

ALAMEDA UNIFIED SCHOOL DISTRICT
CITY OF ALAMEDA, CALIFORNIA

Historic Alameda High School Seismic Upgrade Project

INITIAL STUDY &
MITIGATED NEGATIVE DECLARATION

JULY 2016



Historic Alameda High School Seismic Upgrade Project

Initial Study/Mitigated Negative Declaration

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California Environmental Quality Act (CEQA) Environmental Checklist Form

1. Project Title: Historic Alameda High School Seismic Upgrade Project

2. Lead Agency Name and Address:

Alameda Unified School District
2060 Challenger Drive
Alameda, CA 94501

3. Contact Person and Phone Number:

James Ferranti, Construction Project Manager
(510) 337-7000, ext. 7933
jferranti@alameda.k12.ca.us

4. Project Location:

2200 Central Avenue
Alameda, CA 94501

Assessor's Parcel Number: 71-217-1-2

The project site is located on the south side of Central Avenue, in the east-central area of the City of Alameda (Alameda County). The site occupies an entire City block bordered by Central Avenue on the north, Oak Street on the east, Encinal Avenue on the south, and Walnut Street on the west. The site is located approximately 5,000 feet (0.95 mile) southwest of Interstate 880 and approximately 2 miles northwest of Oakland International Airport.

5. Project Sponsor's Name and Address:

Alameda Unified School District
2060 Challenger Drive
Alameda, CA 94501

James Ferranti, Construction Project Manager
(510) 337-7000, ext. 7933
jferranti@alameda.k12.ca.us

6. General Plan Designation:

Public/Institutional/School (P/I/S)

7. Zoning:

Hotel Residential (R-6)

8. Description of Project:

Project Background and Overview

This Initial Study has been prepared in compliance with the California Environmental Quality Act (CEQA),¹ in accordance with the *CEQA Guidelines*.²

The Alameda Unified School District (AUSD) is undertaking the seismic retrofit of historic Alameda High School, located at 2200 Central Avenue, in the City of Alameda (see Figure 1). The school building—essentially three interconnected buildings consisting of a main Central Building, West Building, and Science Building connected by breezeways—is part of the larger Alameda High School campus of multiple buildings occupying a large City block. Other buildings on the campus include the active classroom building at 2201 Encinal Avenue, the Technical Arts Building, two gymnasiums, and the Emma Hood Swim Center (see Figure 2). The proposed project would entail seismic strengthening of the Science Building and east and west wings of the Central Building. The West Building, which was constructed several decades after the other two buildings, is considered seismically adequate, and the central wing of the Central Building was seismically strengthened in the 1930s and is also considered seismically adequate.

The main Central Building and Science Building of the historic high school were constructed in 1925 in the Neo-Classical Style. The West Building, designed in a Stripped Classical Style, was constructed in 1958 to replace the two-story brick building constructed on the site in 1903 as the City's first high school building. The architecture of the historic buildings represent the purest "temple form" anywhere in the City of Alameda, and an example of a Neo-Classical Style school building that is unique in Northern California. Due to this architectural distinction, the historic Alameda High School was listed on the National Register of Historic Places (NRHP) in 1977, and is therefore afforded special protection under both federal and State law.

The Science Building and east and west wings of the Central Building were closed and fenced off in 2012³ when the AUSD determined that they did not comply with the Field Act of 1933, which requires all public K–12 school buildings and community college buildings in California to be designed and constructed to withstand strong seismic ground shaking. Designs and plans for school renovations and new construction must be reviewed and approved by the Division of the State Architect (DSA). The Field Act was quickly passed by the California Legislature following the 6.3-magnitude Long Beach earthquake on March 10, 1933, which damaged or destroyed more than 230 local school buildings.

Prior to its closure in 2012, the project buildings were occupied for several years by an adult school and the District offices for AUSD, as well as approximately six active classrooms. The remaining student classrooms had been moved to the current classroom building on Encinal Avenue following its construction in 1977. Once the proposed seismic retrofit project is completed, the School District intends to return the historic buildings to classroom use. This would entail relocating some of the existing students and teachers from the current classroom building on Encinal Avenue. It is not anticipated that any increase in the existing student body or teachers would occur as a result of project implementation.

¹ California Public Resources Code, Division 13, Sections 21000 *et. seq.*

² California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000 *et. seq.*

³ The central auditorium and gymnasium attached to the rear of the Central Building remain in active use. They were previously seismically retrofitted in the 1970s.



Figure 1

Project Location

Source: Douglas Herring & Associates



Figure 2

Aerial Overview of Project Site and Surroundings

Source: Google Earth

As noted above and discussed in more detail in Section III, Cultural Resources, the historic Alameda High School is listed on the NRHP, and is therefore subject to particular protection by CEQA. While the type of work required for the proposed seismic retrofit of the school buildings would normally qualify for a Categorical Exemption pursuant to Article 9 of the *CEQA Guidelines*, as set forth in *CEQA Guidelines* Section 15300.2(f), a Categorical Exemption shall not be used for project that may cause a substantial adverse effect on an historical resource. By virtue of being listed on the NRHP, the historic Alameda High School is defined by CEQA as being an historical resource.⁴ Because there is some potential for the proposed project to adversely affect the integrity of this historical resource, the AUSD has taken a conservative approach regarding the project's environmental review, and has prepared this Initial Study (IS) to support adoption of a Mitigated Negative Declaration (MND) pursuant to Article 6 of the *CEQA Guidelines*. Accordingly, this IS focuses in particular on potential effects of the project on historic resources.

Proposed Project

The proposed project would reconstruct all structural and most non-structural elements in the Central Building and Science Building of the historic Alameda High School, while retaining the existing exterior shells. The project is intended to meet the requirements of DSA Procedure 08-03 and the 2013 California Building Code (CBC), thereby qualifying it for State funding under the Kindergarten–University Public Education Facilities Bond Act of 2006.

Although it's a single building, the Central Building consists of the main building flanked on either side by slightly recessed east and west wings; the wings are considered separate buildings by the DSA. The central wing of the main building is a three-story structure, while both wings are two stories tall. The Central Building has floor and roof framing of typical wood-frame construction. Central hallway corridors and stairwells are constructed of elevated concrete. All exterior walls are cast-in-place reinforced concrete. The three-story Science Building also has wood-framed floor and roof assemblies, elevated concrete central corridors and stairwells, and reinforced concrete exterior walls. The Central Building is physically connected to the West Building and Science Building by two-story breezeways, or arcades. The project would include construction of seismic gaps at the ends of the arcades to laterally disconnect them from the adjacent buildings.

The proposed seismic retrofit would include construction of the following components:

- New roof-to-wall anchorages;
- New bracing on floor and roof diaphragms;
- New shear walls and new structural plywood diaphragms on existing wood floor, roof, and wall frames;
- Replacement or alteration of the concrete floor diaphragms of the central hallways in the Central Building, or construction of new connectors and collectors from the adjacent wood classroom floor diaphragms to increase lateral resistance;
- Cutting multiple slots through the concrete floor slab in the Science Building—so that the slab cannot act as a diaphragm to distribute loads to braced frames—and anchoring the bisected wood diaphragms together so they function as a single diaphragm. Alternately, the concrete diaphragm would be used as the floor diaphragm and new connectors and collectors from the adjacent wood floor diaphragms would be added;

⁴ California Resources Agency, *CEQA Guidelines*, Section 15064.5(a).

- Addition of structural steel or reinforced concrete girt columns to stairwell diaphragm openings and solid walls at ends of the buildings;
- Addition of new continuous shallow foundations at braced frames, or installation of pier caps with deep foundation elements;
- Construction of a complete load path to the foundation for the third-floor perimeter concrete shear walls of the Central Building, or removal of the concrete shear walls above the second floor;
- Installation of a seismic gap between the arcades and the adjacent buildings to laterally disconnect them;
- Construction of a new lateral force resisting system in the west wing structure in the Central Building to provide adequate seismic separation between the east wing and the central portion of the original building prevent pounding between the two structures or transfer lateral forces due to impact; and
- Injection of cement grout or chemical grout into the shallow liquefiable soil underlying the buildings to increase soil strength.

Most of the seismic work would be performed within the interior of the buildings. The only exterior work on the buildings would involve some trenching at foundations for construction of bracing, and entry modifications to comply with Americans with Disabilities Act (ADA) accessibility requirements. The foundation trenches are expected to be approximately 4 feet wide and 3 feet deep, and involve excavation of less than 500 cubic yards of soil.

Prior to performing the structural work described above, most of the non-structural systems in the buildings would be removed, including partition walls and mechanical, electrical, and plumbing (MEP) systems. New MEP systems would be installed in compliance with the 2013 California Historical Building Code, as applicable. Suspended ceilings and ductwork would be braced and mechanical units would be anchored. New rooftop mechanical equipment (HVAC systems) would be installed on the roofs of the Central Building and Science Building.

In addition to the structural and non-structural building improvements, new landscaping would be installed along the school frontage on Central Avenue. The existing trees and other landscaping in front of the Central Building and Science Building would be removed. New plane trees (*Platanus orientalis*) would be planted along the street frontage, mirroring existing street trees of the same species on the opposite side of Central Avenue. Yuletide camellia (*Camellia sasanqua 'Yuletide'*) hedges would be planted along the front of the buildings, in front of which would be regularly space columnar red maple trees (*Acer rubrum 'Columnare'*) and a ground cover of star jasmine (*Trachelospermum jasminoides*), interspersed with dwarf Nile lily (*Agapanthus africanus "Peter Pan"*). New drought-tolerant turf lawns of seashore paspalum (*Paspalum vaginatum*) would be installed adjacent to the sidewalk.

A new raised patio for outdoor learning would be created at the rear of the Science Building, landscaped with Muskogee crape myrtle trees (*Lagerstroemia indica 'Muskogee'*) in raised planter boxes. Weather-resistant tables and chairs for students would be arranged on the new patio.

Construction of the project is anticipated to commence in June 2017 and be completed in October 2018.

Required Approvals

Division of State Architect: The project would require review by the Division of the State Architect, a division of the California Department of General Services, for compliance with Title

24 of the California Building Standards Code or Title 24, Part 8 of the State Historical Building Code.

9. Site Description and Surrounding Land Uses:

The Alameda High School campus occupies a City block that is essentially two combined blocks, delineated by Central Avenue on the north, Oak Street on the east, Encinal Avenue on the south, and Walnut Street on the west. The 6-acre campus is developed with multiple school buildings, including two gymnasiums, athletic fields and facilities, and parking lots. The buildings on the campus were constructed at varying times spanning the period from 1925 to 1977.

The block along Central Avenue is developed with the historic three-story buildings, including the main Central Building in the middle of the block flanked by the Science Building on the east and the West Building on the west. The current two-story classroom building, fronting on Encinal Avenue, occupies the southwest corner of the block. Other buildings include a two-story gymnasium located south of the Science Building; the one-story Emma Hood Swim Center, located to the south of this gym; the Larry Patton Gymnasium, located south of the Central Building; and the Technical Arts Building, located south of the West Building. In addition to the two gymnasiums, other athletic facilities include two baseball fields, six tennis courts, and two swimming pools. A faculty/staff parking lot is located on the north side of the active classroom building and a parking lot serving the gymnasium is on Oak Street, south of the Science Building.

