

# Initial Study/Mitigated Negative Declaration North Campus School Site

Prepared for:

Caliber Schools  
P.O. Box 5282  
Richmond, CA 94805

Contact: Markus Mullarkey  
Chief Operating Officer

**AECOM**

May 2019



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# 1 INTRODUCTION

## 1.1 INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

This document contains an initial study (IS), with supporting environmental studies, which concludes that a mitigated negative declaration (MND) is the appropriate California Environmental Quality Act (CEQA) document for the North Campus School (project). This IS/MND has been prepared in accordance with Public Resources Code Section 21000 et seq. and the CEQA Guidelines, California Code of Regulations Section 15000 et seq.

An initial study is conducted by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with CEQA Guidelines Section 15063, an environmental impact report (EIR) must be prepared if an initial study indicates that the proposed project under review may have a potentially significant impact on the environment that cannot be initially avoided or mitigated to a level that is less than significant. A negative declaration may be prepared if the lead agency finds that the proposed project would not have a significant effect on the environment, and therefore prepares a written statement describing the reasons why the preparation of an EIR is not required (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070:

A public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- a) The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or
- b) The initial study identifies potentially significant effects, but:
  - (1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
  - (2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

## 1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. In accordance with CEQA Guidelines Section 15051(b) (1), “the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose.” Based on the criterion above, the West Contra Costa Unified School District (WCCUSD/District) is the lead agency for the proposed North Campus School project.

## 1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed project. This document is divided into the following sections:

- ▶ **1.0. Introduction** – This section provides the introduction, and describes the purpose and organization of the document.
- ▶ **2.0. Project Information** – This section describes the proposed project in detail. It also identifies any other public agencies whose review, approval, and/or permits may be required.
- ▶ **3.0. Environmental Checklist** – This section describes the environmental setting and overview for each of the environmental subject areas. It evaluates a range of impacts classified as “no impact,” “less than significant impact,” “less than significant impact with mitigation incorporated,” and “potentially significant impact” in response to the environmental checklist.
- ▶ **4.0 References** – This section includes the list of documents referenced in the document.

## 1.4 REQUIRED PERMITS AND APPROVALS

The degree to which the District may be subject to local regulations is addressed by Section 53090 et seq. of the California Government Code, which permits the District to exempt itself from local regulations. Local regulations are analyzed and compliance with said regulations is assumed in this document and outlined throughout, as needed.

## 1.5 OTHER AGENCY ACTIONS

The project would require the following approvals:

- ▶ **Contra Costa County.** The project would require encroachment permits from the County for street encroachment.
- ▶ **California State Department of Education.** The California State Department of Education is responsible for reviewing and approving all school sites, regardless of the funding source. The Department of Education also administers certain other Government Code requirements as they relate to school construction and safety.
- ▶ **Department of State Architect.** Pursuant to Section 17280 et seq. of the Education Code, the Department of State Architect (DSA) provides design and construction oversight for K–12 schools, community colleges, and various other State-owned and -leased facilities.
- ▶ **San Francisco Regional Water Quality Control Board.** Because more than 1 acre of ground surface will be disturbed, the project will require a Storm Water Pollution Prevention Plan (SWPPP) in compliance with the “General Construction Activity Storm Water Permit” issued by the State Water Resources Control Board.

## **2 PROJECT INFORMATION**

### **2.1 REGIONAL LOCATION**

The project site is located at 2465 Dolan Way in western Contra Costa County (Figure 2.1, Regional Location), between the cities of Richmond to the south and Pinole to the north. The project site is located approximately 0.3 mile east of California State Route 123 (SR 123), 0.5 mile west of Interstate 80 (I 80), and 7 miles north of the Richmond BART Station. Regional access to the project site is via the Richmond Parkway and San Pablo Avenue. Dolan Way provides local access to the project site and borders the site to the south.

### **2.2 PROJECT SITE LOCATION**

The project site is 9.12 acres, and is in the Tara Hills community in unincorporated Contra Costa County. The project site Assessor's Parcel Number is 403-220-005. Both Shamrock Drive and Tara Hills Drive provide indirect access to the project from SR 123. The project site is designated as Public and Semi-Public in the Contra Costa County General Plan and is surrounded entirely by Single-Family Residential – High-Density zoning (Figure 2.2, Project Location).

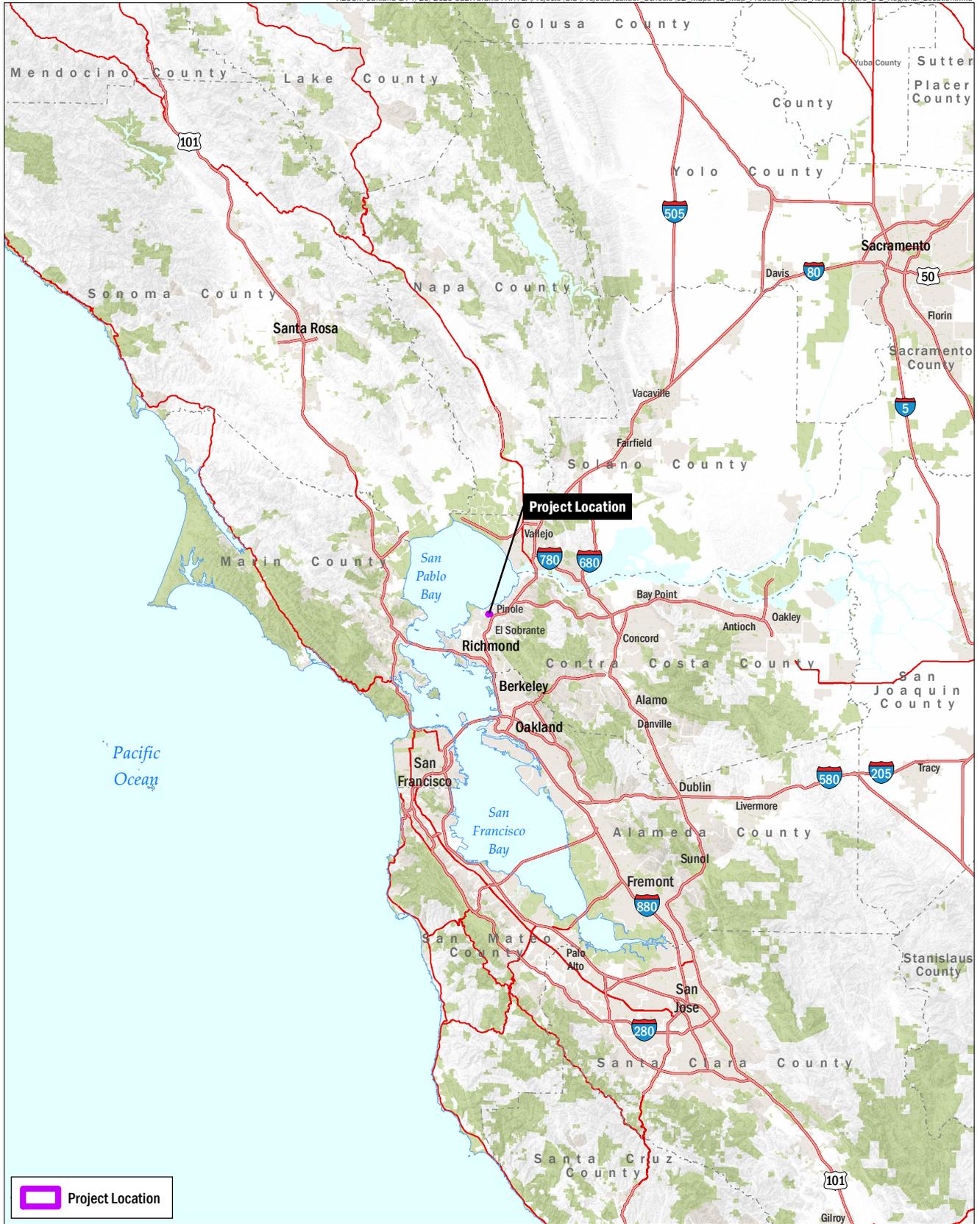
### **2.3 PROJECT SITE HISTORY**

The project site is currently developed as a school, and served as the former site for Kerry Hills Elementary School, which closed in 1989. The building has since been used for various academic and administrative programs by the WCCUSD. The school was originally constructed in 1964, with a capacity of 676 students, based on the State standards at the time. It appears to have served as many as 800+ students in the 1960s (when additional portable classrooms were added) before shrinking in enrollment and eventually being shuttered in 1989. The site currently houses the WCCUSD Special Education program (approximately 120 staff). The North Campus site also serves various community functions; the most important being the baseball fields that are actively used by Tara Hills Baseball.

### **2.4 PROJECT SITE EXISTING CONDITIONS**

The topography of the site is generally flat. The site was originally created by cutting into a former ridge area and placing fill on the flanks of the ridge. The grading created engineered man-made slopes flanking the northwestern edge of the site approximately 50 to 75 feet high, and 40 to 50 feet high along the northeastern edge of the site. The slopes are graded to approximately 2:1 (horizontal: vertical) (Cornerstone Earth Group, 2018). A dirt pedestrian path runs along the northeastern edge of campus from Dolan Way down to Dundee Road. The southern half of the site is occupied by four baseball fields. Low grasses, bushes, and mature trees cover the north- and west-facing slopes (Millennium Consulting Associates, 2018).

The project site contains one freestanding, 39,960-square-foot school building; ten 1,000-square-foot portables to the north, east, and west of the building; a basketball court; baseball fields; and a parking lot. The buildings are surrounded by existing asphalt-concrete pavement (Millennium Consulting Associates, 2018a).



Data Sources: AECOM, 2019.

**FIGURE 2-1**  
*Regional Location*



Data Sources: Esri Imagery, 2017; AECOM, 2019.

## **2.5 PROJECT DESCRIPTION**

The project would include construction and operation of Caliber: Beta Academy, a public charter school. The school capacity would be 900 students, with anticipated full enrollment at school opening in fall 2021. The school would also include approximately 90 staff, including instruction, administration, and maintenance personnel.

The project would include the remodeling of the existing one-story school building, the removal of all existing portables, and the addition of two new buildings; as well as a new one-story building to the northwest of the existing building, and a new, smaller one-story structure to the southwest of the existing building and north of the baseball fields (Figure 2.3 – Proposed Site Plan). The new buildings would include classrooms and administration offices.

