quality Significance Thresholds for Air Pollutant Emissions

Pollutant	Construction Average Daily (lbs./day)	Operational	
		Average Daily (lbs./day)	Maximum Annual (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Oxides of Nitrogen (NO_x)	54	54	10
Inhalable Particulate Matter (PM_{10})	82 (exhaust)	82	15
Fine Inhalable Particulate Matter ($PM_{2.5}$)	54 (exhaust)	54	10
PM_{10}/$PM_{2.5}$ (Fugitive Dust)	BMPs[a]	N/A	N/A

Notes: BMPs = Best Management Practices

N/A = Not Applicable

[a] If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.

Source: Bay Area Air Quality Management District, May *2017, CEQA Air Quality Guidelines.*

In addition to the major air pollutants (as identified above), many other chemical compounds, generally termed toxic air contaminants (TACs), pose a present or potential hazard to human health through airborne exposure. A wide variety of sources, stationary (e.g., dry cleaning facilities, gasoline stations, and emergency diesel-powered generators, etc.) and mobile (e.g., motor vehicles, construction equipment, etc.), emit TACs. The health effects associated with TACs are quite diverse. TACs can cause adverse health effects from long-term exposure (e.g., cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) and/or from short-term exposure (e.g.,

eye watering, respiratory irritation, running nose, throat pain, and headaches). Most of the estimated carcinogenic/chronic health risk in California can be attributed to relatively few airborne compounds, the most important being particulate matter from diesel-fueled engines (DPM). The California Air Resources Board (CARB. Summary: Diesel Particulate Matter Health Impacts) has identified DPM as being responsible for about 70 percent of the cumulative cancer risk from all airborne TAC exposures in California.

The *Guidelines* establish a relevant zone of influence for an assessment of project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a project site. Project construction-related or Project operational TAC impacts to sensitive receptors within the zone that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than 10 in one million
- A non-cancer hazard index greater than 1.0.
- An incremental increase of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) for annual average $PM_{2.5}$ concentrations.

Cumulative impacts from TACs emitted from freeways, state highways or high-volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day), and from all BAAQMD-permitted stationary sources within the zone to sensitive receptors within the zone that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess cancer risk levels of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average $PM_{2.5}$ concentrations greater than 0.8 $\mu g/m^3$.

Discussion

a) The BAAQMD's current *Clean Air Plan: Spare the Air, Cool the Climate* (2017 Plan), focuses on two closely-related goals: protecting public health from air pollutant exposures and reducing Bay Area emissions of heat-trapping gases (termed greenhouse gases [GHG]) that promote global climate change (Project GHG impacts will be addressed in Section VIII below).

Key elements in the 2017 Plan control strategies, with the underlined items having particular applicability to the Project, are:

Controls on Transportation Sources:

- Reduce motor vehicle travel by promoting transit, bicycling, walking and ridesharing.
- Implement pricing measures to reduce travel demand.

- Direct new development to areas that are well-served by transit, and conducive to bicycling and walking.
- Accelerate the widespread adoption of electric vehicles.
- Promote the use of clean fuels and low- or zero-carbon technologies in trucks and heavy-duty vehicles.

Controls on Buildings and Energy Sources:

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind and ground-source heat pumps.
- Support the expansion of community choice energy programs throughout the Bay Area.
- Promote energy and water efficiency in both new and existing buildings.
- Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

The Project site is well served by mass transit: Marin Transit bus service (i.e., Lines #35, #49, and #70) connect it to the local residential areas of Novato and to other Marin County communities, and the SMART Hamilton Novato station is about 1000 feet south of the site. The Project would construct a new office/maintenance facility with supporting parking lot for the Novato Unified School District (NUSD); this new use would be similar to the warehouse use that the site formerly contained. Thus, the Project would accommodate the needs of the NUSD to provide transportation services for the school children and staff; it would not have the potential to substantially increase regional housing, employment, and/or population levels in Marin County or the Bay Area, which are the bases of the 2017 Plan regional emission inventories and control strategies. Project construction will comply with the CALGreen (Title 24) statewide building energy code, a control strategy promoted by the 2017 Plan. The office/maintenance facility will include design provisions to accommodate rooftop solar panels (although there are no present plans for their installation) and electricity will be the facility's dominant energy source (with the exception of natural gas heaters in the Project garages for use on the few especially cold days during the year).