The campus is situated in a mixed-used neighborhood that is at the edge of residential neighborhoods that extend west and south of the high school. The campus is one block west of Park Street, a major commercial street in the project vicinity. City Hall and the public library are located one block north of the campus.

Existing development opposite the historic Alameda High School, on the north side of Central Avenue, consists predominantly of a mix of residential and medical office (typically in converted homes) uses. It includes one- and two-story dental and podiatry offices, two-story single-family homes and duplexes, and a couple of two- or three-story apartment buildings. The corners of this block are anchored by the Veteran's Memorial Building on the west end and the Twin Towers United Methodist Church on the east end. Other nearby churches are located on the northwest and southwest corners of the intersection of Central Avenue and Walnut Street.

Aside from one of these churches, the two blocks of Walnut Street opposite the high school campus are occupied entirely by two-story single-family homes. The block immediately south of the campus is also largely developed with one- and two-story single-family homes, although there are also four two- and three-story apartment buildings on this block, interspersed with the single-family homes.

Development east of the campus begins taking on the commercial character that dominates Park Street, one block to the east. The two blocks of Oak Street opposite the campus are developed with a small restaurant, produce stand, a tutoring center, the Happy Little World child care facility, and a few single-family homes. There is also a long-closed gas station on the northeast corner of Oak Street and Encinal Avenue. Catty-corner from the northeast corner of the campus are the Cinema Grill, the Alameda movie theater, and a five-story parking garage. Catty-corner from the southeast corner of the campus is a row of four small, attached restaurants.

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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.

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Haz. Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION:

On the basis of the initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on the 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.

Signature

Date

Printed name

For

EVALUATION OF ENVIRONMENTAL IMPACTS:

I. AESTHETICS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Have a substantial adverse effect on a scenic vista?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Although the definition of scenic vista is open to interpretation and is inherently subjective, scenic vistas by any definition are typically associated with expansive viewsheds, most typically encompassing some form of the natural environment, such as open space hillsides, mountains, or open bodies of water. By this definition, there are no scenic vistas in the vicinity of the project site, and there is therefore no potential for the project to adversely affect a scenic vista.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no State-designated scenic highways in the vicinity of the project site.⁵

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Substantially degrade the existing visual character or quality of the site and its surroundings?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would consist almost entirely of structural modifications to the two school buildings that would not be visible to offsite viewers. The only anticipated exterior changes would be entry modifications to comply with ADA accessibility requirements and the installation of new HVAC mechanical equipment on the roofs of the Central Building and Science Building. On the Science Building, the new rooftop equipment would be located away from the public edges and towards the center of roofs to minimize visibility from the street. To further minimize visibility from far away or from upper floors of nearby buildings, there would be new mechanical enclosures constructed of solid metal roofing panels, painted a

⁵ California Department of Transportation, Officially Designated State Scenic Highways, accessed May 2, 2016 at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm.

neutral color similar to the building façade. These changes would not be particularly noticeable to offsite viewers, and would not substantially degrade the existing visual character or quality of the site or its surroundings.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project would not include new lighting or creation of new glazed surfaces such as windows. Therefore, the project would have no adverse lighting or glare effects.

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project site and all surrounding lands are designated “Urban and Built-Up Land” on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) by the Department of Conservation (DOC), a department of the California Resources Agency.⁶ The DOC updates the maps every two years; the most recent map was prepared in 2012 and published in 2014. Since the project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, there is no potential for conversion of these types of farmlands.

⁶ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, “Alameda County Important Farmland 2012” (map), April 2014.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project property is not zoned for agricultural use or under a Williamson Act contract.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Public Resources Code Section 12220(g) defines 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, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. There is no forest land on the project site as defined in Public Resources Code Section 12220(g), nor is there any timberland. The project site is not zoned as forest land and there is no forest land on the site. The proposed project would therefore have no impact on forest or timber land.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>d) Result in the loss of forest land or conversion of forest land to a non-forest use?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no forest land on the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project site does not contain farmland or forest land, and implementation of the proposed project would therefore have no potential to convert such lands to other uses.

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:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Conflict with or obstruct implementation of the applicable air quality plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The Bay Area Air Quality Management District (BAAQMD) adopted its 2010 Bay Area Clean Air Plan (CAP) in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gas (GHG) emissions in a single, integrated plan; and establish emission control measures to be adopted or implemented in the 2010 through 2012 timeframe. The BAAQMD is currently in the process of updating the CAP, but has not yet released a draft for public review. The primary goals of the 2010 Bay Area CAP are to:

- Attain air quality standards;
- Reduce population exposure and protect public health in the Bay Area; and
- Reduce GHG emissions and protect the climate.

When a public agency contemplates approving a project where an air quality plan consistency determination is required, BAAQMD recommends that the agency analyze the project with respect to the following questions: (1) Does the project support the primary goals of the air quality plan; (2) Does the project include applicable control measures from the air quality plan; and (3) Does the project disrupt or hinder implementation of any 2010 CAP control measures? If the first two questions are concluded in the affirmative and the third question concluded in the negative, the BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

Any project that would not support the 2010 CAP goals would not be considered consistent with the 2010 CAP. The recommended measure for determining project support of these goals is consistency with BAAQMD CEQA thresholds of significance. If a proposed project would not exceed the BAAQMD significance thresholds, it is considered to support the primary goals of the 2010 CAP. As discussed in more detail in Section III(b), the proposed seismic upgrade of historic Alameda High School would not exceed the BAAQMD CEQA thresholds of significance.

The proposed project would not interfere with the primary goals of the 2010 CAP and none of the adopted 2010 CAP control measures, which generally pertain to stationary sources of pollutants and transportation control measures, would not be applicable to the project. Therefore, the project would not conflict with or obstruct implementation of the 2010 CAP.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The project would be located in a region that experiences occasional violations of standards set by the U.S. Environmental Protection Agency (EPA) for ozone (O₃), respirable particulate matter equal to or less than 10 microns (PM₁₀), and fine particulate matter equal to or less than 2.5 microns (PM_{2.5}). Both construction activities and operational activities of new development have the potential to contribute substantially to these violations. However, implementation of the project would not result in the creation of new jobs and would not increase the number of students, teachers, or other employees at the site. The project would essentially have no operational effects on air quality.

Construction-related emissions are primarily generated by operation of diesel-powered equipment, which emits criteria air pollutants from equipment exhaust, and by disturbance of soil during grading and similar earth-moving activities, which have the potential to generate fugitive dust. BAAQMD’s June 2010 CEQA guidelines (updated in May 2011) established thresholds of 54 pounds per day for nitrogen oxides (NO_x), reactive organic gases (ROG), and PM_{2.5}, and a threshold of 82 pounds per day for PM₁₀; the particulate matter (PM) thresholds apply only to exhaust emissions, not fugitive dust from soil disturbance.⁷ Nearly all of the proposed seismic work would take place inside the existing building structures and would not involve operation of diesel-powered equipment. A very limited use of such equipment would occur during the excavation of trenches adjacent to building foundations. However, such use would be so limited that there would be no potential for the associated emissions to exceed BAAQMD thresholds of significance for construction-related impacts.

⁷ Although these thresholds as well as BAAQMD’s operational thresholds have been set aside by a court order until the agency conducts CEQA review of the thresholds, consistent with Section 15064.7(c) of the State *CEQA Guidelines*, the Alameda Unified School District has determined that there is substantial evidence supporting the thresholds of significance identified in the BAAQMD’s 2010 CEQA guidelines, and the District is therefore relying on those thresholds for the analysis of air quality and greenhouse gas impacts in this Initial Study. Although a lead agency is required to adopt thresholds of significance intended for general use by ordinance, resolution, rule, or regulation, with a public review process, in the current instance, the Alameda Unified School District is utilizing the thresholds recommended in the BAAQMD’s June 2010 CEQA guidelines for the proposed seismic upgrade of Alameda High School, but does not intend to apply them generally to environmental review projects in the District.

BAAQMD’s June 2010 CEQA guidelines include screening criteria that are indicative of a project’s potential to exceed the thresholds of significance for criteria air pollutants. The screening criteria are not in themselves thresholds of significance. Consequently, projects exceeding the screening criteria may not have significant air quality impacts, but quantified modeling of air emissions is recommended for such projects so that an accurate assessment of potential impacts can be made.

The screening criteria are keyed to different kinds of land use development projects that entail the construction and operation of buildings. The construction criteria are based on the potential area of land disturbance, because it is during site grading and paving activities that the majority of construction emissions are generated. For most of the land use types for which BAAQMD has established screening criteria based on area of disturbance, the threshold for potential construction-related impacts is 277,000 square feet. By comparison, the trenching adjacent to building foundations that would occur as part of the proposed project is expected to involve less than 500 cubic yards of excavation, representing less than 2,000 square feet of surface disturbance, or less than 1 percent of the screening threshold. Therefore, the amount of ground disturbance would be far below the threshold at which a quantified analysis is recommended, and would not have any potential to violate air quality standards.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>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)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: As discussed in Section III(b), the proposed project would not result in the generation of long-term operational emissions of criteria air pollutants. Therefore, the project would not contribute to cumulative air quality effects. Furthermore, BAAQMD’s thresholds of significance were developed to identify a cumulatively considerable contribution to a significant regional air quality impact, and the BAAQMD CEQA Air Quality Guidelines state that projects that would have a less-than-significant project-level impact on air quality would also have a less-than-significant cumulative impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Expose sensitive receptors to substantial pollutant concentrations?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: According to BAAQMD’s CEQA Air Quality Guidelines and Air Toxics New Source Review Program Health Risk Screening Analysis Guidelines, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Individual cancer risk is the likelihood that a person exposed to concentrations of toxic air contaminants (TACs) such as

diesel particulate matter (DPM) over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology.⁸ The maximally exposed individual represents the worst-case risk estimate, based on a theoretical person continuously exposed for 30 years at the point of highest compound concentration in the air. This is a highly conservative assumption, since most people do not remain at home all day and on average residents change residences every 11 to 12 years. In addition, this assumption assumes that residents are experiencing outdoor concentrations for the entire exposure period. While, as discussed above in Section III(b), the project would generate short-term emissions from diesel-fueled equipment during excavation of foundation trenches, such emissions would be limited in both volume and duration, and would have no potential to result in an increased cancer risk to sensitive receptors.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Create objectionable odors affecting a substantial number of people?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Though offensive odors from stationary and mobile sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress, generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, odor emissions are highly dispersive, especially in areas with higher average wind speeds. However, odors disperse less quickly during inversions or during calm conditions, which hamper vertical mixing and dispersion.

With respect to the proposed project, diesel-fueled equipment exhaust would generate some odors during excavation of foundation trenches. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. The nearest occupied student classrooms would be more than 300 feet away from trenching activities, and the students would be within an enclosed building. Furthermore, intervening structures such as the gymnasiums would intercept and divert most equipment odors from the classroom building, and atmospheric dispersion would further dilute potential odors. Therefore, the proposed project would have a less-than-significant odor impact.