The remodeled existing building would be used for 1st- through 5th-grade classrooms, as well as student support, office space, and conference space. The new building to the northwest would be used for 6th- through 8th-grade classroom space. The new building to the southwest would accommodate kindergarten uses, and one pre-K classroom.

The existing sports fields and recreation areas, as well as the parking lot, would be retained. The project would include up to four new outdoor play areas, as well as an outdoor learning center (Figure 2-3). A new outdoor recreation area for the 6th through 8th grades would be developed on the northern portion of the project site; a 3rd- through 5th-grade playground/hardscape area would be developed on the eastern portion of the site; and a kindergarten playground and 1st- and 2nd-grade playground would be developed on the western portion of the site. The playgrounds and buildings would be accessible via internal walkways. The existing hardcourt, which accommodates a basketball court, would be relocated to the northeastern portion of the project site to be used by 5th- through 8th--graders.

### **2.5.1 CLASSROOMS AND BUILDINGS DESIGN**

The remodeled building would include 20 core classrooms, two Special Ed classrooms, two elective/flex classrooms, a library, restrooms, student support breakout space, faculty offices, a cafeteria, and administrative offices for the Lower School (grades TK through 5). The new 6th through 8th-grade building to the northwest would include nine core classrooms, three science classrooms, one Special Ed classroom, two elective/flex classrooms, restrooms, student support breakout space, and administrative uses. The new TK/Kindergarten building to the southwest would include five core classrooms and associated restrooms.

The project would be designed per the California Department of Education and Division of the State Architect requirements for school design. In addition to school buildings, the project would include necessary improvements to the recreational facilities in the western portion of the project site, such as basketball courts. Project improvements would include resurfacing and restriping of the existing hardscape. Improvements to the baseball fields would not be part of the project.

04/26/19 hk \1578sr-market.us.ie.us\data\GIS\NetShare\GIS\Graphics\North Campus School IS\Fig2-3\_Prop\_Site\_Plan\_NorthCampus.indd



Source: Lionakis, 2019.

## **2.5.2 CIRCULATION AND PARKING**

The project would maintain the existing ingress and egress points from Dolan Way. Main campus access would be from Dolan Way, with a secondary exit only from Dolan Way west of the main ingress point. The main parking lot off Dolan Way and the secondary smaller lot to the east of the campus would be retained as part of the project. The parking lots would be restriped and resurfaced. A total of 90 parking spaces would be available to staff, parents, and visitors to the site, with 90 percent anticipated to be used by staff, and the remainder for visitors.

Pedestrian access to the project site would be available from Dolan Way and the existing sidewalks. Internal walkways would connect the campus buildings and recreational areas. The existing bus stop for Route 18 would be maintained along Dolan Way opposite Mahan Way.

## **2.5.3 LANDSCAPING**

The project site would include landscaping around the school site. The landscaped area would not exceed 25 percent of the open space, which would include playing fields and other recreational areas. Trees would be planted near the school buildings to provide shade for student activities. Additionally, drought-resistant plants would be planted as part of the project landscaping plan. The project would be compliant with the Model Water Efficient Landscape Ordinance, as required by the Division of the State Architect for water-efficient landscaping and irrigation.

## **2.5.4 LIGHTING**

The project would include a variety of indoor and outdoor lighting. Lighting would be provided for adequate illumination for safe access and basic security. Sport fields and other recreational areas would not include lighting for nighttime activities. Exterior lighting would include wall-mounted fixtures on buildings, typical of school settings. The lights would be pole lights, with a maximum height of 25 feet.

## **2.6 CONSTRUCTION**

Project construction would take approximately 14 months. Due to the existing building and the retention of the circulation and parking areas, less than 50 percent of the site's surface area would be graded. Project construction would not require extensive cut-and-fill operations, because the developed building pad area is already in place.

The Contra Costa County Ordinance Code does not have a noise ordinance, but it addresses construction noise impacts under Grading Ordinance Section 716-8.1008, stating that operations shall be controlled to prevent nuisances to public and private ownerships because of dust, drainage, removal of natural support of land and structures, encroachment, noise, and/or vibration. The City of Richmond, which is the closest municipality to the project site, does have a Community Noise Ordinance (City of Richmond 2019) which prohibits the use of construction equipment from 7:00 p.m. to 7:00 a.m. on weekdays; and from 8:00 p.m. and 9:00 a.m. on weekends. Therefore, construction activities would generally take place between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and between 9:00 a.m. and 8:00 p.m. on weekends.

Construction activities would incorporate site preparation activities, necessary excavation and grading, pavement and concrete walkways, and building construction activities such as laying foundation. Construction equipment

would include excavators, backhoes, bobcats, forklifts, compactors, concrete mixers and pump, scrapers, front loaders, jackhammers, and electric lifts.

Construction vehicles would access the site via Dolan Way and Shamrock Drive, which connects to San Pablo Avenue. Because most construction activities would be internal to the project site, street closures are not anticipated.



### 3 INITIAL STUDY CHECKLIST

Section 3 is the analysis portion of this Initial Study. The section evaluates the potential environmental impacts of the project. Section 3 includes 21 environmental subsections, identified below.

- |                                       |  |
|---------------------------------------|--|
| 1. Aesthetics                         | 12. Mineral Resources                  |
| 2. Agriculture and Forestry Resources | 13. Noise                              |
| 3. Air Quality                        | 14. Population and Housing             |
| 4. Biological Resources               | 15. Public Services                    |
| 5. Cultural Resources                 | 16. Recreation                         |
| 6. Energy                             | 17. Transportation                     |
| 7. Geology and Soils                  | 18. Tribal Cultural Resources          |
| 8. Greenhouse Gas Emissions           | 19. Utilities and Service Systems      |
| 9. Hazards and Hazardous Materials    | 20. Wildfire                           |
| 10. Hydrology and Water Quality       | 21. Mandatory Findings of Significance |
| 11. Land Use and Planning             |  |

Each environmental issue subsection is organized in the following manner:

The **Environmental Setting** summarizes the existing conditions at the regional, subregional, and local levels, as appropriate; and identifies applicable plans and technical information for the particular issue area.

The **Discussion** section provides a detailed discussion of each environmental issue checklist question. The level of significance for each topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this Initial Study:

- ▶ **Potentially Significant Impact.** This response is appropriate when there is substantial evidence that an effect is significant even with implementation of recommended mitigation measures.
- ▶ **Less than Significant with Mitigation Incorporated.** This response applies when the incorporation of mitigation measures would reduce an effect from “Potentially Significant Impact” to a “Less-than-Significant Impact.” The Lead Agency must describe the mitigation measures when significant impacts are identified by the analysis, and briefly explain how they reduce the effect to a less-than-significant level.
- ▶ **Less-than-Significant Impact.** A less-than-significant impact is used when the project would have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- ▶ **No Impact.** This impact significance applies when the project would have no impact on the environment for the particular issue, or they are not relevant to the project.

### 3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. Aesthetics. Except as provided in Public Resources Code Section 21099, would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.1.1 ENVIRONMENTAL SETTING

##### REGIONAL CONTEXT

The 9.12-acre project site is located in the Tara Hills community in unincorporated Contra Costa County (County). In general, the dominant visual characteristics in West Contra Costa County are residential, commercial, and industrial development, with some preserved open space, including shoreline, interior parks, and other areas dispersed throughout the County.

##### PROJECT SITE

The project site is currently developed as a school and served as the former site of the Kerry Hills Elementary School until 1989. The project site is in an urbanized area, on a man-made plateau higher than the land to the west, and slightly lower than the neighborhood to the east. The surrounding area consists of mainly residential development. The visual character of the project area is that of an urbanized area with vistas of San Francisco Bay.

##### SCENIC VISTAS

Scenic vistas are areas of natural beauty with features such as topography, watercourses, rock outcrops, and natural vegetation that contribute to the landscape’s visual quality. The Contra Costa County General Plan designates San Pablo Bay as a Scenic Waterway on the Scenic Resources map (Contra Costa County, 2005). Due to the location and topography of the project site, there is an unobstructed panoramic view of San Pablo Bay directly west from Dolan Way, as well as from the project site. The school buildings are visible in the foreground for travelers along Dolan Way, and do not block the Bay views.

## SCENIC RESOURCES WITHIN SCENIC HIGHWAYS

Scenic resources associated with scenic highways typically include trees, rock outcroppings, and historic buildings. The Contra Costa County General Plan identifies multiple scenic highways, expressways, and scenic routes. The scenic routes identified in the general plan, which also includes California State Scenic Highways, are portions of SR 4, 24, 242, 160, and Interstate 580, Interstate 80, and Interstate 580 traverse the City of Richmond, but are not designated as Scenic Highways (Contra Costa County, 2005). There are no scenic highways or routes in the project area.

## LIGHT AND GLARE

The project site is currently developed as a school in a residential area and does not contain any sources of substantial light and glare. The residential area surrounding the project site contains streetlights along Dolan Way and Shamrock Drive.

### 3.1.2 DISCUSSION

#### a) Have a substantial adverse effect on a scenic vista?

*Less than Significant.* The project would remove existing portables, renovate the existing school facility, and add two new one-story buildings at the project site. One new structure would be in the northwestern corner of the project site, adjacent to the existing baseball fields. Because of the site topography, the project would not obstruct views of the San Pablo Bay from Dolan Way.

The project site is not near any designated scenic vistas, ridgelines, or routes, as outlined in the Contra Costa County General Plan. Therefore, the project would have a less-than-significant impact on a scenic vista.

#### b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

*No Impact.* As described above, the project site is not located near any State-designated scenic highways or locally designated scenic routes and would not be visible from any State-designated scenic highways (Caltrans, 2011). Therefore, the project would not substantially damage scenic resources within a State scenic highway and would have no impact.

#### c) In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

*Less than Significant.* The project site is in an urbanized area surrounded by residential areas. The project would renovate the existing one-story school building and add two additional one-story buildings, similar in visual character to the existing school site. The project is under the jurisdiction of WCCUSD, and the Division the State Architect will review construction plans to ensure they comply with code requirements related to structural safety, fire and life safety, accessibility, and sustainability. The project would maintain a similar visual character to the existing development on the project site. The new structures would match and improve the existing visual character at the project site, and therefore, the project would have a less-than-significant impact.