Compliance with BAAQMD-approved CEQA thresholds of significance is another condition for determining Project consistency with 2017 Plan control measures. Thus, the Project would have **less than significant** air quality impacts because it meets all BAAQMD CEQA emission thresholds (as addressed in the Items b discussion below).

b) The BAAQMD *Guidelines* recommend quantification of Project construction and operational emissions and their comparison to the CEQA significance thresholds. For this, the California Emissions Estimator Model (CalEEMod, Version 2016.3.2) was used. CalEEMod was run using the model's "light industrial" source category for the proposed 9,600 sq. ft. Grounds, Maintenance and Operations Building (GMO) and the "parking lot" source category for the proposed 30,300 sq. ft. parking lot. The model's default emission

estimates for these sources are compatible with Project-specific specifcations for daily motor vehicle trips and facility energy use.

Table AQ-3 shows the estimated exhaust air-pollutant emissions for all Project phases from construction equipment, haul/delivery trucks and worker commute vehicles. Tables AQ-4 and AQ-5 show the operational air-pollutant emissions from all Project stationary and mobile sources in the first year of operation (assumed to be 2020). All tables include comparisons with the BAAQMD CEQA significance thresholds. As can be seen on the tables, this impact would be **less than significant** and no mitigation is required.

Table AQ-3: Project Construction Pollutant Emissions (Maximum Pounds per Day)

	ROG	NOX	PM10 (exhaust)	PM2.5 (exhaust)
	lbs./day			
Total Construction Sources	11.53	22.77	1.29	1.20
Significance Thresholds	**54**	**54**	**82**	**54**
Significant Impact?	**No**	**No**	**No**	**No**

Table AQ-4: Project Operational Pollutant Emissions - Year 2020 (pounds per day)

Emission Source Category	ROG	NOx	PM_{10}	$PM_{2.5}$
Area	0.25	< 0.01	< 0.01	< 0.01
Energy	0.01	0.06	< 0.01	<0.01
Mobile	0.13	0.43	0.42	0.12
Total Project	**0.38**	**0.49**	**0.42**	**0.12**
Significance Thresholds	**54**	**54**	**82**	**54**
Significant Impact?	**No**	**No**	**No**	**No**

Table AQ-5: Project Operational Pollutant Emissions - Year 2020 (tons per year)

Emission Source Category	ROG	NOx	PM_{10}	$PM_{2.5}$
Area	0.05	< 0.01	< 0.01	< 0.01
Energy	< 0.01	0.01	< 0.01	< 0.01
Mobile	0.02	0.06	0.06	0.02
Total Project	**0.06**	**0.07**	**0.06**	**0.02**
Significance Thresholds	**10**	**10**	**15**	**10**
Significant Impact?	**No**	**No**	**No**	**No**

c) The nearest sensitive receptors to the Project site are: the Lanham Village residential community, which includes the Wonder Nook Preschool, to the west and southwest (closest residential units about 200 feet from project site center, which would be the receptor maximally exposed [i.e., the MER] to pollutants emitted during Project construction), the single-family residential development at Hamilton Field to the northeast and east (closest units about 400 feet from project site center), and the South Novato Library, the North Bay Children's Center, and the Novato Charter School to the southeast (at about 600 feet, 800 feet and 1200 feet, respectively).

A screening health risk assessment (HRA) for TAC and particulate exposures to nearby sensitive receptors from Project construction activities was conducted following guidelines established by the California Office of Environmental Health Hazard Assessment (OEHHA 2015) and the BAAQMD (2012).

Cancer risk is the probability of developing cancer from a lifetime exposure (i.e., 70 years) to carcinogenic substances. The likelihood of other adverse chronic health impacts unrelated to cancer are measured using a hazard index (HI) defined as the ratio of a project's incremental annual TAC concentration to a published reference exposure level (REL) as determined by OEHHA (which for DPM is 5 µg/m3). Project incremental cancer risks and HI were estimated by applying established DPM toxicity factors to the construction equipment exhaust DPM concentrations estimated by the SCREEN3 model (Lakes Environmental).