⁸ Bay Area Air Quality Management District. Air Toxics New Source Review Program Health Risk Screening Analysis Guidelines. January 2010.
http://www.baaqmd.gov/~media/Files/Engineering/Air%20Toxics%20Programs/hrsa_guidelines.ashx

IV. BIOLOGICAL RESOURCES — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no habitat on the project site for sensitive or special-status wildlife species. The site has been fully developed with urban uses for many decades, and is located in an area that has been developed with urban uses for many decades. Natural elements on the entire high school campus are limited to small areas of grass lawns, ornamental trees, and a small number of shrubs. While rodents and common urban bird species could utilize this limited habitat on the site for roosting or foraging, these are not protected or special-status species. Such usage would be expected to be very limited due to the scarcity of vegetation for food and cover. The proposed project would not affect the existing landscaping, and would therefore have no potential to adversely affect special-status wildlife species directly or indirectly. While temporary operation of diesel-powered equipment during trench excavation could dissuade birds from roosting nearby, there are much greater numbers of trees for roosting on the neighboring blocks to the south, west, and north, and any wildlife that is using the site on a periodic basis would readily be able to relocate to similar urban habitat nearby.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no riparian habitat or other sensitive habitat present on or in proximity to the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project site does not have any wetlands or other waters subject to regulation by the U.S. Army Corps of Engineers or Regional Water Quality Control Board under Section 404 of the Clean Water Act.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no migratory wildlife corridors or fish habitat on the site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not entail or authorize the removal of any trees and would not have any adverse effects on biological resources. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) <i>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no adopted habitat conservation plan (HCP) applicable to the City of Alameda.

V. CULTURAL RESOURCES – *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: In order to be considered a significant historical resource as defined in Section 15064.5 of the *CEQA Guidelines*, a building must be at least 50 years old. In addition, Section 15064.5 defines an historical resource as, "... a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources," properties included in a local register of historical resources, or properties deemed significant pursuant to criteria set forth in *Public Resources Code* Section 5024.1(g). According to *CEQA Guidelines* Section 15064.5(a)(3), a lead agency can determine that a resource is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the determination is supported by substantial evidence in light of the whole record.

In order to be eligible for listing in the California Register of Historical Resources, a property must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

- Has yielded, or may be likely to yield, information important in prehistory or history.⁹

California properties or other resources listed on the National Register of Historic Places are automatically listed on the California Register of Historical Resources, and therefore are considered historical resources under CEQA.

Because Alameda High School was listed on the National Register in 1977, the proposed seismic retrofit project has the potential to cause a substantial adverse change to an historical resource. In order to evaluate the potential impacts that could result from project implementation, the AUSD retained Knapp Architects, a San Francisco firm that specializes in historic architecture and historic preservation, to conduct an historic resources evaluation.¹⁰ The results of the evaluation are summarized herein; the full report may be reviewed at the administrative offices of the AUSD. A basic architectural description of the project buildings is provided below, followed by the evaluation of potential impacts to the historic resource.

Architectural Description of Historic Alameda High School

The high school property covers a one-block area bounded by Central Avenue to the north, Oak Street to the east, Encinal Avenue to the south and Walnut Street to the west. The historic school is situated on the northern half of the block fronting Central Avenue. The school is set back, consistent with other buildings on Central Avenue beyond the school campus. Grass lawn is planted between the building and sidewalk on the north, east, and west sides of the building. A variety of species of evergreen and deciduous trees are planted along the axis of the front façade. Many of these trees have grown and collectively obscure portions of the façade, especially the east and west wings of the Central Building. The campus area south of the Central Building is occupied by a bituminous-surface parking lot; three additional, non-historic buildings; tennis courts; swimming pools; and a baseball diamond.

The school was constructed as three buildings, which were designed as a single, symmetrical composition connected by arcades. The Central Building serves as the central axis for the campus, and is comprised of a three-story central wing, auditorium wing that extends to the rear from the central wing, two-story east and west wings, and the gymnasium wing attached to the south façade of the auditorium wing. The Science and Technical Arts buildings are overall rectangular and extend the east-west axis of the Central Building.

Constructed of reinforced concrete in the neoclassical style, the school features classical motifs throughout. The principal entry is centrally located on the Central Building facing Central Avenue. It is distinguished by a series of terrazzo steps leading to a monumental ionic colonnade, supporting the projecting portion of the entablature. The colonnade is comprised of a row of ten, concrete ionic columns with fluted shafts. The entablature includes an architrave, a carved frieze reading “ALAMEDA HIGH SCHOOL” with rosettes, and a molded cornice with dentils. A third story extends above the entablature, articulated with two-over-two, double-hung windows with rosettes above, and flanked by fluted pilasters above the entablature. The center bays feature double-leaf bronze doors with cast bronze grill over the transom window. The outer bays feature cast bronze windows.

The primary (north) façade of the two-story, east and west wings flank the central wing and are slightly set back, but continue the horizontal details of the entablature. The wings are divided into eleven two-story window bays and a final projecting bay. Each bay is flanked by raised, square pilasters with Corinthian capitals. The windows are divided by bas-relief spandrel

⁹ California Resources Agency, *CEQA Guidelines*, Section 15064.5(a)(3), as amended October 23, 2009.

¹⁰ Knapp Architects, *Alameda High School Mitigations: Seismic Upgrade Evaluation Report*, June 17, 2016.

panels. The projecting end bays are adorned with a niche enclosed by Ionic columns supporting an entablature. The niche includes a cast Grecian urn set on a semi-circular platform with bas-relief panel above. Above the niche is a cast concrete grill.

The east and west façades of the Central Building continue many of the details described on the primary façade. These elevations are divided into seven bays by square pilasters with Corinthian columns. The outer bays feature the same two-story, divided-light, wood windows with bas-relief spandrel panels as seen on the primary façade. The central bay is slightly obscured by the connecting arcade, but features a double-leaf door on each floor.

The rear (south) façade of the Main Building is symmetrical, with the auditorium wing serving as the axis. The auditorium wing is centered on the central wing of the building. On either side of the auditorium, the central wing is divided into three bays. The bays closest to the auditorium feature double-leaf wood doors on the first and second stories, and a tall divided-light wood window on the third story. The middle bay features a single divided-light wood window on the first, second, and third stories. The third bay features two divided-light wood windows on the first and second stories, and four divided-light wood windows on third story.

The three-story Science Building was reconstructed in 1925, and continues the classical language established on the Central Building through the entablature, window bays, spandrel panels, pilasters and end projecting bays. The building is overall rectangular, but the outer bays project from the building. The projecting bays feature the same enclosed niche with cast concrete grill as seen on the outer bays of the Central Building wings. The center portion of the Science Building is divided into eleven bays. Each of the bays are defined by square pilasters, with the exception of the center bay, which is flanked by ionic columns. Bays one through four and eight through eleven feature two-story, divided-light windows with spandrel panels as described on the east and west wing of the Central Building. The first and second story of the center three bays are separated by a concrete spandrel panel, with the inscriptions "CHEMISTRY" carved into the first, "BIOLOGY" carved into the second, and "PHYSICS" carved into the third. Above the spandrel panels are divided-light, wood windows, matching those in the other bays. The center bay features the primary entrance to the building, consisting of double-leaf bronze doors with cast bronze grills over the transom windows. The fifth and seventh bays feature cast bronze grills with circular cast ornament above. The third story continues the bay divisions of the lower stories with square pilasters and divided light, wood windows.

The two-story Technical Arts Building was reconstructed in 1953, and features a stripped classical style. The building is slightly raised, and features two-story window bays divided by square pilasters on all four façades. The windows feature a spandrel panel similar to one seen on the Central and Science buildings, but without the bas-relief details. The building also features a concrete covered sidewalk that wraps the rear half of the west elevation and rear elevation, added after original completion of the Technical Arts Building.

The arcades connecting the three buildings are one-and-a-half stories tall and each has three bays. The arcades are symmetrical, with a slightly projecting center bay. The arcades feature terrazzo steps approaching the center bay, and an accessibility ramp attached to the east and west bays of the west arcade, and the east bay of the east arcade. The arcades continue the cornice details established on the Central Building. A second-story fire escape stair was added to the rear façade of the east arch of both arcades after original completion of the building.

Additional architectural details on Alameda High School are provided in the evaluation report by Knapp Architects, available for review at the administrative offices of the AUSD.

Evaluation Criteria

Section 15064.5(b)(3) of the *CEQA Guidelines* states that a project that conforms with *The Secretary of the Interior's Standards for the Treatment of Historic Properties, With Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *The Secretary of the Interior's Standards for the Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (36 CFR 67) shall generally be considered to have a less-than-significant impact on the historical resource. Accordingly, the evaluation by Knapp Architects is based on the National Register Criteria and the Secretary of Interior's Standards for Rehabilitation.

Established preservation standards such as the National Register Criteria and the Secretary of Interior's Standards are utilized to inform and prioritize the preservation of historic buildings. These preservation doctrines were written to provide an all-inclusive reference for the evaluation and formulation of treatment options of all historic resources. Alameda High School has already been determined significant and listed in the National Register of Historic Places. Therefore, the proposed treatments should prioritize the retention of spaces, features, and materials that contribute to the school's significance and date to the period of significance established in the National Register nomination, thereby minimizing compromises to the historical integrity of the building.

The Secretary of Interior's Standards outlines four treatment options for historic buildings: Preservation, Rehabilitation, Restoration, and Reconstruction. These standards offer guidelines to promote historic preservation best practices for all types of historic resources. The Secretary of Interior's Standards for Rehabilitation are as follows:

- Standard 1: A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- Standard 2: The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- Standard 3: Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- Standard 4: Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Standard 5: Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Standard 6: Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- Standard 7: Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Standard 8: Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Standard 9: New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

Standard 10: New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Character-defining features

A key to the preservation and rehabilitation standards is the preservation (or restoration) of the character-defining features of the historic resource. Character-defining features are those elements of a building's design that give the building its distinctive character. Character can be created by visual aspects, special arrangements, and physical features of the building. If these elements are changed, they could significantly alter the character or appearance of the building. These features can contribute to the significance of the building, and should be given careful consideration to maximize their preservation.

Preservation Brief #17: Architectural Character—one of 47 briefs prepared by the National Park Service to provide guidance on preserving, rehabilitating, and restoring historic buildings—defines a three-step process to identify character-defining features.¹¹ Evaluation begins with overall visual character of the building, considering the overall shape, massing and setting of the building. The second step evaluates the exterior at close range or “within an Arm’s Length.” This step looks at the materials and craft details of the facades. The third step is identifying visual character of interior spaces, features, and finishes. Within the interior, individual spaces, features, and finishes can be significant, or the significance can lie in the relationship between the individual spaces.

The character-defining features of Alameda High School were identified through study of the National Register Nomination Form and site visits conducted in May 2016 utilizing the three-step process. The following character-defining features of Alameda High School are documented with photographs in the Knapp Architects report:

- Temple front design in a stripped classical style, comprised of an Ionic colonnade supporting an entablature, series of steps leading to the porch (pronaos), and classical motifs throughout;
- Bronze windows and doors;
- Wood divided-light windows;
- Ionic capitals;
- Unified design of three buildings (science wing, central building, and west building), connected by triple-arch arcades, resulting in a series of projecting and recessing volumes augmented by a rhythmic procession of bays defined by pilasters;
- Repeated motifs—derived from classical precedents—carrying the classical style throughout the façade, including bas relief capitals, panels, and frieze details;

¹¹ Nelson, Lee H. *Preservation Brief 17: “Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character.”* Washington, DC: National Park Service. Accessed June 16, 2016 at: <https://www.nps.gov/tps/how-to-preserve/briefs/17-architectural-character.htm>.