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

*Less than Significant.* The project would not introduce new sources of substantial light or glare in the project area. As discussed in Section 2, Project Information, the project would include a variety of indoor and outdoor lighting, which would be typical for a school site. Lighting would be provided for safe access and basic security, including nighttime lighting. Sport fields and other recreational areas would not include nighttime lighting.

Exterior lighting would include wall-mounted fixtures on buildings, maximum 25-foot-high pole lights, and bollard lighting. Pole-mounted lighting would be designed to face downward and be directed away from surrounding residential land uses. The project could have potential nighttime lighting associated with vehicle use. Nonetheless, most school pick-up and drop-off would take place during daytime hours.

Therefore, even though the project would introduce new sources of nighttime lighting and glare in the project area, the project would be consistent with the existing and surrounding land uses and would have a less-than-significant impact.

**Mitigation Measures**

None required.

## 3.2 AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>II. Agriculture and Forestry Resources.</b>				
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department 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 Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p>				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 3.2.1 ENVIRONMENTAL SETTING

#### AGRICULTURAL RESOURCES

The project site is currently developed as a school on Public and Semi-Public land surrounded by Single-Family Residential – High-Density designated areas and is not used for agricultural activities. According to the California

Department of Conservation (DOC) Important Farmland Map for Contra Costa County (DOC, 2016), the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site and adjacent properties are designated as Urban and Built-Up Land, which is defined as land occupied by structures with a building density of at least 1 unit per 1.5 acres (DOC, 2016). The DOC does not consider Urban and Built-Up Land to be Important Farmland. Under the California Land Conservation Act of 1965, also known as the Williamson Act, local governments can enter into contracts with private property owners to protect land (within agricultural preserves) for agricultural and open space purposes. No parcels in or adjacent to the project site are under Williamson Act contracts, because they are in an urbanized area (DOC, 2016).

## **FORESTRY RESOURCES**

The project site is in a developed and urbanized area. Trees on the project site consist of planted ornamental species. These trees do not meet the definition of forest land or timberland as defined by Public Resources Code Sections 12220(g), 4526, and 51104(g).

### **3.2.2 DISCUSSION**

**a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

*No Impact.* As discussed above, the project site is designated Urban and Built-Up Land by the DOC. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. The project would have no impact.

**b) Conflict with existing zoning for agricultural use or a Williamson Act contract?**

*No Impact.* The project site is not zoned for agricultural use. No parcels in or adjacent to the project site are under Williamson Act contracts (DOC, 2016). Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. The project would have no impact.

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

*No Impact.* The project site is not zoned as forest land, timberland, or a Timberland Production Zone. Therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. The project would have no impact.

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

*No Impact.* The project site is in an urbanized area. Trees on the project site do not meet the definition of forest land or timberland as defined by Public Resources Code Sections 12220(g), 4526, and 51104(g). Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. The project would have no impact.

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

*No Impact.* As described above, the project site is in a developed, urbanized area and is not zoned for agricultural or forestry uses. The project would not result in residential uses adjacent to farmland, nor would it result in or encourage the extension of roadways or public service/utility infrastructure into an undeveloped area. Therefore, the project does not involve changes in the existing environment that could result in conversion of farmland to nonagricultural use. The project would have no impact.

### **Mitigation Measures**

None required.

### 3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III. Air Quality.</b>				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.3.1 ENVIRONMENTAL SETTING

The project site is located in unincorporated Contra Costa County, in the San Francisco Bay Area Air Basin (SFBAAB). The Bay Area Air Quality Management District (BAAQMD) regulates air quality in the SFBAAB.

BAAQMD monitors air quality in Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of Solano and Sonoma Counties in the SFBAAB. Local climatological effects, including wind speed and direction, temperature, inversion layers, and precipitation and fog, can exacerbate air quality problems in the SFBAAB. The climate of the SFBAAB is characterized by warm, dry summers and mild winters.

#### AIR QUALITY STANDARDS

Air quality is defined as the concentration of pollutants in relation to their impact on human health. Ambient concentrations of air pollutants are determined by the amount of emissions released by pollutant sources, and the ability of the atmosphere to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the project area are influenced by factors such as topography, meteorology, and climate, as well as the quantity of emissions released by air pollutant sources.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the United States Environmental Protection Agency (EPA) and the California Air Resources

Board (CARB) as being of concern both on a nationwide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); sulfur dioxide (SO<sub>2</sub>); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM<sub>10</sub>), and PM equal to or less than 2.5 micrometers in diameter (PM<sub>2.5</sub>). Because the air quality standards for these air pollutants are regulated using human and environment health-based criteria, they are commonly referred to as “criteria air pollutants.”

Areas are classified under the Federal Clean Air Act and California Clean Air Act as attainment, non-attainment, or maintenance (previously non-attainment and currently attainment) for each criteria pollutant based on whether the federal and State air quality standards have been achieved. With respect to federal standards, the SFBAAB is designated as a nonattainment area for ozone and PM<sub>2.5</sub>, and as an attainment or unclassified area for all other pollutants. With respect to the State standards, the SFBAAB is designated as a nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>, and as an attainment or unclassified area for all other pollutants (BAAQMD, 2017d).

## **TOXIC AIR CONTAMINANTS**

In addition to criteria air pollutants, both federal and State air quality regulations also focus on toxic air contaminants (TACs). A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may otherwise pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their toxicity or health risk may pose a threat to public health even at low concentrations. Sources of TACs include industrial processes, such as petroleum refining and chrome plating operations; commercial operations, such as gasoline stations and dry cleaners; and motor vehicle exhaust. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. According to the California Almanac of Emissions and Air Quality (CARB, 2013), the TAC diesel particulate matter (DPM) has potential to cause cancer and other health problems; and is especially a health hazard to children whose lungs are still developing, and to the elderly who may have other serious health problems. However, emissions of DPM are forecasted to decline; it is estimated that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects (CARB, 2016).

Naturally occurring asbestos (NOA) is the term applied to the natural geologic occurrence of any of six silicate minerals. NOA was identified as a TAC in 1986 by CARB and is known to be present throughout California. During grading and other construction activities, NOA can become released into the environment and cause a potential health hazard. However, based on the geologic setting in Contra Costa County, the project site is not near any areas likely to contain NOA (Department of Conservation, 2011).

## **SENSITIVE RECEPTORS**

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Some people are more affected by air pollution than others. The BAAQMD defines sensitive receptors as “facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly and people with illnesses” (BAAQMD, 2017a). Children, pregnant women, the elderly, those with existing health conditions, and athletes or others who engage in frequent exercise are especially vulnerable to the effects of air pollution and are considered sensitive receptors. Accordingly, land uses that are typically considered sensitive receptors include schools, daycare centers, parks and playgrounds, and medical facilities. Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in

sustained exposure to pollutants present. The closest sensitive receptors (residences) to the project area are approximately 275 feet from the project site.

### 3.3.2 DISCUSSION

#### a) Conflict with or obstruct implementation of the applicable air quality plan?

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

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

Projects that are consistent with the assumptions used in development of the air quality plan are considered to not conflict with or obstruct the attainment of air quality levels identified in the plan. Assumptions for emission estimates are based on population, employment, and land use projections taken from local and regional planning documents. As discussed in more detail in Section 3.11, Land Use and Planning, the project would be consistent with the County's Public and Semi-Public designation. Because the project would be developed on an existing school site, the project is consistent with the development assumptions for land uses and vehicle trips associated with the General Plan land use designation of the site, and the intensity of operational emissions has been accounted for in the air quality plan.

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

As described below in impact *b*), the project would not exceed any criteria pollutant emissions thresholds of significance recommended by BAAQMD and would comply with all BAAQMD Rules and Regulations.

Because the project is consistent with the Contra Costa County land use designations and does not exceed BAAQMD thresholds of significance, the project would be consistent with applicable air quality plans. This impact would be less than significant.

**b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

*Less than Significant.* The nonattainment status of regional pollutants is a result of past and present development within the SFAAB, and this regional impact is cumulative in nature rather than being attributable to any one source. A single project's emissions may be individually limited but could be cumulatively considerable when considered in combination with past, present, and future emissions sources within the air basin. If a project's emissions are below the BAAQMD thresholds of significance, the project is not considered to result in a cumulatively considerable contribution to a significant impact on regional air quality.

The BAAQMD CEQA Air Quality Guidelines are for informational purposes only and should be followed by local governments at their own discretion (BAAQMD, 2017a). The CEQA Air Quality Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or the air district to any specific course of regulatory action. The thresholds for criteria pollutants were developed through a quantitative examination of the efficacy of fugitive dust mitigation measures, and a quantitative examination of the allowable emissions limits for individual projects to avoid impeding the region's ability to attain and maintain ambient air quality standards. In addition, because regional air quality standards have been established for these criteria pollutants to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution, these trigger levels can also be used to assess project emissions and inform the project's impacts to regional air quality and health risks under CEQA.

Construction and operational emissions associated with the project were modeled using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 and compared to the BAAQMD thresholds of significance to determine the potential impacts; refer to Appendix AQ for model output files and assumptions used.

**CONSTRUCTION**

Project construction would occur over an approximately 14-month period, and would consist of site preparation activities, necessary excavation and grading, pavement and concrete walkways, and building construction activities such as laying foundation and constructing retaining walls. Because a building is already present, less than 50 percent of the site's surface would be graded; and project construction would not require any extensive cut-and-fill operations, because the developed building pad area is already in place. The analysis assumed approximately 2,222 cubic yards of material would be imported or exported during grading.

Ozone precursor emissions of reactive organic gases (ROG) and NO<sub>x</sub> are associated primarily with construction equipment exhaust. Fugitive PM emissions are associated primarily with fugitive dust generated during site preparation and grading, and vary depending on the soil silt content, soil moisture, wind speed, acreage of disturbance, vehicle travel to and from the construction site, and other factors. PM emissions are also generated by equipment exhaust and re-entrained road dust from vehicle travel on paved and unpaved surfaces.