As shown in Table AQ-6, the cancer risk from Project construction DPM at the existing adjacent residential uses most exposed to TACs from Project construction would be 7.09 additional cancer cases per million people exposed, which is below the project-level CEQA threshold for cancer risk. The HI from Project construction DPM would be 0.183, which is well below the BAAQMD threshold for chronic hazard. But the modeled annual $PM_{2.5}$ concentration from Project construction would be 0.917 µg/m3, which substantially exceeds the Project-level CEQA threshold (0.3 $\mu g/m^3$).

Implementation of mitigation measure AQ-1 would assure that annual average $PM_{2.5}$ concentrations at the existing adjacent residential receptors due to Project construction would be well below the CEQA $PM_{2.5}$ threshold (and would substantially reduce cancer risk and chronic hazard, as well), as also shown in Table AQ-6. With this mitigation measure, this impact would be reduced to a **less-than-significant** level.

After it is operational, the Project would not include substantial stationary TAC emission sources nor add substantial mobile TAC emission sources (i.e., by BAAQMD definition, daily incremental traffic volumes of 10,000 or greater) to local streets.

As also shown in Table AQ-6, the cumulative TAC exposure at the MER would be considerably below the BAAQMD cumulative thresholds for cancer risk, chronic hazard and annual $PM_{2.5}$ concentration.

To reduce the exposure of local sensitive receptors to PM10 and PM2.5 in the fugitive dust released during Project construction, the BAAQMD *Guidelines* also require that all Bay Area construction projects implement Best Management Practices (BMPs) to control fugitive dust emissions. Thus, the following basic control measures must be implemented by the Project construction contractor:

BAAQMD Required Dust Control Measures: The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign shall be posted with the telephone number and person to contact at Novato Unified School District regarding dust complaints. This person shall respond and take corrective action with 48 hours. The BAAQMD's phone number shall also be included to ensure compliance with applicable regulations.

Table AQ-6: Project and Cumulative TAC Impacts on Maximally Exposed Existing Sensitive Receptor (MER) in the Project Site Vicinity

BAAQMD Source #	Facility	Address	Cancer Risk	Hazard Index	$PM_{2.5}$ Concentration
From Permitted Stationary TAC Sources					
	None are within 1000 feet of the Project site		----	----	----
From Major Roadways*					
Highway 101 (MER is ~1000 feet east of the nearest highway travel lane)			12.791	0.013	0.122
From Project**					
Project Construction Impacts before Project Mitigation			7.09	0.183	**0.917**
Project-Level Significance Thresholds			10	1.0	0.3
Significant Project-Level Impact before Project Mitigation?			No	No	**Yes**
Project Construction Impacts after Project Mitigation			1.06	0.028	0.136
Significant Project-Level Impact after Project Mitigation?			No	No	No
From Cumulative Sources					
Cumulative Sources Impact after Project Mitigation			13.86	0.04	0.26
Cumulative Significance Thresholds			100	10	0.8
Significant Cumulative Impact after Project Mitigation?			No	No	No

*The BAAQMD's Highway Screening Analysis Tool and Roadway Screening Analysis Calculator were used to estimate maximum cancer risks, hazard indexes, and $PM_{2.5}$ concentrations at the closest existing residences to the Project site.

**The Project construction risk, hazard and $PM_{2.5}$ increments, as estimated by the SCREEN3 model, are reduced by more than 80 percent, to a less-than-significant level relative to the CEQA $PM_{2.5}$ project-level significance threshold, by requiring that Project construction equipment have at least EPA-rated Tier 4 engines or Level 3 diesel particulate filters (Mitigation Measure AQ-1).

d) Project operation would not introduce substantial sources of odor emissions to the area. However, the Project's diesel-powered construction equipment would emit odorous exhaust that could impact existing local residents. But since the Project construction activities would be temporary and the closest local odor-sensitive receptors (i.e., the existing low-density residential uses, day care facilities, school and library) are all at distances greater than a few hundred feet from the site center, construction odor emissions would not affect a substantial number of people, nor be substantially objectionable to any particular receptor over extended periods while construction is underway. Therefore this impact would be **less than significant.**

Mitigation Measures

Mitigation Measure AQ-1. The Project construction contractor shall implement the following measures to further reduce construction-related DPM exhaust emissions:

All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements:

- All engines shall meet or exceed USEPA/CARB Tier 4 off-road emission standards; or
- All engines shall be equipped with a CARB Level 3 Verified Diesel Emissions Control Strategy (VDECS) device.