- Continuation of the bay rhythm on the secondary façades through the use of pilasters, windows, and arcade, but without the bas relief motifs of the primary façade, resulting in a more paired down classical language;
- The lobby, with the defining attribute of a wood coffered ceiling, playing a prominent role in the sequence of spaces of the school, leading to the classroom corridors, vertical circulation areas, and the auditorium;
- A horizontal circulation designed as an archetypal double-loaded corridor, with distinctive fenestration patterns comprised of single-leaf and double-leaf wood doors with divided-light windows, transom windows, and divided-light clerestory windows;
- Vertical circulation designed as switchback stairs with travertine steps and solid handrails;
- Classrooms, though varying in dimension, uniformly defined by an exterior window wall and interior hallway walls with built-in cabinets and clerestory windows; and
- Large special-use spaces such as the gymnasium, auditorium, and library—key functional spaces within the context of education—defined by functional elements key to their use: large unobstructed space, seating and stage, and shelving, respectively.

Alameda High School was determined eligible and listed in the National Register in 1977, and documented in a National Register Nomination Form from that same year. The National Register Nomination Form defines the school as locally significant under Criterion C for its artistic value as a representative example of the neoclassical style applied to a school building. The nomination states, “the buildings’ exterior design represents the purest ‘temple form’ anywhere in the city of Alameda” and “The building’s exterior represents an entire era of neoclassical revival that is unique for Northern California school buildings.”¹² The features described above comprise the character-defining features of this neoclassical collection of buildings.

Evaluation Conclusions

A key to the preservation and rehabilitation standards is the preservation (or restoration) of the character-defining features of the historic resource. Character-defining features are those elements of a building’s design that give the building its distinctive character. Character can be created by visual aspects, special arrangements, and physical features of the building. If these elements are changed, they could significantly alter the character or appearance of the building. These features can contribute to the significance of the building, and should be given careful consideration to maximize their preservation.

The Secretary of Interior’s Standards for rehabilitation, discussed above, were consulted to evaluate the impacts of the proposed designs for the seismic upgrade and accessibility improvements. Knapp Architects’ evaluations are discussed by area below.

Site and Landscaping

The existing site layout and landscaping were determined to be not significant, and do not appear to be a part of a planned landscape design. The most significant proposed alterations to the site and landscape include the addition of a small raised patio on the rear of the Science Building, and the removal and replacement of the accessibility ramps located on the primary façade.

¹² United States Department of the Interior, National Park Service, *National Register of Historic Places Inventory–Nomination Form, Alameda High School*, March 23, 1977.

The patio addition would be located on rear of the science building, would be inconspicuous if at all visible from the primary (north) façade, and would not markedly change the character of the rear façade. The rear façade is characterized by a stripped classical style, and the patio would have a low profile that would continue the visual plane of the base detail already present on the façade.

The proposed project would include the removal of the existing ramps and their replacement with a sloped, ADA-compatible sidewalk without handrails. The sloped sidewalks have been designed to connect with the arcade and to be less visually obtrusive than a typical ramp with railings. The placement and design of the new proposed sidewalks would significantly reduce the visual impact of the existing ramps, while still providing accessibility. The arcades are less significant than the colonnade entrance, and by attaching the sloped sidewalks to the arcade the proposed ramps would provide accessibility without detracting from the most prominent features of the façade.

The proposed project would also include the removal of the existing trees and plantings on the north side of the school, and their replacement with more compatible plantings that would not obscure the façade. A line of trees would also be planted at the edge of the property along Central Avenue, continuing the tree canopy consistent with other blocks of Central Avenue on either side of the campus.

Knapp Architects concluded that the proposed site paving, and landscape would be compatible with the character of the property.

Exterior

The proposed project would rehabilitate the exterior of Alameda High School, making minimal changes. The scope of work would include the repair or in-kind replacement of existing wood windows and repair of cracks and spalling throughout the exterior of the buildings. These repairs would improve the weather-tightness of the building, while also correcting damage and past incompatible alterations, such as the addition of air conditioning units, and would secure the longevity of the character-defining features of the buildings.

The only substantial alteration to the exterior of the buildings would be a change to the current fenestration pattern on the rear of the Science Building and east façade of the one-story addition. The alteration would include the addition of four windows in previously covered openings, the replacement of the sliding overhead door with a large divided-light window, the addition of a glass and wood door with transom, and the replacement of the glass doors and transom on the east façade of the addition. These alterations would be in character with the bay division of the rear façade, and thereby would not markedly change the character of the façade. Furthermore, these changes would be invisible from the north façade, and minimally or not at all visible from other views of the building.

Central Building Interior

The proposed scope of the work within the Central Building includes minimal changes to improve accessibility, reconstruction of a previously removed corridor wall, and the reallocation of interior classrooms and office spaces.

Central Wing of Central Building Interior

No work is currently planned for the interior of the auditorium or lobby. Minimal alterations to the central wing interior spaces are proposed, which would consist primarily of accessibility improvements to the restrooms, but would also include the removal of an interior, non-original partition wall to create a conference room. The removal of the wall would return the space to its

original configuration. Other interior partition walls would be moved to improve the functionality of other interior spaces, but would not significantly impact the character of the building.

East Wing of Central Building Interior

The scope of work for the east wing would maintain the character-defining features of the double-loaded corridor. Alterations would be contained within the interior spaces located on either side of the corridor, and result in the reallocation of classroom and office spaces through the moving of interior partition walls. Comparison of the original 1924 drawings and the existing conditions suggests that these spaces were originally classrooms, but at a later period these spaces were divided to accommodate smaller office spaces. Therefore, the new proposed rearrangement would not significantly impact the building. On the second floor the interior partitions would be moved to align with new seismic bracing (see below), but the rooms would continue to function as classrooms. The designs include the removal of non-original partitions on the third floor. Overall, the proposed designs for the east wing would not significantly impact the design of the building.

West Wing of Central Building Interior

The proposed designs for the west wing would reconstruct the south wall of the corridor on the first and second stories. The wall was removed when the wing was being utilized by the Alameda Free Library. The reconstruction of the wall, based on designs provided from the original 1924 drawings, would reverse past, incompatible alterations. The construction of this wall would result in the return of the corridor-to-classroom relationship, with the character-defining clerestory windows. The proposed designs also include dividing this space into several classrooms, as the space was historically used. The partition walls would attach to the exterior wall between the windows, and would not obscure the view of the windows.

Additional changes would include altering the swing of the classroom doors on the north side of the corridor to improve accessibility. The original doors would be retained and installed with new hardware. However, if necessary, new doors would be constructed to match the original doors in materials and design. The proposed changes would be compatible with the historic character of the building.

Science Building Interior

The Science Building was previously renovated in 1965, with the installation of single-leaf flush doors and relocation of interior partition walls. This remodeling was outside of the period of significance, and altered the interior character of the Science Building, though the corridor-to-classroom relationship was maintained. The proposed project would maintain the double-loaded corridor, but would include a reallocation of the classroom and laboratory spaces through the moving of partitions. Other changes would include the installation of new single-leaf wood doors with a window. As all of the interior doors in the science wing were previously replaced, an historic example is not present. However, the design of the new doors draws from the historic doors in the Central Building. These new designs would provide a more compatible door, likely similar to what was there historically without creating a false sense of historicism. These changes would be compatible with the historic character of the building.

Mechanical, Electrical, and Plumbing

The replacement of heating, plumbing, and electrical systems would improve the functionality of the building. The proposed design seeks to obscure these upgraded systems by placing them between joists, and when necessary hiding them above ceiling "clouds." The systems hidden by

the clouds would be further obscured from view by painting them a dark color to blend them in with the ceiling.

The historic ceiling was constructed with minimal space between it and the top of the window frame. The clouds would allow for the benefits of a dropped ceiling to hide the upgraded heating, plumbing, and electrical work, without obscuring the view of the exterior windows. The proposed ceiling cloud system would hang below the top of the window frame, but a substantial 8-foot offset from the wall would minimize the impact of the cloud system on the exterior windows. In addition, this system would minimally impact the existing ceiling, and would be easily reversible if desired at a later time. These changes would be compatible with the historic character of the building.

Seismic Rehabilitation

The proposed project would include a full seismic rehabilitation of all structural elements through a cross brace system, which would significantly increase the stability and safety of the building during strong seismic shaking. A cross brace system was determined to be the best option for the seismic upgrade of the historic structure. As the primary façade is largely constructed of glass, total concealment of the braces was not possible, and there are four bays on each floor of the Central Building where the cross bracing would obstruct the exterior windows and would be visible from the exterior of the building on the primary façade. Alternatives were considered such as a moment bracing system, but it was determined that this would not be compatible with the concrete structure. The cross brace system has been designed in a way to minimize the instances where the system would visually impact the character of the building. The system is also offset from the exterior wall, thereby not physically engaging the historic features.

Though necessary to correct serious structural deficiencies, the visibility of the cross braces would adversely affect the historic character of the building. However, overall, the proposed changes would be sensitive to and compatible with the historic character of the building. Therefore, when considered in its entirety, the proposed project would have a *less-than-significant impact* on historic resources. Nonetheless, implementation of one or more of the following measures is recommended to further reduce the impact of the project:

- Installation of a film on the windows that would reduce, from the exterior, the visibility of the interior of the building through the windows.
- Installation of Venetian blinds, with the blades angled and secured to distort the appearance of the cross bracing from outside, but still allow natural light to enter the space.
- Installation of a window treatment that would distort or minimize the appearance of the cross bracing from the exterior.
- A methodical survey of the windows should be completed to ensure that all the windows which can feasibly be repaired will indeed be retained. Windows identified to be replaced should only include those in which the severity of deterioration requires replacement.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: The San Francisco Bay area was occupied by Native Americans as far back as 3,000 to 4,000 years ago. Prior to European contact, the project area was inhabited by the Penutian-speaking Bay Miwok (referred to as “Costanoans” by the Spanish) tribe of Native Americans.¹³ By the 19th century, forced missionization and the epidemic spread of western diseases had reduced the Bay Miwok population significantly, resulting in the disappearance of local tribelets, such as the Chochenyo, who inhabited the area now comprising the City of Alameda. Buried Native American artifacts, including remnants of former settlements, have been encountered throughout the Bay Area, particularly adjacent to or in proximity to water sources, and could potentially be present at the project site.

To determine the likelihood of buried archaeological artifacts to be present in the area of the proposed project, an archival records search was conducted by the Northwest Information Center (NWIC) at Sonoma State University, which is part of the California Historical Resources Information System (CHRIS).¹⁴ The NWIC determined that no cultural resource studies encompassing the project area have been recorded with CHRIS. Nonetheless, the NWIC noted that Native American resources are frequently associated with Holocene-age landforms, and the project site is located in an area that contains the latest Pleistocene to Holocene sands. Due to this factor and the site’s relative proximity to the waters of San Francisco Bay, the NWIC concluded that there is a high potential for unrecorded Native American archaeological resources to be present at the site. Additionally, based on a review of historic literature and maps of the area, the NWIC concluded that there is a moderate potential for unrecorded historic-period archaeological resources to be present at the site.