Table 3.1 summarizes the annual and average daily emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub> exhaust, and PM<sub>2.5</sub> exhaust associated with construction of the project. The BAAQMD does not have quantitative mass emissions thresholds for fugitive PM<sub>10</sub> and PM<sub>2.5</sub> dust. Instead, the BAAQMD recommends that all projects, regardless of the level of average daily emissions, implement applicable best management practices (BMPs), including those listed as Basic Construction Measures in the BAAQMD CEQA Guidelines (BAAQMD, 2017a). The BMPs should be included

in the project’s description or recommended as mitigation in a CEQA-compliant environmental document. The following Basic Construction Measures would be implemented as part of project design.

**Table 3.1. Summary of Construction-Related Emissions**

Construction Year	Emissions			
	ROG	NO <sub>x</sub>	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>1</sup>
2020 Emissions (tons/year)	0.19	1.86	0.09	0.09
2021 Emissions (tons/year)	0.74	1.65	0.08	0.07
Total Emissions	0.93	3.50	0.17	0.16
Average Daily Emissions (lb/day) <sup>2</sup>	<b>6.02</b>	<b>22.75</b>	<b>1.11</b>	<b>1.03</b>
BAAQMD Significance Threshold	54	54	82	54
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes: lb/day = pounds per day; NO<sub>x</sub> = oxides of nitrogen; BAAQMD = Bay Area Air Quality Management District; PM<sub>10</sub> = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; PM<sub>2.5</sub> = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases

<sup>1</sup> PM<sub>10</sub> and PM<sub>2.5</sub> construction-related emissions and thresholds represent exhaust emissions only.

<sup>2</sup> Average daily emissions are calculated based on 22 working days per month over a 14-month construction period. See Appendix AQ for detailed modeling assumptions, outputs, and results.

Source: AECOM, 2019

As shown in Table 3.1, the estimated average daily emissions generated during construction would not exceed the BAAQMD thresholds. In addition, the proposed construction activities would be implemented in accordance with all applicable regulatory requirements, including BAAQMD’s Basic Construction Measures, and would reduce construction-related fugitive dust and exhaust emissions:

**Construction-Related Emissions.** *The following construction measures, as periodically amended by BAAQMD, are required for all proposed development projects to reduce construction-related fugitive dust and exhaust emissions:*

- (A) *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times daily.*
- (B) *All haul trucks transporting soil, sand, or other loose material off site shall be covered.*
- (C) *All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
- (D) *All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.*
- (E) *All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.*
- (F) *Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.*
- (G) *All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.*

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

Construction-related emissions would be below the recommended BAAQMD emission thresholds. Compliance with the above CARB and BAAQMD regulatory requirements would further reduce potential construction-related emissions below those estimated in Table 3.0-AQ1 and satisfy BAAQMD requirements. Therefore, construction of the project is not considered to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment. There would be a less-than-significant impact.

## OPERATIONS

Daily activities associated with long-term school operations would generate criteria air pollutant emissions and precursors from mobile, energy, and area sources. Mobile sources include vehicle trips arriving at and departing from the school. Area sources include consumer products (i.e., cleaning supplies, aerosols, toiletries), natural gas combustion for water and space heating, landscape maintenance equipment, and periodic architectural coatings. Although construction emissions are considered short-term and temporary, operational emissions are considered long-term, and would occur for the lifetime of the project. Therefore, operational emissions have greater potential to affect the attainment status of an air basin, particularly as a result of increased traffic. The project's daily trip generation was calculated based on CalEEMod defaults which are based on the 9th Edition of the ITE Trip Generation Manual. As shown in Appendix AQ, the analysis assumed the project would generate approximately 1,458 trips per day.

The analysis also modeled existing operational emissions associated with the existing WCCUSD Special Education program, consisting of approximately 120 staff. As shown in Table 3.2, the project's daily and net operational emissions would not exceed the recommended BAAQMD thresholds. This comparison to the BAAQMD thresholds shows that school operations would not contribute substantially to any existing or projected air quality violation and would not conflict with efforts to reach attainment of any air quality standards. Therefore, the school's long-term operational impact is not considered to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment. There would be a less-than-significant impact.

**Table 3.2. Summary of Long-Term Operational Emissions**

Emissions Source	Average Daily Emissions (lb/day) <sup>1</sup>				Maximum Annual Emissions (tons/year)			
	ROG	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	ROG	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Project Operations <sup>2</sup>	8.42	14.79	9.89	2.77	0.76	1.33	0.89	0.25
Existing Operations <sup>2</sup>	2.61	3.02	1.65	0.48	0.23	0.27	0.15	0.04
<b>Net Operational Emissions</b>	<b>5.82</b>	<b>11.77</b>	<b>8.24</b>	<b>2.30</b>	<b>0.52</b>	<b>1.06</b>	<b>0.74</b>	<b>0.21</b>
<b>BAAQMD Significance Threshold</b>	<b>54</b>	<b>54</b>	<b>82</b>	<b>54</b>	<b>10</b>	<b>10</b>	<b>15</b>	<b>10</b>
<b>Exceeds Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes: Total emissions may not add correctly due to rounding.

lb/day = pounds per day; NO<sub>x</sub> = oxides of nitrogen; BAAQMD = Bay Area Air Quality Management District; PM<sub>10</sub> = respirable particulate matter; ROG = reactive organic compound

See Appendix AQ for detailed modeling assumptions, outputs, and results.

<sup>1</sup>Average daily emissions calculated assuming 180 days in a school year.

<sup>2</sup> Project operational emissions were modeled for Year 2021. Existing operational emissions were modeled for Year 2019.

Source: Data compiled by AECOM in 2019

**c) Expose sensitive receptors to substantial pollutant concentrations?**

*Less than Significant.* Sensitive receptors nearest to the project are those within the residential neighborhoods adjacent to the project site.

***Construction-Related and Operational Criteria Air Pollutant Emissions***

As shown in Tables 3.1 and 3.2, construction and operation of the project would result in emissions of criteria air pollutants, but at levels that would not exceed the BAAQMD thresholds of significance. The thresholds of significance were designed to identify those projects that would result in significant levels of air pollution, and to assist the region in attaining the applicable State and federal ambient air quality standards, which were established using health-based criteria to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. Therefore, the construction-related and operational criteria air pollutant emissions associated with the project would not expose sensitive receptors to substantial pollutant concentrations.

***Construction-Related and Operational Toxic Air Contaminant Emissions***

Construction would generate diesel particulate matter emissions from the use of off-road diesel-powered equipment required for site grading and excavation, paving, and other construction activities. These activities may expose nearby receptors to TACs, including residents in adjacent areas.

Receptor dose is the primary factor used to determine health risk and is a function of exposure concentration and duration. However, even in intensive phases of construction, there would not be substantial pollutant concentrations, with the potential exception of the immediate vicinity of the construction site, because concentrations of mobile-source DPM emissions are typically reduced by approximately 60 percent at a distance of around 300 feet (100 meters) (Zhu et al., 2002). The nearest sensitive receptors are residences adjacent to the project site, with the nearest residence approximately 30 feet from the project site boundary; however, construction activities would be dispersed throughout the entire project site, so the majority of construction activities would take place farther than approximately 275 feet from the nearest residences.

The total duration of construction activities is projected to be 14 months; the exposure of sensitive receptors to construction emissions would be short-term, intermittent, and temporary in nature. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Therefore, the risks estimated for such an individual are higher if a fixed exposure occurs over a longer period of time. Health effects from TACs are often described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs (OEHHA, 2015). Construction activities for the project would last approximately 14 months and would vary in activity and equipment intensity over that time, thereby limiting exposure by sensitive receptors to substantial TAC concentrations. If the duration of construction activities near a sensitive receptor was for the entirety of the 14-month construction period, which is not anticipated, then the exposure would be less than 4 percent of the total exposure period used for typical health risk calculations (i.e., 30 years).

Given the construction schedule, varying buffer distances to the nearest sensitive receptors as construction moves across the project site, and the highly dispersive nature of diesel PM emissions, construction of the project would not expose sensitive receptors to substantial TAC concentrations. Implementation of BAAQMD's Basic

Construction Measures, as discussed under item 1.1(b) above, would also reduce diesel PM emissions during construction.

Operation of the project would involve educational land uses that would not be a substantial source of TAC and/or PM<sub>2.5</sub> emissions.

### **CARBON MONOXIDE HOTSPOTS**

The primary mobile-source pollutant of localized concern is CO. Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, speed, and delay. Transport of CO is limited, because it disperses rapidly with distance from the source under normal meteorological conditions. However, under specific meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels related to local sensitive land uses such as residential units, hospitals, schools, and childcare facilities.

CO concentration is a direct function of motor vehicle activity, particularly during peak commute hours, and meteorological conditions. Under specific meteorological conditions, CO concentrations may reach unhealthy levels with respect to local sensitive land uses, such as residential areas, schools, preschools, playgrounds, and hospitals. As a result, air districts typically recommend analysis of CO emissions at a local rather than a regional level.

Air pollutant monitoring data indicate that CO levels have been below State and federal standards in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard. In the last 10 years, the SFBAAB has not had any days that have exceeded the State or federal ambient air quality standard for CO (BAAQMD, 2017c). In addition, the BAAQMD CEQA Guidelines suggest that projects would not result in a CO impact if the project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. As discussed in more detail in Section 3.17, Transportation, (Table 3.176) intersections affected by the project would not increase to more than 44,000 vehicles per hour in the AM and PM peak hours.

Given that the project meets the BAAQMD recommended screening criteria, the project would not expose sensitive receptors to any substantial pollutant concentrations. Therefore, this impact would be less than significant.

**d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

*Less than Significant.*

### **ODOR EMISSIONS RELATED TO SHORT-TERM CONSTRUCTION**

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant; leading to considerable distress, and often generating citizen complaints to local governments and regulatory agencies.

The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines and emissions associated with asphalt paving and the application of architectural coatings may be considered offensive to some individuals. Odors resulting from project construction would be temporary and disperse rapidly

with distance from the source. Construction-generated odors would not result in the frequent exposure of receptors to objectionable odor emissions to a substantial amount of people. Therefore, this impact would be less than significant.

### **ODOR EMISSIONS RELATED TO LONG-TERM OPERATIONS**

Schools are not typically considered to be sources of objectionable odors. Industries and/or facilities that are likely to emit objectionable odors include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and manufacturing plants. The proposed project would not include any of these types of facilities. Other minor sources of odor that could be generated during operations of the school include landscaping equipment. As a result, this impact would be less than significant.