IV. Biological Resources

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 Wildlife or U.S. Fish and Wildlife Service?		X		
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 Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?				X

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

Background

This report presents the methods and results of a biological habitat evaluation conducted by

Vollmar Natural Lands Consulting, Inc. (VNLC) for the project site. This habitat evaluation was conducted to identify and characterize existing conditions within the approximately 2.67 acres of the proposed project, as well as to assess the potential for special-status species, habitats, and jurisdictional features to occur within the project site. The habitat evaluation consisted of a literature review and site reconnaissance by two VNLC biologists. During the site visit, all observed flora and wildlife species, general conditions, and notable habitat features were recorded. A search was conducted for jurisdictional features (wetlands and other waters, etc), sensitive habitats (native grasslands, etc), and habitat potential for special-status species (nesting potential, burrows, etc).

Approximately 0.98 acres of the site is vegetated or unpaved, and dominated by previously planted landscaping (mix of native and non-native species), ruderal grassland species, and mature trees. The north and west sides of the site contain a mixed line of mature coast live oak (*Quercus agrifolia*), one valley oak (*Quercus lobata*), maple (*Acer macrophyllum*), one red willow (*Salix laevigata*), and ornamental sweet gum (*Liquidambar styraciflua*) trees.

The eastern portion of the project site is a mix of unmaintained landscaping and ruderal grassland, including species such as planted palm trees (unknown species), native and non-native shrubs including coyote brush (*Baccharis pilularis*), and camphor tree (*Cinnamomum camphora*), and herbaceous species including firethorn (*Pyracantha* sp.), fennel (*Foeniculum vulgare*), Bermuda grass (*Cynodon dactylon*), and Himalaya blackberry (*Rubus armeniacus*). The eastern portion of the site also includes one coast live oak that is zoned for removal. Small rodent activity was observed in this portion of the site, though no large burrow complexes were noted.

The remaining approximately 1.69 acres (mainly the central portion of the site) is paved or graveled, and unvegetated.

Based on habitat requirements and regional distribution, no State or federally Threatened or Endangered species are expected to occur on the project site. However, four special-status species have potential to occur on site and to be impacted by the direct project activities (tree removal or construction related noise). These include:

- Oak titmouse (*Baelophus inornatus*) (federal Bird of Conservation Concern);
- Pallid bat (*Antrozous pallidus*) (State Species of Special Concern);
- Western red bat (*Lasiurus blossevillii*) (State Species of Special Concern); and
- Hoary bat (*Lasiurus cinerus*) (State Special Animal).

In addition, the project site could support nesting and migrating birds covered under the Migratory Bird Treaty Act (16 U.S.C. 704) and the California Fish and Game Code (Section 3503). These laws prohibit the take of migratory birds, or disturbance to the active nests of most native birds. In addition to the oak titmouse detailed above, a number of additional migratory birds have potential to occur within the regional vicinity of the project area. These include Allen's hummingbird (*Selasphorus sasin*), black rail (*Laterallys jamaicensis*), black turnstone (*Arenaria melanocephala*), Clark's grebe (*Aechmophorus clarkii*), common yellowthroat (*Geothlypis trichas sinuosa*), Lawrence's goldfinch (*Carduelis lawrencei*), Lewis's woodpecker (*Melanerpes lewis*), long-billed curlew (*Numenius americanus*), marbled godwit (*Limosa fedoa*), Nuttall's woodpecker (*Picoides nuttalli*), American bushtit (*Psaltriparus minimus*), Rufous hummingbird (*Selasphorus rufus*), short-billed dowitcher (*Limnodromus griseus*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo maculates clementae*), tricolored blackbird (*Agelaius tricolor*), whimbrel (*Numenius phaeopus*), willet (*Tringa semipalmata*), and wrentit (*Chamaea fasciata*).