In addition to the archival records search by the NWIC, in compliance with Assembly Bill (AB) 52, approved by the State Legislature in 2014, the AUSD contacted the California Native American Heritage Commission (NAHC) to identify Native American tribes that may have tribal cultural resources in the project area. The NAHC responded, identifying the following tribal groups as having traditional lands or cultural places within Alameda County: the Amah Mutsun Tribal Band of Mission San Juan Bautista, Indian Canyon Mutsun Band of Coastanoan, Muwekma Ohlone Indian Tribe of the SF Bay Area, the Ohlone Indian Tribe, and the Coastanoan Rumsen Carmel Tribe. Letters were sent to the designated representatives of these tribes seeking their input regarding tribal cultural resources that may be located on or near the project site. At the time of publication of this Initial Study, no responses from the contacted tribes had been received by the AUSD.

¹³ In anthropological literature, the Costanoans are often referred to as the Ohlone.

¹⁴ Mark Castro, Researcher, Northwest Information Center, Sonoma State University, *Record Search Results for the Proposed Seismic Retrofit of Alameda High School, City of Alameda, Alameda County* [letter report], NWIC File No. 15-1630, June 8, 2016.

While the NWIC determined that there is a high potential for unrecorded Native American archaeological resources to be present at the site, the amount of subsurface disturbance that would be required for the proposed project would be quite limited and would occur entirely within areas that have already been previously disturbed at least once. (Initial disturbance may have occurred during original construction of the high school, if not earlier, and subsequent disturbance could have occurred during reconstruction.) Furthermore, with the exception of the injection of grout into the shallow liquefiable soil underlying the buildings to increase soil strength, which would be done via small borings, subsurface disturbance would not extend more than 3 feet below the ground surface, reducing the potential to encounter buried cultural artifacts.

Nonetheless, it is possible that buried prehistoric or historic cultural materials may be present in the project area that could be disturbed and damaged or destroyed during project construction. Damage to or destruction of such resources would constitute a *significant, adverse impact*. Implementation of the following mitigation measures would reduce this potential impact to a less-than-significant level.

Mitigation Measure CR-1: The Alameda Unified School District (AUSD) shall advise the project construction contractor at a pre-construction conference of the potential for encountering cultural resources during construction and the AUSD's responsibilities under the California Environmental Quality Act (CEQA) should such resources be encountered, as set forth in Section 15064.5 of the *CEQA Guidelines* and Public Resources Code Section 21083.2. This advisory shall also be printed on the Plans and Specification Drawings for this project.

Mitigation Measure CR-2: If any cultural artifacts are encountered during site grading or other construction activities, all ground disturbance within 100 feet of the find shall be halted until the AUSD is notified and a qualified archaeologist can identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The results of any additional archaeological effort required through the implementation of Mitigation Measures CR-2 or CR-3 shall be presented in a professional-quality report, to be submitted to the AUSD and the Northwest Information Center at Sonoma State University in Rohnert Park.

Mitigation Measure CR-3: In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the project sponsor, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation

of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: Paleontological resources are the fossilized remains of vertebrate or invertebrate organisms from prehistoric environments found in geologic strata. They are valued for the information they yield about the history of the earth and its past ecological settings. They are most typically embedded in sedimentary rock foundations, and may be encountered in surface rock outcroppings or in the subsurface during site grading. The project area is underlain by latest Pleistocene to Holocene dune sand, a form of alluvium.¹⁵ Pleistocene alluvium is ranked as highly sensitive for significant paleontological resources (the Pleistocene is the first epoch of the Quaternary period).¹⁶ While subsurface disturbance that may occur as a result of project approval is expected to be quite limited in extent, there is some potential for encountering paleontological resources on the site during subsurface disturbance during trenching adjacent to school building foundations. Any destruction of unique paleontological resources during subsurface disturbance would be a *potentially significant impact*. Implementation of the following measure would reduce this potential impact to a less-than-significant level:

Mitigation Measure CR-4: During the pre-construction conference required by Mitigation Measure CR-1, the AUSD shall advise the project construction contractor to observe the following precautions: If any paleontological resources are encountered during subsurface disturbance, all ground disturbance shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the scientific value of the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). Significant paleontological resources shall be salvaged and deposited in an accredited and permanent scientific institution, such as the University of California Museum of Paleontology (UCMP).

¹⁵ U.S. Geological Survey, Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California [map], 2000.

¹⁶ Kenneth L. Finger Ph.D., Consulting Paleontologist, Letter report to Michelle Touton, Archeo-Tec Re: Paleontological Records Search: Masonic Homes Flatlands Project, Union City, Alameda County, November 21, 2009.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Disturb any human remains, including those interred outside of formal cemeteries?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: See Section V(b), above.

VI. GEOLOGY AND SOILS – *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</i>				
i) <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.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no known active earthquake fault located on or near the project site. The nearest seismically active fault is the Hayward fault, located more than 3 miles east of the project area, while the San Andreas fault lies about 17 miles to the west.¹⁷ There is therefore no potential for fault rupture at the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) <i>Strong seismic ground shaking?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The project area is located in the Coast Ranges Province that developed in response to faulting associated with movement at the plate boundary between the North American and Pacific Crustal Plates, which resulted in a series of northwest-trending mountain

¹⁷ U.S. Geological Survey, Earthquakes and Faults in the San Francisco Bay Area (1970-2003) [map], August 2004.

ranges and intervening valleys. Continued deformation and erosion during the late Tertiary and Quaternary Age (the last several million years) formed the prominent coastal ridges and the inland depression that is now the San Francisco Bay. The more recent seismic activity within the Coast Range Geomorphic Province is concentrated along the San Andreas Fault zone, a complex group of generally north- to northwest-trending faults.

Published geologic maps indicate that the project site is underlain by aeolian (dune) sands of Holocene and Pleistocene age. The deposits consist of fine-grained, very well sorted, well-drained alluvial sands.

The San Francisco Bay Area is recognized by geologists and seismologists as one of the most seismically active region in the United States. Similar to most urban locations throughout the Bay Area, the project site is potentially subject to moderate to high seismic ground shaking during an earthquake on one of the major active earthquake faults that transect the region. Major earthquakes have occurred on the Hayward, Calaveras, and San Andreas faults during the past 200 years, and numerous minor earthquakes occur along these faults every year. At least five known earthquakes of Richter magnitude (RM) 6.5, four of them greater than RM 7.0, have occurred within the San Francisco Bay Area within the last 150 years. This includes the great 1906 San Francisco earthquake (RM 8.2) and the 1989 Loma Prieta earthquake (RM 6.9).

According to a 2014 analysis by the Working Group on California Earthquake Probabilities (WGCEP), an expert panel co-chaired by U.S. Geological Society seismologists, there is a 72 percent probability that an earthquake of magnitude 6.7 or greater will occur in the San Francisco Bay Area in the next 30 years and a 20 percent probability that an RM 7.5 earthquake will occur (starting from 2014).¹⁸ The WGCEP estimates there is a 32-percent chance of an RM 6.7 quake occurring on the Hayward fault by 2045. The closest known active fault to the project site, the Hayward fault is approximately 3.7 miles northeast of the site. It is therefore likely that a major earthquake will be experienced in the region during the life of the project that could produce strong seismic ground shaking at the project site.

A geotechnical investigation of the proposed project was performed by Miller Pacific Engineering Group to define the subsurface conditions at the site, evaluate potential geotechnical hazards associated with the existing improvements, and identify appropriate geotechnical design criteria for the project.¹⁹ Based on the geologic conditions at the project site and the distance to active regional faults, the investigation calculated the probable peak ground acceleration (PGA) likely to be experienced at the site during a strong earthquake on one of the regional faults. The probable PGA ranged from 0.15 g-force (g) from a quake within the Contra Costa Shear Zone to 0.38 g from a 7.3 Moment Magnitude earthquake on the Hayward fault.

Using Probabilistic Seismic Hazard Analysis (PSHA) to determine probabilities of all possible earthquake scenarios, Miller Pacific determined that there is a 2-percent chance in the next 50 years that a PGA of 0.86 g will be experienced at the site, and a 10-percent chance that a PGA of 0.55 g will be experienced. Such shaking would represent a significant hazard to the structural integrity of buildings not designed to withstand such shaking.

The proposed project is intended to reduce the existing risk of structural damage and potential injury or death of building occupants during a strong earthquake. The project would be

¹⁸ Edward H. Field and Members of the 2014 Working Group on California Earthquake Probabilities, U.S. Geological Survey, California Geological Survey, *UCERF3: A New Earthquake Forecast for California's Complex Fault System*, USGS Open File Report 2015-3009, 2015.

¹⁹ Miller Pacific Engineering Group, *Geotechnical Investigation, Alameda Unified School District, Evaluation of Three Historic Buildings, Historic Alameda High School, 220 Central Avenue, Alameda, California*, Project 1911.021, November 10, 2015.

designed and constructed in accordance with the most recent version of the California Building Code, the California Historical Building Code, or the American Society of Civil Engineers' Standards ASCE/SEI 41-43, as determined by the Division of the State Architect (DSA). These standards incorporate performance-based design criteria for foundations, walls, and other structural and non-structural systems that are intended to allow retrofitted older buildings to withstand the probable PGA resulting from a strong earthquake. Compliance with these requirements, which will be subject to final approval by the DSA, will ensure that the project would have a less-than-significant impact from exposure to strong seismic ground shaking.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>iii) Seismic-related ground failure, including liquefaction?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Liquefaction occurs when clean, loose, saturated, uniformly graded, fine-grained soils are exposed to strong seismic ground shaking. The soils temporarily lose strength and cohesion due to buildup of excess pore water pressure during earthquake-induced cyclic loading, resulting in a loss of ground stability that can cause building foundations to fail. Soil liquefaction may also damage roads, pavements, pipelines, and underground cables. Soils susceptible to liquefaction include saturated, loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits.

The project site is mapped by the U.S. Geological Survey as having a moderate potential for liquefaction.²⁰ A more detailed, site-specific analysis of the site's liquefaction potential was performed by the geotechnical consultant for the project using Cone Penetration Test (CPT) data measured in the field and CPT liquefaction assessment software, factoring in a design earthquake of magnitude 7.3. The evaluation identified granular soils layers from the surface to roughly 10 feet deep, and discontinuous and relatively thin layers of potentially liquefiable soil 20 to 44 feet below the ground surface. Based on this, the geotechnical consultant concluded that there is a moderate to high risk of liquefaction at the site. The evaluation determined that post-liquefaction settlement would be limited to 0.5-inch to 1 inch, and the potential settlement could be addressed by strengthening the top 10 feet of underlying soils with cement or chemical grouting. As described in the project description, injection of cement grout or chemical grout into the shallow liquefiable soil underlying the buildings is part of the proposed project. Therefore, the project would reduce the hazard related to seismic-related ground failure, including liquefaction, and would have a net beneficial effect.