The project site is surrounded by adjacent residential uses. These land uses are not typically associated with odor-emitting sources. As a result, this impact would be less than significant.

### **MITIGATION MEASURES**

None required.

### 3.4 BIOLOGICAL RESOURCES

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

#### 3.4.1 ENVIRONMENTAL SETTING

The approximately 9.12-acre project site is located in unincorporated Contra Costa County, within the Tara Hills community, adjacent to the City of Richmond. The surrounding area consists of high-density residential housing with semi-public and public lands. Approximately 730 feet downslope and west of the project site is Garrity Creek, an intermittent freshwater channel with connectivity to San Pablo Bay. San Pablo Bay is approximately 1.20 miles northwest of the project site. Low grasses, bushes, and numerous mature landscape trees cover the north- and west-facing slopes of the project site.

#### DEVELOPED AND URBAN

Land cover at the project site and adjacent areas consists of developed and urban landscapes with some nonnative annual grass species and other ruderal forb species, which are typical of landscaped areas in an urban setting. Tree

species include ornamental landscape trees commonly found in large-lot single-family housing communities, parks, and in developed settings for recreation, erosion control, or aesthetic purposes. The topography of the project site is generally flat and was originally created as a fill mound where the Kerry Hills Elementary School was constructed in 1964. The slopes are graded to approximately 2:1 (horizontal:vertical) with impervious surfaces throughout the project site consisting of school buildings surrounded by asphalt concrete and pavement. Other facilities include four baseball fields at the southern end of the project site.

## **SENSITIVE BIOLOGICAL RESOURCES**

Special-status species include plants and animals in the following categories:

- ▶ Plant and wildlife species listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- ▶ Plant and wildlife species considered candidates for listing or proposed for listing;
- ▶ Wildlife species identified by the California Department of Fish and Wildlife (CDFW) as fully protected and/or species of special concern;
- ▶ Plants considered by CDFW to be rare, threatened, or endangered;
- ▶ Plants and wildlife species covered by the Natomas Basin Conservation Plan (NBHCP); and
- ▶ Plant species designated special-status, sensitive, or declining by other federal or State agencies or nongovernmental organizations.

To identify special-status species previously recorded in the vicinity of the project site, or that could be affected by the project due to the presence of potentially suitable habitat, several online databases and reports were reviewed, including the California Natural Diversity Database (CNDDDB, 2019), the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) (USFWS, 2019), and the California Native Plant Society's rare plant inventory (CNPS, 2019).

### **Special-Status Plants**

The database searches and literature review identified five special-status plant species known or with potential to occur in the general vicinity of the project site. However, each of these species is only known to occur in specific habitat types/regions or have become extirpated (displaced) from the region from development, and therefore have low potential to occur in the project site. The five plant species are Santa Cruz tarplant (*Holocarpha macradenia*), pallid manzanita (*Arctostaphylos pallida*), soft salty bird's-beak (*Chloropyron molle ssp. molle*), Contra Costa goldfields (*Lasthenia conjugens*), and California seablite (*Suaeda californica*). All of these species require specific microhabitats (i.e., vernal pools with grassland, tidal wetland, or chaparral) that are not present at the project site.

### **Special-Status Wildlife**

Based on the results of the CNDDDB search and literature review, 14 special-status fish and wildlife species were identified with some potential to occur in the project vicinity, as included in Appendix BIO. However, each of the listed fish and wildlife species require specific habitat types, such as estuary/marine, wetland, riparian, woodland,

and open grassland habitat with connectivity. These habitat types and connectivity are absent from the project site and surrounding area. As a result, the project vicinity and the project site would not support special-status wildlife. Migratory birds and protected raptors not tracked by CNDDDB would have some potential to occur on the project site, as described below.

Special-status mammal species within a 5-mile radius of the project site include pallid bat (*Antrozous pallidus*), salt marsh harvest mouse (*Reithrodontomys raviventris*), salt-marsh wandering shrew (*Sorex vagrans halicoetes*), and San Pablo vole (*Microtus californicus sanpabloensis*). Of these species, 3 of the 4 listed special-status species have no potential to occur in the project site, because these species require salt marsh and tidal wetland habitat. The project site does not contain salt marsh and/or tidal wetland habitat; therefore, these species are not given further consideration. The pallid bat is most frequently found foraging in open oak woodland and forested canyons, and typically roost in the crevices of bridges, building structures, concrete girder structures, and rock crevices. These bats are also sensitive to disturbance, with the potential to abandon roosts with repeated disturbance. Based on historical records, this species does not persist in the more rural portions of eastern Contra Costa County and requires proximity to oak woodlands .

There are two documented occurrences of pallid bat within 2 miles of the project site (CNDDDB, 2019). These are historical occurrences from approximately 50 years ago, with no recent documented observations of the species in the project vicinity. The project site and surrounding area are developed residential and commercial land cover types with no large tracts of oak woodland habitat used by this species for foraging. In addition, ambient noise from the urban/developed environment does not provide suitable roosting habitat for the pallid bat, and would cause disturbance. Therefore, it is very unlikely that a population of this species occurs on site.

### **Other Special-Status Raptors and Migratory Birds**

Many bird species are migratory and fall under the jurisdiction of the Migratory Bird Treaty Act (MBTA). Various migratory birds and raptor species have the potential to inhabit the project vicinity. White-tailed kite (*Elanus leucurus*), a fully protected species under the California Fish and Game Code, has the potential to nest in the open spaces and annual grasslands surrounding the project site, and could forage within the project site. Northern harrier (*Circus cyaneus*), a species listed by CDFW as a species of special concern, could forage within the project site. Northern harrier is a ground-nesting species, and typically nests in emergent wetland/marsh, open grasslands, or savannah communities. Marsh and wetland habitat is approximately 1.20 miles north of the project site along the San Pablo Bay shoreline. Northern harrier is unlikely to nest within the project site because this species prefers large tracts of undisturbed habitats dominated by thick vegetation growth (Smith et al., 2011).

Ridgeway's rail (*Rallus longirostris obsoletus*), California least tern (*Sterna antillarum browni*), Western snowy plover (*Chararius nivosus nivosus*), San Pablo (Samuel's) song sparrow (*Melospiza melodia samuelis*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), and California black rail (*Laterallus jamaicensis coturniculus*) require salt marsh/tidal wetland and/or sand dune habitat, which are not found in the project site, but occur 1.20 miles north of the project site along the San Pablo Bay shoreline. These species have no potential to occur in the project site, and do not require further consideration.

The habitat within the project vicinity provides potential nesting and/or foraging habitat for migratory birds that occur in the region, with low potential to occur in the project site. The nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest.

### 3.4.2 DISCUSSION

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

*Less than Significant with Mitigation.* Other special-status mammal species, bird species, and various raptors, including white-tailed kite, northern harrier, and common bird species, could nest on or near the project site, and use the site for foraging. All raptors are protected under California Fish and Game Code Section 3503.5; white-tailed kite is a fully protected species; and northern harrier is a CDFW species of special concern. Destruction of bird nests is a violation of the MBTA and Section 3503 of the California Fish and Game Code.

Project construction could result in direct destruction of active nests of common ground-nesting birds; birds nesting in man-made structures are protected under the MBTA or California Fish and Game Code Section 3503, due to proposed renovation and construction. Project construction could also result in indirect disturbance of breeding birds, causing nest abandonment by the adults and mortality of chicks and eggs. This would be a potentially significant impact, and Mitigation Measure **MM BIO-1** is required.

The landscape trees adjacent to the project site could provide nesting habitat for various raptor species, and nesting birds protected under the MBTA. White-tailed kite has been documented on eBird (2019) as occurring in the Hilltop Lake area, approximately 0.60 mile southwest of the project site. The Hilltop Lake Park supports a large, open-water feature with wetland habitat, and tracts of grassland with some woodland habitat. Birds nesting in the open space areas adjacent to the project site are not likely to be affected by construction activities on the project site, because the habitat is greater than 0.25 mile from the project site, and the distance provides a sufficient sound barrier to the project site. In addition, the open space is surrounded by residential development, with ambient noise already occurring in the project vicinity. Therefore, project implementation would have a less-than-significant impact on birds nesting in the open space habitat adjacent to the project site.

Implementing Mitigation Measure **MM BIO-1** would reduce potentially significant impacts on raptor species and other nesting birds to a less-than-significant level because it would ensure these birds are not disturbed during nesting, so that project construction would not result in nest abandonment and loss of eggs or young. By complying with CDFW standard measures, impacts on raptors and other nesting birds would be reduced to a less-than-significant level, because no active nests would be lost.

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

*No Impact.* There is no riparian habitat or other sensitive natural community in the project site. Garrity Creek is downslope of the project site and is surrounded by residential development. The section of Garrity Creek in proximity to the project site is channelized by concrete sides and culverted through the residential area. Because these resources are not present in the project area, the project would have no impact.

- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

*No Impact.* There are no federally protected wetlands or waters in the project site, and the project would have no impact.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

*No Impact.* Project implementation would result in disturbance to urban land uses on a previously developed parcel with impervious surfaces. The site is in an area that has been previously developed as the Kerry Hills Elementary School and the Tara Hill's baseball facilities, and is surrounded by residential housing, with the majority of the land cover composed of impervious and/or developed surfaces. The project would not interfere with the natural use of the area by species for migration corridors. Wildlife that could use the area as a corridor are urban-adapted, common species such as northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*); and they would not be affected by project activities. The project site itself does not serve as a wildlife corridor for any listed special-status species, nor would the project impede the use of any native wildlife nursery sites. Therefore, the project would have no impact.

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

*No Impact.* Mature landscape trees and other biological resources on the project site are protected under local policies or ordinances. The proposed project would not involve tree removal, and therefore would not conflict with County policies or ordinances governing protection of trees Contra Costa County Zoning Chapter 816-6, Tree Protection and Preservation. Existing on-site native oak trees or heritage trees would not be impacted by project activities, because all work activities would be limited to previously disturbed/impervious surfaces, with project activities complying with the local tree and landscaping ordinances. Therefore, project implementation would not conflict with local policies or ordinances protecting biological resources, and the project would have no impact.

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

*No Impact.* The project site falls outside of the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP). Therefore, project implementation would not conflict with the provisions of the final HCP/NCCP. The project would have no impact.