Multiple bird species were observed on or adjacent to the project site during the field visit, including western scrub-jay (*Aphelocoma californica*), red-shouldered hawk (*Buteo lineatus*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), American bushtit (*Psaltriparus minimus*), American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), western bluebird (*Sialia mexicana*), ring-billed gull (*Larus delawarensis*), American robin (*Turdus migratorius*), and white-crowned sparrow (*Zonotrichia leucophrys*). Additionally, due to the presence of large trees and signs of small mammal activity, raptors could potentially use the site for foraging.

As discussed above, the site supports about 47 mature native oak trees. No additional sensitive plant communities were observed or expected to occur on the project site. No potential jurisdictional wetlands or Waters of the United States were observed on the project site.

Discussion

a) The project has the potential to affect the following special-status species:

Migratory and Nesting Protected Bird Species. The project could affect migratory birds by tree removal and noise impacts on active nests. This potentially significant impact would

be reduced to a ***less-than-significant*** level by implementation of Mitigation Measures BIO-1 and BIO-3, below.

Oak titmouse (*Baelophus inornatus*). This species usually nests in tree cavities, though it will occasionally utilize stumps, fenceposts, pipes, eaves, or holes in riverbanks. The established, mature oak trees on the project site (especially along the western portion of the site) provide potential habitat for this species. The oak titmouse has the potential to be impacted by the direct project activities (tree removal) or construction related noise. Impacts to this species can be reduced to ***a less-than-significant*** level by implementation of Mitigation Measures BIO-1 and BIO-3, below.

Pallid bat (Antrozous pallidus). This species roosts at night in many types of habitat, including open buildings, porches, garages, highway bridges, and mines, with adequate cover for protection from high temperatures. Pallid bat is extremely sensitive to human disturbance of roosting sites, and has the potential to be impacted by the direct project activities (tree removal) or construction related noise. Impacts to this species can be reduced to ***a less-than-significant*** level by implementation of Mitigation Measure BIO-2, below.

Western red bat (*Lasiurus blossevillii*). This bat is a migratory species similar to birds, and may be found in forests roosting in the foliage of trees. The western red bat has the potential to be impacted by the direct project activities (tree removal) or construction related noise. Impacts to this species can be reduced to ***a less-than-significant*** level by implementation of Mitigation Measure BIO-2, below.

Hoary bat (*Lasiurus cinerus*) This species prefers open habitats for foraging which also contain
trees for cover and roosting, preferring to roost in the dense foliage of medium to large trees. The
hoary bat has the potential to be impacted by the direct project activities (tree removal) or construction related noise. Impacts to this species can be reduced to ***a less-than-significant*** level by implementation of Mitigation Measures BIO-2, below.

b) The project would not affect any riparian habitat or sensitive natural communities, as none of those are present on the site. ***No impact*** would occur.

c) The project would not affect any wetlands habitats, as none of those are present on the site. ***No impact*** would occur.

d) The project has no potential to impede any migration corridors. With respect to native wildlife nursery sites, see Migratory and Nesting Bird Species discussion, above. ***No impact*** would occur.

e) The project would remove Three coast live oak trees, and potentially one red willow. The City of Novato regulates the removal or alteration of trees to preserve scenic beauty, maintain property values, minimize erosion problems, and maintain the attractiveness of the Novato area. However, the City does not have jurisdiction over on-site activities, as this site falls under NUSD jurisdiction. Therefore, the District would not be required to obtain a tree removal permit from the City of Novato for their removal. **No impact** would occur.

f) The project site is not covered by any federal, state, or local conservation plan. Therefore the project would have no impact. With respect to habitat conservation plan compliance.

Mitigation Measures

Measure BIO-1: Prevent Loss of Active Bird Nests. A pre-construction survey for nesting birds shall be conducted by a qualified biologist within two weeks of construction activities, if activities are to occur within nesting/breeding season of native bird species (February-August). If active nests are identified within 300 feet of construction, and would be exposed to prolonged construction-related noise above normal levels, a buffer shall be implemented around nests during the breeding season, or until a biologist determines the young have fledged. The size of the buffer and the type of construction activity will depend on multiple factors including relative change in noise and disturbance during construction activity, amount of vegetative screening between activity and nest, and sensitivity of species.