²⁰ U.S. Department of Interior, U.S. Geological Survey, Preliminary Maps of Quaternary Deposits and Liquefaction Susceptibility, Nine-County San Francisco Bay Region, California, Open File Report 00-444, 2000.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>iv) Landslides?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project site and surroundings are within an area that is generally level, with minor variations in elevations. There are no significant slopes in the project vicinity that could be subject to landslides.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Result in substantial soil erosion or the loss of topsoil?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Most of the proposed seismic upgrade work would be done inside the existing project buildings, where there would be no potential for soil erosion. A limited amount of subsurface disturbance would occur adjacent to the existing building foundations, where trenches would be excavated to allow for the installation of bracing and/or shear walls. These trenches would be approximately 3 feet deep and 4 feet wide. Because they would be narrow excavations adjacent to the existing buildings, the potential for soil erosion due to wind or stormwater action would be very limited. The excavations would be backfilled as soon as the work was complete, and the ground surface would be revegetated or covered with gravel, which would deter future erosion. Furthermore, as discussed in more detail in Section IX(a), the amount of area disturbed would be significantly below the threshold for obtaining coverage under the Construction General Permit administered by the San Francisco Bay Regional Water Quality Control Board, which requires implementation of erosion-reduction controls during construction. For these reasons, the project would have a less-than-significant impact due to erosion.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The potential for liquefaction was discussed above in Section VI(a)(iii). The loose, sandy soil underlying the project buildings that pose a risk of liquefaction would also be subject to compression settlement under foundation loading. The geotechnical investigation

determined that while these soils pose a moderate risk to the proposed improvements from compression settlement, the proposed strengthening of the shallow soils with cement or chemical grout would eliminate this risk. The geotechnical investigation did not identify any risk of lateral spreading at the project site. For the foregoing reasons, the project would have a less-than-significant impact due to its location on unstable subsurface conditions.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Expansive soils will shrink and swell with fluctuations in moisture content and are capable of exerting significant expansion pressures on building foundations, interior floor slabs, and exterior concrete flatwork. Distress from expansive soil movement can include cracking of brittle wall coverings (stucco, plaster, drywall, etc.), racked door and/or window frames, and uneven floors and cracked slabs. Flatwork, pavements, and concrete slabs-on-grade are particularly vulnerable to distress due to their low bearing pressures. The geotechnical consultant did not encounter expansive soils during the site investigation.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project area is served by a municipal sewer system, and the proposed project would not require the use of a septic or alternative wastewater disposal system.

VII. GREENHOUSE GAS EMISSIONS – *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: GHGs refer to gases that trap heat in the atmosphere and contribute to global warming. The primary GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NO_x), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H₂O). The majority of GHG emissions in the Bay Area come from transportation (39.7 percent), followed by industrial/commercial sources (35.7 percent) and electricity generation (14.0 percent). Construction equipment and other off-road equipment contribute 1.5 percent of the total GHG emissions.²¹

As discussed in Section III(b), no operational air emissions, including emissions of GHGs, would be generated by the project. While there are no established thresholds of significance for construction emissions of GHGs, as is the case with criteria pollutants, the greatest potential for construction emissions of GHGs is during grading and paving activities and, consequently, the larger the area of disturbance, the greater the emissions of GHGs. Due to the very limited areas of disturbance that are anticipated during excavation of trenches adjacent to building foundations, a quantified analysis of construction emissions of GHGs was deemed unwarranted. As discussed in Section III(b), the project would fall far below the threshold at which the BAAQMD recommends modeling of construction emissions of criteria air pollutants. It can therefore be reasonably presumed that the emissions of GHGs during project construction would be quite limited, and would not have a significant impact on the environment.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: In 2008 the City of Alameda adopted the *City of Alameda Local Action Plan for Climate Protection*, which provides a strategy for reducing emissions of GHGs in the City.²² The Local Action Plan establishes an overall goal of reducing community-wide GHG emissions by 25 percent below 2005 levels by 2020 and sets forth specific initiatives for achieving this goal

²¹ Bay Area Air Quality Management District, *Bay Area Emissions Inventory, Summary Report: Greenhouse Gases, Base Year 2011*, Table F: 2011 Bay Area GHG Emissions by Sector, updated January 2015.

²² City of Alameda, *City of Alameda Local Action Plan for Climate Protection*, adopted February 5, 2008.

that are organized into the following four categories: 1) transportation and land use; 2) energy; 3) waste and recycling; and 4) community outreach and education.

None of the Local Action Plan initiatives would apply directly to the proposed project, which would not entail or authorize new uses or construction of new structures. Therefore, the project would not conflict with the Local Action Plan.

VIII. HAZARDS AND HAZARDOUS MATERIALS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not involve the routine transport, use, or disposal of hazardous materials. Once the seismic upgrade is complete, the buildings hazardous materials.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: There are no active or inactive hazardous waste or hazardous materials release sites on the project block or within a 1,000-foot radius of the site, as tracked by the California Department of Toxic Substances Control’s EnviroStor database (which includes Federal Superfund Sites, State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, Permitted Hazardous Waste Facilities, Post Closure and Hazardous Waste Facilities, and Historical Non-Operating Hazardous Waste Facilities).²³

In addition, there are no active permitted underground storage tank facilities (UST), leaking underground storage tank (LUST) cleanup sites, or other hazardous materials release sites on the project block identified on the GeoTracker database maintained by the State Water Resources Control Board (SWRCB).²⁴ However, GeoTracker does identify two LUST sites identified within a 1,000-foot radius of Alameda High School. The Russi Commercial Property at 1347 Park Street, about 400 feet southeast of the school, is listed as an open site assessment

²³ California Department of Toxic Substances Control, EnviroStor Data Base of Cleanup Sites and Hazardous Waste Permitted Facilities, accessed May 9, 2016 at: <http://www.envirostor.dtsc.ca.gov/public/>.

²⁴ California Environmental Protection Agency, State Water Resources Control Board, Groundwater Ambient Monitoring & Assessment Program (GAMA), GeoTracker GAMA Groundwater Data Sources, Accessed May 9, 2016 at: <http://geotracker.waterboards.ca.gov/>.

currently undergoing remediation for groundwater contamination that resulted from fuel oil leaking from a UST that was removed in 1995. The other site is the Bill Chun Service Station at 2301 Santa Clara Avenue, approximately 500 feet northeast of the school site. Three LUSTs were removed from this site in 1992 and elevated levels of total petroleum hydrocarbons as gasoline (TPHg) and the gasoline constituents of benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in underlying soil and groundwater. Remediation of the site is still ongoing and is being overseen by the Alameda County Environmental Health Services Department.²⁵

For a number of reasons, whatever residual groundwater contamination may remain at these two sites would not adversely affect Alameda High School and would not be exposed or released by proposed project activities. First, most project activities would occur within the existing school buildings and would not disturb the subsurface. While some trenching would occur adjacent to the building foundations, groundwater would not be encountered during this work because the trenches would be about 3 feet deep, while groundwater is located at depths of 10.5 feet to 19.5 feet below the ground surface (bgs) at the site.²⁶ Secondly, groundwater at the project site is not downgradient of these sites, because groundwater in the area flows in an easterly and southeasterly direction.²⁷ Finally, groundwater in the area is not used for drinking water or other beneficial uses.²⁸ Consequently, the proposed project would not expose construction workers or future building occupants to hazardous materials. Since the project also would not involve the transport or use of hazardous materials, it would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not emit hazardous emissions, handle hazardous materials, or generate hazardous waste.

²⁵ Alameda County Health Care Services Agency, Environmental Health Services, Environmental Protection, *Case File Review for Fuel Leak Case No. RO0000382 and GeoTracker Global ID T0600100980, Bill Chun Service Station, 2301 Santa Clara Avenue, Alameda, CA 94501* [letter to Lily A. Chun 1991 Trust], January 7, 2016.

²⁶ Miller Pacific Engineering Group, *op. cit.*, Section III.D.

²⁷ Ninyo & Moore, *Site Investigation Report, 2301 Santa Clara Avenue, Alameda, California*, Project No. 401896004, Section 1.5, Site Hydrogeology, December 26, 2012.

²⁸ Gribi Associates, *Risk Management Plan, 1347 Park Street UST Site, Alameda, California, Alameda County Site IS 5511, GA Project No. 144-01-02*, September 5, 2003.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Government Code Section 65962.5 requires the California Department of Toxic Substances Control (DTSC) to compile and maintain a list of hazardous waste sites and facilities and hazardous substance release sites. The EnviroStor database discussed in Section VIII(b) comprises the listing compiled by DTSC pursuant to Section 65962.5. As discussed above in Section VIII(b), the project site is not listed on the EnviroStor database. The project would therefore not create a significant hazard to the public or the environment.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>e) For a project 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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Although Oakland International Airport is located about 2 miles southeast of Alameda High School, the proposed seismic upgrade project would not expose people living and working in the area to a new hazard from airport operations.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no private airstrips in the vicinity of the project site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) <i>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed property transfer does not have the potential to impair implementation of emergency evacuation or emergency response plan.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) <i>Expose people or structures to 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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project is located in a fully built-out area with residential, commercial, and institutional development in the vicinity of the site. There are no wildlands in the project area, and therefore there is no potential for the proposed project to result in the exposure of people or structures to wildland fires.

IX. HYDROLOGY AND WATER QUALITY — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Violate any water quality standards or waste discharge requirements?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: While urban development has a high potential to adversely affect water quality in surface water bodies, due to the concentration and characteristics of water pollution sources in the urban environment, the proposed project would not include any new development or new uses. Therefore, there is no potential for the project to have a long-term adverse effect on water quality. However, though temporary in nature, construction projects that disturb surface soils have the potential to cause erosion, and eroded soils can be washed into surface waters, degrading water quality through sedimentation.

Protection of surface water quality is regulated by the U.S. Environmental Protection Agency (EPA) pursuant to the federal Clean Water Act (CWA), which prohibits certain discharges of

stormwater containing pollutants except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In California, the EPA has authorized the State Water Resources Control Board (SWRCB) to administer the NPDES stormwater permitting program.

Water quality is regulated by two categories of NPDES permits addressing two types of stormwater discharges: operational and construction. For operational discharges, the SWRCB has established two permitting programs, one for industrial dischargers, and the other is a general stormwater discharge permit issued to municipalities, generally referred to as a Municipal Regional Stormwater Permit (MRP). Cities and counties in the San Francisco Bay Area are covered under a single MRP, NPDES Permit No. CAS612008 issued to Bay Area jurisdictions by the San Francisco Bay Regional Water Quality Control Board (RWQCB) (NPDES Order No. R2-2009-0074). This revised MRP was issued on October 14, 2009 and replaced the previous permit originally issued in February 2003 with substantial new requirements for development and redevelopment projects. Because the proposed project would not include new development, it would not require coverage under the MRP, and requirements of the MRP are not discussed further here.

Potential impacts to water quality from construction activities are regulated by the NPDES Construction General Permit (CGP) Order 2009-0009-DWQ, administered by the RWQCB. Order 2009-0009-DWQ requires project sponsors to implement construction Best Management Practices (BMPs) at the project site and comply with numeric action levels (NALs) in order to achieve minimum federal water quality standards. The CGP requires control of non-stormwater discharges as well as stormwater discharges. Measures to control non-stormwater discharges such as spills, leakage, and dumping must be addressed through structural as well as non-structural BMPs.