## **MITIGATION MEASURES**

### **MM BIO-1: Avoid Direct Loss of Protected Bird Nests**

Grading and other ground-disturbing activities will be performed during the nonbreeding season (between September 1 and January 31) for protected bird species in this region to avoid and minimize impacts to nesting birds. If construction work must occur during the nesting season (between February 1 and August 31), WCCUSD shall conduct a preconstruction nesting bird survey. The preconstruction survey

shall be conducted by a qualified biologist before any construction activity as it relates to site preparation occurring within 500 feet of suitable nesting habitat for any protected bird species. If an active raptor or common bird species nest protected by the MBTA or California Fish and Game Code is detected, the qualified biologist shall establish a buffer around the nest. No project activity shall occur within the buffer area until a qualified biologist confirms that the nest is no longer active. The size of the buffer shall be determined in consultation with CDFW. Buffer size is anticipated to range from 50 to 500 feet, depending on the nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the chicks have fledged, or as otherwise determined by a qualified biologist.

### 3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V. Cultural Resources. Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.5.1 ENVIRONMENTAL SETTING

Cultural resources include historical resources and archaeological resources (as defined in Public Resources Code Section 15064.5). Cultural resources are any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant, or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource is considered by the lead agency to be historically significant if the resource meets the criteria for listing in the California Register of Historical Resources (California Code of Regulations Title 14(3) Section 15064.5(a)(3)).

A database search of site records and previous cultural resource studies was conducted at the Northwest Information Center of the California Historical Resources Information System on April 4, 2019 (File No. 18-1911). Site records and previous studies of the project site and a 0.5-mile radius were reviewed. The records search revealed that no studies had been previously completed, and no resources had been previously recorded in the project site, or within a 0.5-mile radius of the project site.

#### 3.5.2 DISCUSSION

**a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?**

*No Impact.* Based on the database search, no previously identified historical resources are located on the project site or in the surrounding area. Additionally, the project would renovate the existing structure on site. The site is typical of school development, with no particular historical significance based on the type of construction and the project site history. Therefore, the project would have no impact on historical resources.

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

*Less Than Significant with Mitigation.* No archaeological resources are known to exist on the project site. However, it is possible that earth-disturbing project construction activities could inadvertently discover previously

unrecorded subsurface archaeological resources. The possibility that project construction could damage or destroy such resources would be a potentially significant impact, and Mitigation Measures **MM CUL-1** and **MM CUL-2** would be required, which includes stop work and recovery measures, as well as worker sensitivity training. Implementation of Mitigation Measure **MM CUL-1** and **MM CUL-2** would mitigate potentially significant impacts on archaeological resources to a less-than-significant level.

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

**Less Than Significant.** No human remains are known to exist on the project site. However, the lack of surface and record indications does not preclude the possibility that human remains could be present, and inadvertently encountered and damaged during project construction. In accordance with California Health and Safety Code Section 7050.5(b), if human remains are uncovered during ground-disturbing activities, all such activities in the vicinity of the find shall be halted, and the Contra Costa County Coroner and a qualified professional archaeologist shall be contacted immediately. The Coroner is required to examine all discoveries of human remains within 2 working days of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are of Native American origin, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The County or its appointed representative and the professional archaeologist shall consult with a Most Likely Descendent determined by the NAHC regarding the removal or preservation and avoidance of the remains and determine if additional burials could be present within the project site. Compliance with California Health and Safety Code Section 7050.5(b), as required by State law, would avoid disturbance to human remains, and the project would result in a less-than-significant impact.

## **MITIGATION MEASURES**

### **Mitigation Measure CUL-1: Procedures for Inadvertent Discovery of Cultural Resources**

Before the start of any earthmoving activities, Caliber Schools shall retain a qualified archeologist to train all construction personnel involved with earthmoving activities, including the project superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and the proper notification procedures that should be followed if fossils are encountered. If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, human remains, bottle glass, ceramics, building remains) is made during project-related construction activities, ground disturbance within 25 feet of the find shall be halted, and the District shall be notified immediately. The County shall retain a qualified professional archaeologist to determine whether the resource is potentially significant. If the resource is potentially significant and project implementation may result in significant impacts, the qualified professional archaeologist shall develop additional appropriate protection measures. Protection measures may include, but are not necessarily limited to, additional documentary research, subsurface testing, excavation, and preservation in-place.

### **Mitigation Measure CUL-2: Worker Training**

Prior to the issuance of grading permits, the District shall confirm that Caliber Schools has required all construction crews to undergo adequate training for the identification of federal- or State-eligible cultural resources, and that the construction crews are aware of the potential for previously undiscovered archaeological resources on-site; of the laws protecting these resources, and associated penalties; and of the procedures to follow should they discover cultural resources during project-related work.

### 3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VI. Energy. Would the project:</b>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.6.1 ENVIRONMENTAL SETTING

Electricity for Contra Costa County is provided by Pacific Gas & Electric Company (PG&E), as regulated by the California Public Utilities Commission. PG&E provides electrical service and natural gas to approximately 16 million people throughout its 70,000-square-mile service area in northern and central California. Electricity is delivered to Contra Costa County via transmission lines. In 2018, PG&E reported that 33 percent of its electricity in 2017 came from renewable resources, including solar, wind, geothermal, biomass, and small hydroelectric sources. Additionally, nearly 80 percent of its total electric power mix came from greenhouse gas (GHG)-free sources. As of April 2018, the majority of unincorporated Contra Costa County residents purchased their energy from MCE Energy, a Community Choice Aggregation program<sup>1</sup>. Electricity is still distributed and delivered by PG&E, but residents have the option to select renewable energy sources in their electric service. The District is located in the County, and therefore, PG&E is the energy provider at the site.

#### 3.6.2 DISCUSSION

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, unnecessary consumption of energy resources, during project construction or operation?**

**Less than Significant.** The project would remove the existing portables, renovate the existing school facility, and add two new buildings that would increase the activities, use, and energy consumption at the project site.

As new buildings in Contra Costa County, the project would be subject to the energy conservation standards included in Title 24 that require the project to meet a number of conservation standards, including installation of water-efficient fixtures and energy-efficient appliances. Documentation showing compliance with Title 24, Section 11, the California Green Building Standards Code, would be submitted prior to construction to DSA, which would review for compliance under State Law. Code of Regulations Title 24 also regulates energy consumption for the heating, cooling, ventilation, and lighting of residential and nonresidential buildings. Compliance with Title 24 would ensure reduction in the use of fuel, water, and energy by the project.

<sup>1</sup> Community choice aggregation (CCA), also known as municipal aggregation, are programs that allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier, while still receiving transmission and distribution service from their existing utility provider.

Because the project site would be used for a school site in a residential, urban area, vehicle trips and associated energy resources for the project would not constitute wasteful use of energy, and therefore would be consistent with the Plan Bay Area 2040 land use strategy, which seeks to reduce per capita vehicle miles traveled (VMT). Project operation would provide opportunities to minimize VMT, use carpooling, and use nonmotorized modes of transportation (e.g., walking, biking, transit) to reach residential and employment destinations and amenities.

Therefore, the project would not result in the use of large amounts of fuel, water, or energy; or result in the use of these resources in a wasteful manner. There would be a less-than-significant impact.

**b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

*Less than Significant.* In 2015, Contra Costa County adopted a Climate Action Plan, which includes a number of GHG emission reduction strategies. The strategies include implementing standards for green buildings and energy-efficient buildings, reducing parking requirements, and reducing waste disposal. Green building codes and debris recovery programs are among the strategies currently implemented by the County. The project would not conflict with policies or strategies as outlined in both the City of Richmond CAP and the Contra Costa County CAP, because it would be subject to the energy conservation standards and building regulations as required by Title 24, including the 2016 California Green Building Standards Code. Compliance with Title 24, including the 2016 California Green Building Standards Code, is required.

The project would not conflict with a State or local plan for renewable energy or energy efficiency. The project would have a less-than-significant impact.

**MITIGATION MEASURES**

None required.

### 3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VII. Geology and Soils. Would the project:</b>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3.7.1 ENVIRONMENTAL SETTING

This subsection incorporates information from the Geotechnical and Geologic Hazard Evaluation for the proposed project by Cornerstone Earth Groups in November 2018. The report is attached as Appendix GEO.

## **GEOLOGY**

The site is regionally located in an alluvial plain in the East Bay within a few miles west of the Berkeley Hills. The project site is in flatlands and low hills along the margin of San Francisco Bay, where extensive residential and commercial development has dominated the landscape for many decades. The project site is underlain by the Pliocene Orinda Formation.

## **SEISMICITY AND SEISMIC HAZARDS**

The San Francisco Bay Area is a seismically active area. Seismic hazards can cause damage to structures and risk the health and safety of citizens. Seismic hazards vary widely, and the level of hazard depends on both geologic conditions and the extent and type of land use. Significant earthquakes occurring in the San Francisco Bay Area are generally associated with crustal movement along well-defined, active fault zones of the San Andreas Fault system. There are several active faults in the project vicinity, the closest being the Hayward Fault, about 1.6 miles east of the project site (Contra Costa County, 2005). Strong to very strong ground shaking could occur at the project site as a result of a large earthquake on any one of the nearby faults. The intensity of earthquake ground motion at the project site would depend on the characteristics of the generating fault, the distance to the earthquake epicenter, and the magnitude and duration of the earthquake.

## **EARTHQUAKE-INDUCED LIQUEFACTION, SURFACE RUPTURE POTENTIAL, AND SETTLEMENT**

Liquefaction is the sudden loss of soil shear strength and sudden increase in pore water pressure caused by shear strains, which could result from an earthquake. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated, and are bedded with poor draining materials, such as sand and silt layers bedded with a cohesive cap (Cornerstone Earth Group, 2018). The mapping for the State Seismic Hazard Zone series for the Richmond 7.5-Minute Quadrangle does not extend north of the City of Richmond to the project site; however, it is likely that artificial (man-made) fill at the project site was derived from on-site bedrock cut materials and were likely compacted in accordance with standards of practice at the time original construction occurred (Cornerstone Earth Group, 2018). The project-specific geotechnical study determined that the potential is considered not significant for seismically induced damage due to liquefaction, surface ruptures, and settlement at the project site.