Measure BIO-2: Prevent Loss of Roosting Habitat for Bat Species. The potential of the large trees to provide suitable roosting habitat shall be assessed by a qualified bat biologist, and if necessary, a roosting bat protection plan shall be implemented. If bats are determined to be using the site, minimization measures shall include prohibiting night work activities (between 10pm and sunrise), and minimizing work activities to outside of the most sensitive breeding (non-volant) period of April to August.

V. Cultural Resources

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

Background

This analysis considers the project's impact to historical and archaeological resources, and human remains on the project site.

Discussion

a) Archival research, an intensive archaeological survey, and coordination with the Native American community did not result in the identification of any prehistoric, ethnographic, or historic-era cultural sites, features, artifacts, or other properties within or immediately adjacent to the project site. Consequently, the project site contains no historical resources as defined in CEQA Guidelines Section 15064.5; therefore, the project would have a **less-than-significant** impact on historical resources.

b) Although the likelihood of project ground-disturbing activities encountering and disturbing archaeological resources is low, prehistoric, ethnographic-era, and historic period cultural resources are known to be present in the general area.

The City of Novato's Cultural Resources Ordinance (No. 923) offers guidance for the preservation and investigation of cultural resources. This Ordinance requires that an archaeological investigation be conducted prior to the City issuing any building or grading permit whenever construction or other activities are proposed that could disturb recorded or previously undocumented cultural sites, features, artifacts, or other culturally important properties.

Three cultural resources, CA-MRN-159, CA-MRN-160, and P-21-0001962, are located within the half-mile search radius. Resource P-21-0001962 consists of the Hamilton Army Air Field Discontiguous Historic District which was nominated for listing on the National Register of Historic Places in 1998 (Table CULT-1). The project area was initially located within this district but a 2018 re-assessment by the California State Historic Preservation Officer resulted in this area being excluded from the District. Building 971, the Navy Exchange building (comparable to an army base "Post Exchange") which until recently was within the project area prior to its demolition, was originally built in 1953, and likely rebuilt in 1975, but is not listed in any documentation of the District and as a result, it is not noted here as a cultural resource.

Table CULT-1. Previously Documented Cultural Resources within One Half-Mile of the Project Area

Resource No.(s)	Association	Type	Location
CA-MRN-159	Prehistoric	Sparse midden containing shell, fire-cracked rock, charcoal, midden soil	West of project area – adjacent to south-bound lakes Highway 101
CA-MRN-160 P-21-000185	Prehistoric	Shell midden/mound documented by N.C. Nelson in 1907	1/4–1/2 mile north of project area
P-21-001962	Historic era	Hamilton Army Air Field Discontiguous Historic District	Adjacent/east of project area

Based on the presence of both prehistoric and historic-era archaeological site and features present in the vicinity of the proposed Project, comparable sites could be encountered within the study area. Early Native American archaeological materials that could be found include but are not necessarily limited to: obsidian and chert flakes and flaked stone tools; ground stone tools such as grinding slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and discreet darkened midden soils containing flaked and ground stone tools and fragments of bone, shellfish, and fire-cracked rock fragments. Historic period site indicators can include fragments of glass, and ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and trash deposits (e.g., wells, privy pits, dumps). Should prehistoric or historic-era materials and sites be encountered as a result of Project ground-disturbing activities, Mitigation Measure CULT-1 would reduce this **potentially significant** impact to a **less-than-significant** level.

c) Although no prehistoric or historic-era human remains have been identified within or near the project site, it is possible that presently undocumented human interments may be uncovered during excavation activities. This **potentially significant** impact would be a

potentially significant. implementation of the following mitigation measure would reduce this impact to a **less-than-significant** level.

Mitigation Measures

Mitigation Measure CULT-1: Archaeological Deposits: If archaeological remains are encountered during project activities, project ground disturbances at the find and immediate vicinity shall be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). The archaeologist shall examine the finds and recommend mitigation measures which may include documentation in place, avoidance, testing, and/or data recovery.

Mitigation Measure CULT-2: Human Remains. California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code Section 7050.5 and Section 7052 and California Public Resources Code Section 5097.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground disturbing activities all such activities in the vicinity of the find shall be halted immediately and the Agency or the Agency's designated representative shall be notified. The Agency shall immediately notify the county coroner and a qualified professional archaeologist. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The responsibilities of the Agency for acting upon notification of a discovery of Native American human remains are identified in detail in the California Public Resources Code Section 5097.9. The Agency or their appointed representative and the professional archaeologist will consult with a Most Likely Descendent determined by the NAHC regarding the removal or preservation and avoidance of the remains and determine if additional burials could be present in the vicinity.