Coverage under the CGP is required for projects that would disturb 1 acre or more of land. The only land disturbance that would occur during implementation of the Alameda High School seismic upgrade project would be trenching adjacent to building foundations to enable installation of structural bracing. The trenching is expected to involve less than 500 cubic yards of excavation, requiring less than 2,000 square feet of surface disturbance. This would be far below the 1-acre (43,560 square feet) threshold for CGP coverage. The trenches would be excavated during the dry season and would be exposed for a short period, after which they would be backfilled with soil and covered with packed gravel or revegetated. Due to these factors, very little, if any, stormwater entrainment of soils would occur from the trench locations. Therefore, project construction activities would have a less-than-significant impact on water quality.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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 that would not support existing land uses or planned uses for which permits have been granted)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project would not increase the amount of impervious surfaces at the site, and therefore would have no effect on groundwater recharge or groundwater supplies. In any event, the groundwater table at the site is not used as a source of drinking water or other beneficial uses.²⁹

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As noted above, the proposed project would not create any new impervious surfaces in the project area or otherwise alter the existing drainage patterns on the project site. The potential for erosion to adversely affect water quality during excavation of foundation trenches is discussed in Section IX(a), above.

²⁹ Gribi Associates, *op. cit.*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project would not alter the course of a stream or river and would not alter the existing drainage pattern of the site. There is therefore no potential for the project to increase the risk of on- or off-site flooding.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not create any new impervious surfaces in the project area and, therefore, would not increase the volume or rate of stormwater runoff in the area. As discussed in Section IX(a), above, the project would not create a substantial source of polluted stormwater runoff.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>f) Otherwise substantially degrade water quality?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project's potential to degrade water quality is discussed in Sections IX(a) and IX(e). The project would not otherwise have the potential to substantially degrade water quality.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The Alameda High School campus and all surrounding lands are mapped as Zone X by the Federal Emergency Management Agency (FEMA), which is the designation assigned to areas that have been determined to be outside of the 0.2 percent annual chance flood plain (i.e., the 500-year flood plain).³⁰ In any event, the project would not create new housing.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) <i>Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As discussed in Section IX(g), above, the project site is not located within a 100-year or 500-year flood hazard area. In addition, the project would not create new structures.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) <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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The City of Alameda does not lie within any dam failure inundation zones.³¹

³⁰ Federal Emergency Management Agency, Flood Insurance Rate Map, Alameda County, California and Incorporated Areas, Community Panel Number 06001C0088G, effective August 3, 2009.

³¹ Alameda County Community Development Agency, *Safety Element* [element of the General Plan], Figure S-9: Dam Inundation, adopted January 8, 2013, amended February 4, 2014.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
j) <i>Inundation by seiche, tsunami, or mudflow?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Tsunamis (seismic sea waves) are long-period waves that are typically caused by underwater disturbances (landslides), volcanic eruptions, or seismic events. Areas that are highly susceptible to tsunami inundation tend to be located in low-lying coastal areas such as tidal flats, marshlands, and former bay margins that have been artificially filled but are still at or near sea level. The project area is not located within a tsunami inundation area, as mapped by the California Emergency Management Agency.³² Furthermore, there are no aspects of the project that would increase the risk of inundation by tsunami.

A seiche is a free or standing wave oscillation(s) of the surface of water in an enclosed or semi-enclosed basin that may be initiated by an earthquake. Given its location adjacent to San Francisco Bay, the potential for a seiche run-up at the project site would not be greater than the potential for inundation by tsunami. In addition, there are no aspects of the project that would increase the risk of inundation by seiche in the project area.

Debris flows, mudslides, and mudflows begin during intense rainfall as shallow landslides on steep slopes. The rapid movement and sudden arrival of debris flows can pose a hazard to life and property during and immediately following a triggering rainfall. The project area is essentially flat, as is the surrounding area. There is therefore no potential for mudslides or debris flows.

X. LAND USE AND PLANNING — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Physically divide an established community?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project site is a fully developed high school campus surrounded by an established residential development to the south and west and mixed uses (predominantly commercial) to the north and east. The proposed project would not include construction of new roads or new development, and therefore, would have no potential to physically divide an established community.

³² California Emergency Management Agency, Tsunami Inundation Map for Emergency Planning, State of California, San Francisco Bay Area, December 9, 2009.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would allow the historic Alameda High School buildings to be returned to their historical use as student classrooms. This would not be a new use on the site and it would be a use that is explicitly permitted in the Public/Institutional/School (P/I/S) General Plan land use designation assigned to the project site. A school is also a principal permitted use in the R-6, Residential Hotel zoning district in which the school campus is located. Because the proposed project would not authorize any new uses or new development, there is no potential for the project to conflict with policies or regulations promulgated in the General Plan or Zoning Ordinance.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Conflict with any applicable habitat conservation plan or natural community conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There is no adopted habitat conservation plan (HCP) applicable to the City of Alameda.

XI. MINERAL RESOURCES — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: No regionally significant mineral deposits have been mapped on or in the vicinity of the project site. The site is within a large area classified as Mineral Resource Zone MRZ-1 by the California Department of Conservation’s Division of Mines and Geology (DMG).³³ The

³³ California Department of Conservation, Division of Mines and Geology, Generalized Mineral Land Classification Map of the South San Francisco Bay Production-Consumption Region (Plate 1 of 29), 1996.

MRZ-1 designation is assigned to areas where sufficient data exists for a determination that no significant mineral deposits exist, or where it is judged that there is little likelihood for their presence. Furthermore, the site is in a fully developed, urbanized area where mineral extraction would not be practical, and the project would not add new development to the area. Therefore, the project would not have an effect on the availability of mineral resources.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The Alameda General Plan does not identify any local mineral resources within the City. However, as noted in Section XI(a), above, there is no potential for the project to have an adverse effect on the availability of significant mineral resources.

XII. NOISE — *Would the project result in:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Noise standards in the City of Alameda are established in the Health and Safety Element to the *City of Alameda General Plan* as well as the Alameda Municipal Code. The Health and Safety Element sets the most stringent standards for residential uses, where noise environments of 60 decibels (dB) CNEL³⁴ or less are considered “normally acceptable” and noise environments of between 60 dB and 70 dB CNEL are considered “conditionally acceptable,” requiring noise insulation features for new development. The standards also include thresholds for “normally unacceptable” and “clearly unacceptable” noise levels, and provide less stringent noise thresholds for various non-residential land uses.

Chapter 4-10, “Noise Control,” of the Alameda Municipal Code also regulates noise in the community. Section 4-10.4 (Exterior Noise Standards) lists exterior noise standards for various noise-sensitive receiving land uses (single- or multi-family residential, schools, hospitals, churches, public libraries, and commercial uses) as measured at the receiving land use. Section 4-10.7 includes exceptions to these noise standards, including, “noise sources associated with

³⁴ The Community Noise Equivalent Level (CNEL) is a descriptor of environmental noise based on the 24-hour average sound level, with additional weighting of sound levels during the more sensitive evening and nighttime periods.

construction provided the activities take place between the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday or 8:00 a.m. to 5:00 p.m. on Saturdays.”

The construction of the proposed seismic upgrade of the historic high school buildings would be subject to the restrictions on construction hours. The majority of the work would occur within the existing buildings and the noise generated during this work would be largely confined within the buildings. Noise would be generated outside the buildings during the excavation of trenches adjacent to the building foundations. It’s very unlikely that construction noise would be audible inside the main Alameda High School classroom building, given the distance from the project buildings and the presence of intervening building structures. It’s more likely that trench excavation activities at the west wing of the Central Building could be perceptible to students in the West Building and Technical Arts Building, depending on location. (See Figure 2 for orientation of the respective buildings.)

Such noise exposure would be quite limited, due to several factors. The majority of the trenching would occur adjacent to the northern and southern façades of the west wing of the Central Building. The projecting bays at the west end of this building would serve to shield and deflect noise from trenching away from the West Building. In addition, even absent the deflecting bays, there is no direct line of noise travel between the west wing and the nearby West Building. Thus, the amount of sound reaching classroom windows would be a fraction of the sound levels at the trenching site. With the windows closed, there would be additional attenuation of at least 15 dB, with the result that noise experienced in the nearest classrooms to trenching activity would likely be perceptible, but not highly disturbing. Noise levels at more distant classrooms would be lower, and as trenching progressed away from the West Building, noise levels would also progressively fall off. Trenching at the east wing of the Central Building is not expected to be audible in any active classrooms.

While there is a direct line between the southern façade of the Central Building and the eastern façade of the Technical Arts Building, there are no windows on this façade, and the building shell would block most or all of the noise. It is very unlikely that any noise disturbance would occur inside the Technical Arts Building.

While there may be a minor degree of noise disturbance in a few classrooms closest to the excavation activity, the noise levels would be moderate at worst (i.e., below 60 dB) and would be short-term in nature. Noise from construction activities that occur within the allowed construction hours is considered to comply with the City’s noise ordinance. Therefore, based on the above considerations, the project would not result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Vibration generated by construction activity has the potential to damage structures and cause annoyance to people. Vibration-related damage can be structural, such as cracking of floor slabs, foundations, columns, beams, or walls, or cosmetic architectural damage, such as cracked plaster, stucco, or tile. Disturbance to people can range from barely perceptible

vibration to interference with sleep. Due to the seismically active nature of the San Francisco Bay Area, an experience of heavy vibration could provoke fear or anxiety about an earthquake.

Ground vibration that may be imperceptible to people can also cause secondary effects, such as the rattling of dishes in a cabinet. Reoccurring primary and secondary vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels are well below minimum thresholds for damage potential.

Excessive groundborne vibration from construction activities is generally associated with pile driving, and may also result from blasting or operation of drop balls, “pogo stick” compactors, or crack-and-seat equipment, none of which would be used for the proposed project. According to the Caltrans *Transportation and Construction Vibration Guidance Manual*, other typical construction equipment does not result in adverse vibration effects on people or structures, and the noise generated by the equipment typically overshadows any meaningful ground vibration effects on people.³⁵ In addition, vibration effects attenuate quickly with distance, such that a disturbing amount of vibration at the source may be insignificant a short distance away, depending on the underlying soil type.

The proposed project could potentially generate perceptible amounts of groundborne vibration at nearby locations, particularly during trenching activities. However, given the type of equipment that would be used for trenching, backfilling, and compaction, coupled with the distance to the nearest classrooms, any vibration at the most affected classroom would be expected to fall below the “barely perceptible” threshold of 0.01 peak particle velocity (PPV) recommended by Caltrans for evaluation of vibration impacts. Even if vibration were to reach a “distinctly perceptible” threshold of 0.04 PPV, such exceedances would be quite limited in duration and would merely constitute a temporary annoyance, with no potential for adverse health or structural effects. Therefore, based on the preceding analysis, the proposed project would have a less-than-significant impact from groundborne noise and vibration.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: No permanent noise would be generated by the proposed project. The only potential source of noise would be short-term noise generated during excavation of trenches. Please see Section XII(a), above, for additional information.

³⁵ California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, September 2013.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The temporary construction noise that would be generated during implementation of the project is addressed in Section XII(a), above.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no airports within 2 miles of the project; Oakland International Airport is located slightly more than 2 miles southeast of Alameda High School. In any event, the project would not expose people living and working in the area to excessive noise levels from airport operations.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: There are no private airstrips in the vicinity of the project.

XIII. POPULATION AND HOUSING – *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not create new housing and would not construct new infrastructure. Therefore, it would have no potential to induce population growth.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project would not displace any existing housing; the project would have no effect on housing.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: See Section XIII(b), above.

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Fire response to the project site would be provided by the Alameda Fire Department (AFD), which operates four stations located throughout the City (a fifth station was closed in 2009). The AFD responds to approximately 14,000 alarms each year, about 71 percent of them for emergency medical service.³⁶ In 2015 the Department had a Citywide average response time 4 minutes and 23 seconds. First response in the event of a fire or medical emergency would be provided by Fire Station No. 1, located at 2401 Encinal Avenue.