## **SURFACE AND SUBSURFACE SOILS**

Although the site-specific subsurface data are not yet known for the site, according to the Geotechnical and Geological Hazard Evaluation prepared by the project area by Cornerstone Earth Group in 2018, it is reasonable to assume that man-made fill was generated from on-site excavated material for the original grading and site development of the school. The surface layer of man-made fill is likely to consist of a mixture of clay, silt, sand, and gravel materials (Cornerstone Earth Group, 2018).

## **Expansive Soils**

The project site has moderately to highly expansive surficial soils, with localized beds of expansive Orinda Formation claystone bedrock (Cornerstone Earth Group, 2018). These expansive soils can shrink and harden when dry and expand and soften when wet.

### 3.7.2 DISCUSSION

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
  - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42**

*Less than Significant.* The project site is not in an Alquist-Priolo Earthquake Fault Zone, and no known faults cross the project site (Alquist-Priolo Earthquake Fault Zones Map, 2015). However, the project site is located in a seismically active region, and several active faults are nearby. The project would comply with the requirements of the California Building Code (CBC), Chapter 16, Section 1613, Earthquake Loads. Therefore, the project would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault. This impact would be less than significant.

- ii) **Strong seismic ground shaking?**

*Less than Significant.* Seismic ground shaking can be expected during the design life of structures built on the project site due to the high seismic activity of the area. All buildings constructed in California are required to comply with the CBC, which incorporates design criteria for seismic loading, and contains provisions for buildings to structurally survive an earthquake without collapsing, such as anchoring to the foundation and structural frame design. The project would be designed to meet the State of California standards for structural design and site development through CBC Chapter 16, Section 1613, Earthquake Loads, to withstand anticipated seismic ground shaking. Therefore, while earthquake shaking would be potentially damaging, structural damage would be reduced through implementation of the CBC. Therefore, project impacts would be less than significant.

- iii) **Seismic-related ground failure, including liquefaction?**

*Less than Significant.* As outlined above, the project site has a low potential for liquefaction or any other seismic-related ground failure. Groundwater is estimated to be about 20 feet below the ground surface in the vicinity of the project site (Cornerstone Earth Group, 2018). Because there is low potential for liquefaction at the project site, and the project would be required to comply with existing regulations related to foundations and earthquake loads. As outlined in the project-specific geotechnical report, the project would include slabs-on-grade that would be supported on a layer of non-expansive fill; foundations would need to extend below the zone of seasonal moisture fluctuation. The project would have a less-than-significant impact as it relates to seismic-related ground failure, including liquefaction.

- iv) **Landslides?**

*Less than Significant.* The topography at the site is relatively flat, due to its original grading. The project site was originally created by grading the former ridge area and placing fill on the northeastern and northwestern flanks of the ridge. As part of the original site development, engineered fill downslopes along the northeastern half of the site and northwestern edge of the site were constructed. According to the project-specific geotechnical study, the possibility of landslides at the project site is low; however, further evaluation of building setbacks relative to the top of existing slopes would be included as part of the design-level geotechnical investigation, as required by

DSA. The project would also incorporate recommendations included in Section 5.0 of the project-specific geotechnical study, including completing a design-level geotechnical investigation (Appendix GEO). Due to the low potential for landslides at the project site, the project would have a less-than-significant impact.

**b) Result in substantial soil erosion or the loss of topsoil?**

*Less than Significant.* Project construction activities, including demolition, grading, and excavation, would disturb on-site soils, temporarily exposing them to wind and water erosion. Because the project would disturb more than 1 acre, it is required to comply with the Construction General Permit (Water Quality No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ) implemented and enforced by the State Water Resources Control Board. The General Permit requires project applicants to prepare and submit an SWPPP that identifies BMPs to reduce construction effects on receiving water quality by implementing erosion control measures and reducing or eliminating non-stormwater discharges.

An SWPPP provides a schedule for the implementation and maintenance of erosion control measures and a description of site-specific erosion control practices, such as appropriate design details and a time schedule. The SWPPP would consider the full range of erosion control BMPs. Examples of construction BMPs to reduce erosion include the use of temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; performing clearing and earth-moving activities only during dry weather; and limiting construction access routes and stabilizing designated access points. With preparation and implementation of a project-specific SWPPP, project impacts on erosion would be less than significant.

**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?**

*Less than Significant.* According to the project-specific geotechnical report, the project site has a low potential for on- or off-site landslide. The man-made slopes flanking the northwestern edge of the site are 50 to 75 feet high, and 40 to 50 feet high along the northeastern edge of the site. The slopes appear to be graded to approximately 2:1 (horizontal:vertical) or flatter, with intermediate benches and surface drainage swales (Cornerstone Earth Group, 2018). The project would not disturb existing slopes, and would retain the existing building pad, thereby minimizing the risk for subsidence.

As described above, the project site has a lower potential for liquefaction. The potential for liquefiable soils at the site that could result in lateral spreading is likely low. As part of the DSA application, the project would comply with any site-specific recommendations as they relate to slope instability, as outlined in the design-level geotechnical analysis. In addition, the project would implement recommendations outlined in Section 5.0 of the geotechnical report, including completing a design-level geotechnical investigation; and comply with CBC building standards. Due to the low potential at the project site for landslides, lateral spreading, subsidence, liquefaction, or collapse, and with implementation of the project-specific geotechnical report recommendations, project impacts would be less than significant.

**d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

*Less than Significant.* As described above, the project site has moderately to highly expansive surficial soils. Per the project-specific geotechnical study, the project would use slabs-on-grade on a layer of non-expansive fill.

Additionally, the project foundations would extend below the zone of seasonal moisture fluctuation.<sup>2</sup> The project would use positive drainage<sup>3</sup> so that stormwater runoff would drain away from buildings and would limit landscaping watering near building foundations to minimize moisture in surficial soils at the project site. With the incorporation of these design features and compliance with the CBC, the project would have a less-than-significant impact due to expansive soils.

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

*No impact.* The project would be served by the West County Wastewater District (WCWD). No septic tanks or alternative wastewater disposal systems would be installed for the project. The project would have no impact on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

**f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?**

*Less than Significant with Mitigation.* There are no unique paleontological resources or unique geologic features on the project site. However, it is possible that earth-disturbing project construction activities could inadvertently damage or destroy previously unrecorded paleontological resources. Implementation of Mitigation Measure MM CUL-1 would mitigate potentially significant impacts on paleontological resources to a less-than-significant level.

## **MITIGATION MEASURES**

### **Mitigation Measure CUL-1: Procedures for Inadvertent Discovery of Cultural Resources.**

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<sup>2</sup> Zone of seasonal moisture fluctuation is the depth to which the water content fluctuates in the soil due to changes in climatic conditions at the ground surface.

<sup>3</sup> Positive drainage is created when surface drainage is employed by grading an area so that water collects and flows to a lower elevation, away from buildings and structures.

### 3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VIII.Greenhouse Gas Emissions. Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.8.1 ENVIRONMENTAL SETTING

Certain gases in the earth’s atmosphere, classified as GHGs, play a critical role in determining the Earth’s surface temperature. Solar radiation enters the Earth’s atmosphere from space. A portion of the radiation is absorbed by the Earth’s surface, and a smaller portion of this radiation is reflected back toward space through the atmosphere. However, infrared radiation is selectively absorbed by GHGs in the atmosphere. As a result, infrared radiation released from the Earth that otherwise would have escaped back into space is instead “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the “greenhouse effect,” is responsible for maintaining a habitable climate on Earth. Anthropogenic (e.g., human caused) emissions of these GHGs lead to atmospheric levels in excess of natural ambient concentrations and have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change.

The Intergovernmental Panel on Climate Change concluded that variations in natural phenomena, such as solar radiation and volcanoes, produced most of the warming of the earth from pre-industrial times to 1950. Some variations in natural phenomena also had a small cooling effect. From 1950 to the present, increasing GHG concentrations resulting from human activity, such as fossil fuel burning and deforestation, have been responsible for most of the observed temperature increase (IPCC, 2013).

GHGs are present in the atmosphere naturally; are released by natural and anthropogenic (human-caused) sources; and are formed from secondary reactions taking place in the atmosphere. Natural sources of GHGs include the respiration of humans, animals, and plants; decomposition of organic matter; volcanic activity; and evaporation from the oceans. Anthropogenic sources include the combustion of fossil fuels by stationary and mobile sources, waste treatment, and agricultural processes. The following are the GHGs that are widely accepted as the principal contributors to human-induced global climate change that are relevant to the project:

- ▶ **Carbon Dioxide:** Natural sources of CO<sub>2</sub> include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; and evaporation from oceans. Anthropogenic sources include burning of coal, oil, natural gas, and wood.
- ▶ **Methane:** CH<sub>4</sub> is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, and by the decay of organic waste in municipal solid waste landfills.

- ▶ **Nitrous Oxide:** N<sub>2</sub>O is produced by both natural and human-related sources. Primary human-related sources of N<sub>2</sub>O are agricultural soil management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. N<sub>2</sub>O is also produced naturally from a wide variety of biological sources in soil and water; particularly microbial action in wet tropical forests.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation, and the length of time the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO<sub>2</sub>; therefore, CO<sub>2</sub> has a GWP of 1. The other main GHGs that have been attributed to human activity include CH<sub>4</sub>, which has a GWP of 28, and N<sub>2</sub>O, which has a GWP of 265 (IPCC, 2013). For example, 1 ton of CH<sub>4</sub> has the same contribution to the greenhouse effect as approximately 28 tons of CO<sub>2</sub>. GHGs with lower emissions rates than CO<sub>2</sub> may still contribute to climate change, because they are more effective at absorbing outgoing infrared radiation than CO<sub>2</sub> (i.e., high GWP). The concept of CO<sub>2</sub> equivalence (CO<sub>2</sub>e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation. GHG emissions are typically measured in terms of pounds or tons of CO<sub>2</sub>e and are often expressed in metric tons of CO<sub>2</sub> equivalent emissions (MTCO<sub>2</sub>e).

### 3.8.2 DISCUSSION

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

*Less than Significant.* Project implementation would generate short-term construction and long-term operational GHG emissions. Construction-related GHG emissions would cease following construction of the proposed project. Operational emissions are considered long-term and assumed to occur for the lifetime the project. Construction and operational emissions were modeled using CalEEMod Version 2016.3.2; refer to Appendix AQ for model output files and assumptions.