VI. Energy

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion

a) The project would not result in wasteful, inefficient, or unnecessary consumption of energy, given (1) the relatively small size of the project: a 9600 sq. ft. office/vehicle/equipment maintenance facility for the NUSD (which would replace similar uses now operating elsewhere in Novato), and (2) Project compliance with State of California energy conservation regulations, and City of Novato General Plan 2035 energy conservation policies (see Item b discussion below). Therefore, this impact would be **less than significant.**

b) The State Building Standards Commission adopted updates to the California Green Building Standards Code (CALGreen), which went into effect in January 2011. CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation conservation. CALGreen provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. CALGreen also requires building commissioning, which is a process for verifying that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. CALGreen provides the minimum standard that buildings need to meet in order to be certified for occupancy, but does not prevent a local jurisdiction from adopting more stringent requirements. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) reduce energy and water consumption.

The *Novato General Plan 2035* contains the following policies regarding energy efficiency. (Although the site has been withdrawn from City jurisdiction, conformance with City policies may be used in developing CEQA significance criteria.):

- **EL 25a: Reduce Resource Use in Buildings**. Require new development to minimize impacts on the environment, including use of energy and water-efficient design features and materials consistent with local building codes and Water District regulations
- **EL 25b: Green Building Regulations**. Adopt green building regulations that exceed minimum code requirements when found to be cost-effective for long-term building operations.

The Project would be built on accord with California's CALGreen standards and, thus, would not conflict with *Novato General Plan 2035* energy conservation policies. Therefore, this impact would be **less than significant.**

VII. Geology and Soils

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial director indirect risks to life or property?			X	

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?				X

Background

This analysis considers the project's potential impacts on unique paleontological resources unique geologic features on the project site.

A geotechnical study of the site was prepared for the site by Miller Pacific Engineering Group (Miller Pacific Engineering Group, *Geotechnical investigation, Novato Unified School District-Maintenance Operations and Transportation Building, Novato, California*, January 11, 2019). The discussions below are based on the findings of that study.

Geologic Conditions

Regional geologic mapping indicates that the site is underlain by Holocene alluvial deposits, which typically consist of moderately consolidated clay, silt, and gravel. The hills surrounding the site are composed of sandstone and shale. The site had previously been used for a building at the old Hamilton Air Force Base. The building and its foundations have been removed, and most of the site has been covered with a layer of crushed gravel approximately one foot deep, placed after the building was removed.

Three exploratory soil borings have been conducted on the site to determine subsurface geologic conditions. The subsurface conditions below the gravel layer reflect the regional geologic conditions; a two- to four-foot layer of clayey gravel fill, most likely placed when the removed building was constructed. underlies the gravel. Interbedded alluvial deposits variously composed of silty and clayey sands underlie the fill to a depth of about 12-15 feet below the ground surface, beyond which bedrock was encountered. Groundwater was encountered between 2 and 18 feet below the ground surface.

Seismic Conditions

The site is located in the seismically active San Francisco Bay Area. While no faults underlie the site, nearby active faults include the Hayward Fault, approximately 7 miles east of the site; the

Rogers Creek Fault, about 9 miles northeast of the site, the san Andreas Fault, about 12.5 miles west of the site, and the San Gregorio fault, about 14 miles southwest of the site. Major earthquakes potentially affecting the project site are possible on all of these faults. Due to their proximity to the site, the Hayward and Rogers Creek faults have the greatest likelihood of generating strong seismic shaking on the site. Studies indicate that the highest probability of a Richter Magnitude 6.7 or above earthquake in the Bay Area would be on those two faults, with a 33% likelihood of a major earthquake by 2043.