The proposed project would not cause a substantial increase in demand for fire protection or emergency medical response services. It would not authorize construction of new structures, and would therefore have no effect on fire protection services, and it would not increase the population of the project area. While there is a possibility that a medical emergency requiring AFD response could occur during construction of the seismic upgrade of Alameda High School, this would be an isolated occurrence that would be well within the AFD's existing response capabilities, and would not result in a need for construction of new fire facilities. Therefore, the project's potential impact on fire protection services would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Police protection would be provided to the project by the Alameda Police Department (APD), which operates out of a central station at 1555 Oak Street. The APD has a force of 88 sworn officers and 32 non-sworn full-time personnel.³⁷ The APD's service area is divided into five patrol sectors; the project area is located in Sector 3.

³⁶ Alameda Fire Department, Response Data, accessed May 10, 2016 at: <https://alamedaca.gov/fire/response-data>.

³⁷ City of Alameda Police Department, About the Alameda Police Department, accessed May 10, 2016 at: <https://alamedaca.gov/police/about-alameda-police-department>.

The proposed project would not increase the population of Alameda, would not develop any new land uses, and would not generate new employees. Therefore, the proposed project would be expected to have no effect on demand for police protection services.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Schools?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The project would not create new housing and would not increase the population of the City of Alameda. There is therefore no potential for the project to adversely affect schools.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Parks?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: As noted in Section IX(c), above, the project would not increase the population of Alameda, and therefore the project would have no effect on the demand for park services.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Other public facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As noted in Section IX(c), above, the project would not increase the population of Alameda, and therefore the project would have no effect on the demand for other public facilities such as libraries.

XV. RECREATION –

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As discussed in Section IX(c), above, the project would not increase the population of Alameda, and therefore it would have no effect on existing parks or other recreational facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project does not include construction of any recreational facilities.

XVI. TRANSPORTATION/TRAFFIC — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: The proposed project is not expected to increase the number of students, teachers, or staff at Alameda High School or add to the resident population of Alameda. Therefore, the project would generate no operational traffic and would have no long-term effect on the existing circulation system in the City of Alameda or in the greater Bay Area. While some short-term traffic would be generated by construction workers traveling to and from the site during the seismic upgrade, such traffic would be extremely limited both in magnitude and duration, and would not be expected to have a noticeable effect on the existing circulation system or conflict with the City’s traffic standards.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The Alameda County Congestion Management Agency (CMA) is responsible for ensuring local government conformance with the Congestion Management Program (CMP) applicable to the City of Alameda. The threshold for CMP analysis in Alameda County is 100 peak-hour trips. There is no potential for the project’s short-term, construction-related traffic to generate 100 peak-hour trips. Therefore, the project would not conflict with the Alameda County CMP.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would have no effect on air traffic patterns.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) <i>Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not create new roads or intersections or alter existing roadways, either on or off the high school campus. There is no potential for the project to create new traffic hazards or increase existing traffic hazards.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) <i>Result in inadequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: For the reasons discussed in Section XVI(d), above, the project would have no effect on emergency access.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) <i>Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety to such facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As discussed in Section XVI(a), above, the project would generate no operational traffic. The amount of short-term construction traffic that would be generated by contractors during the seismic upgrade would be extremely limited. There are no aspects to the proposed project with the potential to conflict with adopted policies, plans, or programs pertaining to

public transit, bicycle, or pedestrian facilities, or to decrease the performance or safety of such facilities.

XVII. UTILITIES AND SERVICE SYSTEMS — *Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Although the project buildings have been closed for the past four years, there has been a history of wastewater generation at the site related to the prior use of the buildings as classrooms and AUSD office space. Once the proposed seismic retrofits have been completed, the project buildings would be returned to their former classroom use, and wastewater would again be generated at the site. However, the project is not expected to cause a net increase in wastewater generation in comparison to the recent past generation at the site, and therefore would have not potential to exceed applicable wastewater treatment requirements.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: Wastewater generated at the project site is treated at the East Bay Municipal Utility District’s wastewater treatment plant in Oakland, located adjacent to the eastern entrance to the San Francisco-Oakland Bay Bridge. The plant treats an average of 63 million gallons a day (MGD) of wastewater, while the plant has primary treatment capacity of 320 MGD and secondary treatment capacity of 168 MGD.³⁸ There is a significant amount of excess treatment capacity at the plant, and no potential for the project to result in a need to expand the existing facilities.

Once the seismic repairs are complete, the proposed project would not result in a net increase in the consumption of water relative to the historical usage at the site. The school buildings would be returned to classroom use by students and teachers, consistent with the prior use of the buildings. Due to the long history of operation of the project buildings as classrooms, the water demand associated with the project site has long been factored in to the water supply planning that is performed on a regular basis by the East Bay Municipal Utility District (EBMUD), the water supplier in the City of Alameda. Similar to water agencies throughout the State of

³⁸ East Bay Municipal Utility District, Wastewater Treatment, Accessed May 10, 2016 at: <http://www.ebmud.com/wastewater/collection-treatment/wastewater-treatment/>.

California, water supply shortages can occur in EBMUD’s service area during periods of prolonged drought. However, treatment capacity is not a constraint in the EBMUD water supply system. The treatment plant can filter and treat more than 375 MGD,³⁹ while current water demand in the District is about 190 MGD, which is projected to increase to around 230 MGD by 2040.⁴⁰ Thus, there is more than adequate existing water treatment capacity for EBMUD water customers, and the proposed project would not result in a need to construct new or expanded water treatment facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: The proposed project would not affect existing stormwater drainage facilities. It would not create new impervious surfaces or otherwise affect long-established drainage patterns within the project area. The project would not cause any increase in the generation of stormwater. It would therefore have no effect on stormwater drainage facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: As discussed in Section XVII(b), above, the project would have no effect on water demand and, therefore, the project would have no effect on water supplies.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

³⁹ East Bay Municipal Utility District, Water Quality, Accessed May 10, 2016 at: <http://www.ebmud.com/water-and-drought/about-your-water/water-quality/>.

⁴⁰ East Bay Municipal Utility District, Water Resources Planning Division, *Draft Urban Water Management Plan 2015*, Table 4-5: Preliminary EBMUD Baseline Supply and Demand Analysis, April 2016.

Explanation: See Section XVII(b), above.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) <i>Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Although there would be no ongoing operational generation of solid waste associated with the proposed project, a substantial amount of construction and demolition (C&D) debris would be generated by the project. C&D waste from the project is expected to include dirt and organic debris, concrete, steel, carpet, glass, plaster, gypsum board, untreated wood, linoleum, built up roofing, acoustic ceiling tiles, clad copper wiring, cast iron and steel piping, copper and ABS piping, plumbing fixtures, mechanical equipment, lighting fixtures, and hardware. There would also be some hazardous waste that would be disposed of at a hazardous waste disposal facility by a qualified hazardous waste contractor.

The construction contracts for the proposed work will require contractors to divert at least 75 percent of all waste generated to re-use or recycling. This would exceed the 50-percent diversion required by the City's Waste Management Plan Ordinance, and would help minimize the amount of waste disposed of at Altamont Landfill, the landfill that serves the City of Alameda. The amount of waste that would require landfill disposal would be a minute fraction of the daily waste stream disposed of at Altamont Landfill, which has available capacity through 2045.⁴¹ There is no potential for the proposed seismic upgrade project to generate solid waste that would exceed the existing permitted capacity of Altamont Landfill.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) <i>Comply with federal, state, and local statutes and regulations related to solid waste?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: Projects that would cost \$100,000 or more to construct must divert at least 50 percent of all construction and demolition (C&D) debris generated by the project, as set forth in the City's Waste Management Plan Ordinance, and projects falling below this threshold are still encouraged to divert at least 50 percent of all construction and demolition (C&D) debris generated during construction.⁴² The proposed seismic retrofit project will be subject to this ordinance and, as noted above, the AUSD is expected to include a requirement for 75-percent diversion in all construction contracts issued for the project. Construction contractors will also be expected to comply with applicable State and federal regulations pertaining to solid waste, and there is no reason to expect that implementation of the proposed project would result in any conflicts with applicable regulations.

⁴¹ Waste Management, Inc., Altamont Landfill Sustainability, accessed May 19, 2016 at: <http://altamontlandfill.wm.com/sustainability/index.jsp>.

⁴² City of Alameda, Municipal Code, Chapter XXI, Article VI, Section 21-24.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE —

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) <i>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?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation: The project would not adversely affect biological resources, including fish habitat or fish populations. The possibility for damage to historic or prehistoric cultural resources is remote, but mitigation measures have been identified in this Initial Study that would ensure that in the event cultural resources were encountered during project-related activities, potential impacts to such resources would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) <i>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.)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation: No significant cumulative impacts were identified for the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) <i>Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explanation: No significant direct or indirect adverse impacts on human beings would result from implementation of the proposed project.

REPORT PREPARATION

This Initial Study/Mitigated Negative Declaration was prepared by Douglas Herring & Associates, with assistance from the Alameda Unified School District. The evaluation of potential impacts to historic resources was performed by Knapp Architects.

MITIGATION MEASURES

Cultural Resources

Mitigation Measure CR-1: The Alameda Unified School District (AUSD) shall advise the project construction contractor at a pre-construction conference of the potential for encountering cultural resources during construction and the AUSD's responsibilities under the California Environmental Quality Act (CEQA) should such resources be encountered, as set forth in Section 15064.5 of the *CEQA Guidelines* and Public Resources Code Section 21083.2. This advisory shall also be printed on the Plans and Specification Drawings for this project.

Mitigation Measure CR-2: If any cultural artifacts are encountered during site grading or other construction activities, all ground disturbance within 100 feet of the find shall be halted until the AUSD is notified and a qualified archaeologist can identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The results of any additional archaeological effort required through the implementation of Mitigation Measures CR-2 or CR-3 shall be presented in a professional-quality report, to be submitted to the AUSD and the Northwest Information Center at Sonoma State University in Rohnert Park.

Mitigation Measure CR-3: In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and a qualified archaeologist shall notify the Office of the Alameda County Coroner and advise that office as to whether the remains are likely to be prehistoric or historic period in date. If determined to be prehistoric, the Coroner's Office will notify the Native American Heritage Commission of the find, which, in turn, will then appoint a "Most Likely Descendant" (MLD). The MLD in consultation with the archaeological consultant and the project sponsor, will advise and help formulate an appropriate plan for treatment of the remains, which might include recordation, removal, and scientific study of the remains and any associated artifacts. After completion of analysis and preparation of the report of findings, the remains and associated grave goods shall be returned to the MLD for reburial.

Mitigation Measure CR-4: During the pre-construction conference required by Mitigation Measure CR-1, the AUSD shall advise the project construction contractor to observe the following precautions: If any paleontological resources are encountered during subsurface disturbance, all ground disturbance shall be halted until the services of a qualified paleontologist can be retained to identify and evaluate the scientific value of the resource(s) and, if necessary, recommend mitigation measures to document and

prevent any significant adverse effects on the resource(s). Significant paleontological resources shall be salvaged and deposited in an accredited and permanent scientific institution, such as the University of California Museum of Paleontology (UCMP).