Discussion

a) i. Based on available published geologic information, the project site is not located within an Alquist Priolo Earthquake Fault Zone. The potential for fault rupture on the side is therefore considered to be low and *no impact* would occur. (Miller Pacific, 2019)

ii. The site would be subject to moderate-to-strong ground shaking in the event of a major earthquake on any of the regional fault zones, with peak ground acceleration ranging from about 0.16 g top 0.44 g (one "g" is the force of gravity). This shaking could damage improperly constructed buildings and cause ground failures that also could affect the structure and infrastructure (these ground failures are discussed below). This impact is *potentially significant* but can be reduced to a *less-than-significant* level with implementation of Mitigation Measure GEO-1, below.

iii. Miller Pacific conducted a liquefaction analysis of the soils underlying the site. That investigation determined that a potentially liquefiable sandy layer exists below the site, and liquefaction in a major earthquake could result in about 2.5 inches of total settlement on the site, with 1.3 inches of differential settlement over a 30-foot span. Miller Pacific concluded that "liquefaction presents a moderate-to-high risk of damage to the planned improvements", although they do not anticipate liquefaction to occur near the surface.

Miller Pacific did not find any potential for significant seismically induced ground settlement on the site, other than that related to subsurface liquefaction. Similarly, the lack of open exposed faces such as steep slopes or channel banks results in a low potential for ground lurching, cracking, or lateral spreading. Therefore these impacts would *be less than significant.*

The **potentially significant impact** associated with liquefaction hazards would be reduced to a **less-than-significant** level by implementation of Mitigation Measure GEO-2, below.

iv. The nearly level site does not contain any slopes that would be subject to landslide hazards.

b) The site is generally flat and mostly covered by crushed gravel, which is not susceptible to erosion. After project construction, runoff from the site would be increased and, if discharges to open ground are concentrated, some erosion could occur. All project runoff would be directed to existing City storm drain systems, therefore this impact is considered **less than significant.**

c) Please see response to item a) iii, above. This impact would be reduced to a **less-than-significant** level by implementation of Mitigation Measure GEO-2, below.

d) Expansive soils shrink and swell with fluctuations in moisture content and are capable of exerting significant expansion pressures on building foundations, interior floor slabs, and exterior flatwork. Distress from expansive soil movement can include cracking of brittle wall coverings (stucco, plaster, drywall, etc.), cracked door and/or window frames, and uneven floors and cracked slabs. Flatwork, pavements, and concrete slabs-on-grade are particularly vulnerable to damage from soil swelling and shrinking highly plastic and/or expansive soils were not observed by Miller Pacific within the upper 5-feet during our subsurface exploration. Therefore, Miller Pacific determined that the risk of expansive soil affecting the proposed improvements is low. (Miller Pacific 2019). The impact would be **less than significant.**

e) The proposed project would be served by the City's sewer system and would not include any septic systems. Therefore **no impact** would occur with respect to adequacy of site soils for septic systems.

f) Archival research indicates that no paleontological resources have been documented within or adjacent to the project site and it is unlikely that such resources would be encountered as a result of project ground-disturbing activities. A search of the University of California Museum of Paleontology (UCMP) on-line data base indicates that the closest finds of paleontological remains in Marin County occurred somewhere along San Antonio Creek which, at a minimum, is located approximately 4 miles north of the project site. Several finds of Mammoth (*Mammoth primigenius*) and Mastodon (*Mammut americanum*), were made along the creek in 1928 but no additional details of the find's specific location(s) appears to have been document. In general, paleontological finds in the region consist largely of bivalves, gastropods, and other invertebrates located in ocean-side erosional contexts in places such as Drakes Bay, Tomales Point, Bolinas Bay, Point Reyes, and Kehoe Beach, and not inland where the project site is located. In addition, the entire project site is located on recent Quaternary alluvial deposits which do not constitute a unique geologic feature and no such features or formations are known to be present in the immediate area. **No impact** would occur.

Mitigation Measures

Mitigation Measure GEO-1: The project structures and foundations shall be designed in accordance with the most recent version (2016) of the California Building Code. Recommended seismic coefficients are provided in Section 5.2 of the Miller Pacific report shall be included in the project design.

Mitigation Measure GEO-2: The building's foundation systems shall be designed to withstand up to 2.5-inches of total and 1.3 of differential settlement, over a 30-foot span. Foundation design criteria to mitigate the effects of liquefaction provided in Section 5.4 of the Miller Pacific report shall be incorporated into the project design.