Construction-related exhaust GHG emissions would be generated from a variety of sources during construction of the proposed project, including, but not limited to heavy-duty construction equipment, haul trucks, material delivery trucks, and construction-worker vehicles. Similar to air pollutant emissions, daily GHG emissions would vary depending on the type of construction activities planned for each day. For example, during construction equipment-intensive phases, daily GHG emissions would be higher than daily emissions generated during less equipment-intensive phases.

There are direct and indirect sources of operational GHG emissions. Direct GHG emissions are those emissions that are generated at the location of consumption or use. For example, mobile-source emissions are direct emissions because GHG emissions are generated as a vehicle begins to move. Indirect emissions are those emissions that occur at a different time or location from the point of consumption or use. For example, electricity-related GHG emissions are indirect emission, because as a consumer uses electricity at their home, the fuel combustion and emissions associated with creating that electricity likely occurred off-site or at a different time. Other indirect GHG emissions include emissions associated with solid waste disposal and water consumption. CalEEMod estimates direct emissions associated with the proposed project’s mobile (e.g., staff and student-related vehicles), area (e.g., landscape maintenance equipment), and energy (e.g., natural gas) sources, and indirect emissions associated with energy (i.e., electricity), water (i.e., conveyance and distribution), and solid waste (i.e., decomposition) sources.

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

Direct comparison of construction GHG emissions with long-term thresholds would not be appropriate, because these emissions cease on completion of construction. Other districts (e.g., South Coast Air Quality Management District, 2008; San Luis Obispo County Air Pollution Control District, 2012) recommend that GHG emissions from construction activities be amortized over a project’s operational lifetime (typically assumed to be 30 years) for comparison with long-term GHG emissions significance thresholds. For comparison to the BAAQMD threshold, construction emissions were amortized over the lifetime of the project and added to the annual operational emissions (see Table 3.3).

For operational-related GHG emissions of a land use development, such as the proposed project, BAAQMD recommends a threshold of significance of less than 1,100 MTCO<sub>2e</sub> per year, or 4.6 MTCO<sub>2e</sub> per service population (defined as population plus employees, in this case students and staff) per year.

Table 3.3 presents a summary of the project’s annual construction-related GHG emissions and annual operational emissions by emissions source.

**Table 3.3. Greenhouse Gas Emissions for Construction and Operations of the Project**

<b>Emissions Source</b>	<b>GHG Emissions</b>
<b>Construction GHG Emissions</b>	
Total Construction Emissions (MTCO <sub>2e</sub> )	529
Amortized Construction Emissions (MTCO <sub>2e</sub> /year) <sup>1</sup>	18
<b>Operational GHG Emissions</b>	
Project Emissions (MTCO <sub>2e</sub> /year)	1,187
Existing Emissions (MTCO <sub>2e</sub> /year)	252
Net Emissions (MTCO <sub>2e</sub> /year)	936
<b>Total Annual Operational Emissions (MT CO<sub>2e</sub>/year)</b>	<b>953</b>
<b>BAAQMD Threshold (MTCO<sub>2e</sub>/year)</b>	<b>1,100</b>
<b>Service Population (SP)<sup>2</sup></b>	<b>990</b>
<b>Project Emissions per Service Population MT CO<sub>2e</sub>/SP</b>	<b>0.96</b>
<b>BAAQMD Threshold (MTCO<sub>2e</sub>/SP)</b>	<b>4.6</b>
<b>Exceed Thresholds?</b>	<b>No</b>
Notes: Totals may not add due to rounding. CO <sub>2e</sub> = carbon dioxide equivalent; GHG = greenhouse gas; MT = metric tons <sup>1</sup> Amortized construction GHG emissions calculated assuming a 30-year project lifetime. <sup>2</sup> Service population is defined as the number of students (900) and staff (90, includes instruction, administration, and maintenance staff). Source: Modeled by AECOM in 2019. See Appendix AQ for model details, assumptions, inputs, and outputs.	

As shown in Table 3.3, total annual GHG operational emissions were estimated at approximately 953 MTCO<sub>2e</sub> per year, or 0.96 MTCO<sub>2e</sub> per service population. Annual project GHG operational emissions would not exceed the BAAQMD threshold of 1,100 MTCO<sub>2e</sub> per year, or 4.6 MTCO<sub>2e</sub> per service population. Therefore, the

project would not generate GHG emissions that would have a significant impact on the environment. The impact would be less than significant.

**b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

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

In December 2008, CARB adopted its Climate Change Scoping Plan (Scoping Plan), which contains the main strategies California will implement to achieve the required GHG reductions required by AB 32 (CARB, 2008). In 2014, CARB approved the first update to the Climate Change Scoping Plan: Building on the Framework (CARB, 2014). In 2016, the State legislature passed Senate Bill (SB) 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, CARB released a proposed scoping plan on January 21, 2017. The final scoping plan was adopted November 2017 to provide a framework for achieving California’s 2030 GHG target (CARB, 2017). None of these statewide plans or policies constitutes a regulation to adopt or implement a regional or local plan for reduction or mitigation of GHG emissions. In addition, it is assumed that any requirements formulated under the mandate of AB 32 and SB 32 would be implemented consistent with statewide policies and laws.

In 2015, Contra Costa County also adopted the Contra Costa County CAP to address the challenges of climate change by reducing local GHG emissions, while improving community health. The CAP presents a reduction target consistent with AB 32 to reduce community-wide emissions 15 percent below 2005 levels by 2020 (Contra Costa County, 2015). The project would remove the existing portables, renovate the existing school facility, and construct two new buildings. Consistent with Contra Costa County CAP Measure EE 1: Energy-Efficient Retrofits – Nonresidential Buildings, renovation of the existing school facility would involve the incorporation of energy-efficient retrofits. In addition, consistent with Measure LUT 1: Mobility and Land Uses, project operation would provide opportunities to minimize VMT, use carpooling, and use nonmotorized modes of transportation (e.g., walking, biking, transit) to reach residential and employment destinations and amenities. Contra Costa County has also adopted implementation of the 2016 California Green Building Standards Code (CALGreen) in the Contra Costa County Ordinance Code. The 2016 CALGreen requirements include mandatory measures for all new building construction. The project would be built to comply with 2016 CALGreen Code.

Therefore, the project would not conflict with the Contra Costa CAP; AB 32 Scoping Plan and Scoping Plan updates; or any other plans, policies, or regulations for the purpose of reducing GHG emissions. As discussed earlier, the project would also not generate GHG emissions that would have a significant impact on the environment. Therefore, the impact would be less than significant.

**MITIGATION MEASURES**

None required.

### 3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IX. Hazards and Hazardous Materials. Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.9.1 ENVIRONMENTAL SETTING

##### PROJECT SITE HISTORY

The discussion in this section is based in part on the Environmental Site Assessment (ESA) that was conducted for the project site by Millennium Consulting Associates in November 2018 (Appendix HAZ), as well as the Limited Hazardous Material Preliminary Assessment also conducted by Millennium Consulting Associates in December 2018. According to the Phase I ESA, the project site does not have any recognized environmental conditions on the project site; however, a hazardous material survey should be performed because the building was constructed in 1964, and potentially contains asbestos and lead.

## **NATURALLY OCCURRING ASBESTOS (NOA)**

Chrysotile and amphibole asbestos are types of NOA found in certain geologic settings in the San Francisco Bay Area, most commonly in serpentinite and other ultramafic rocks. When disturbed by construction, grading, quarrying, or surface mining operations, asbestos-containing dust can be generated. According to the project-specific geotechnical study, the project site is not underlain by ultramafic rocks, nor is it immediately adjacent to any known deposits of ultramafic rocks. Consequently, the potential to encounter NOA soils during ground disturbance at the project site is very low to none.

## **REGULATED ASBESTOS-CONTAINING MATERIALS**

Construction materials containing asbestos greater than 1 percent are defined as an asbestos-containing material (ACM), and are regulated by the federal and State governments (Millennium Consulting Associates, 2018b). Construction materials containing asbestos greater than 0.1 percent are defined as an Asbestos-Containing Construction Material (ACCM) and are regulated by the State of California. The California Occupational Safety and Health Administration (Cal/OSHA) regulates the removal of both ACM and ACCM. According to a pre-renovation hazardous materials survey (Millennium Consulting Associates, 2018b), there are ACM and ACCM at the project site. Section 3.2 and Table 1 of the survey report, which is reproduced in Appendix HAZ, identify the types of ACM and ACCM detected.

## **LEAD-BASED/CONTAINING COMPONENTS, MATERIALS AND COATING SYSTEMS**

Cal/OSHA does not have a regulatory definition of a “lead-containing material.” Cal/OSHA and federal OSHA are concerned with “an employee occupationally exposed to lead” (Millennium Consulting Associates, 2018b). This is understood to mean material disturbed during construction work containing lead (i.e., lead-containing paint and lead-based paint) is covered under the lead in construction standards. The Preliminary Site Assessment Survey identified building materials with lead-based components and/or coatings, and lead-containing components and/or coatings (see Section 3.5 of the survey report, which is reproduced in Appendix HAZ).

## **OTHER REGULATED MATERIALS (ORM)**

Typical ORMs include known and suspected mercury-containing components (fluorescent light tubes, switches, etc.); suspected polychlorinated biphenyl (PCB)-containing components (internally mounted light ballasts); heating, ventilation, and air conditioning refrigerants and oils; and any digital thermostats. PCB-containing materials (window caulking, expansion joints, and sealants, if sufficient material or component scheduled for renovation). Exterior door frame caulking of the building has been found to contain PCB concentrations up to 36,000 parts per million. (Millennium Consulting Associates, 2018a).

## **FIRE HAZARD**

The project area is identified by the California Department of Forestry and Fire Protection (CAL FIRE) as a Local Responsibility Area. Local Responsibility Areas, which are under the jurisdiction of local entities (e.g., cities, counties), are required to only identify very high fire hazard severity zones. The CAL FIRE map “Fire Hazard Severity Zones in LRA” for Contra Costa County identifies the project site and surrounding area as a Non-Very High Fire Hazard Severity Zone, which indicates that the risk of wildland fire hazards is not considered high or very high (CAL FIRE, 2009).

### 3.9.2 DISCUSSION

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

*Less than Significant with Mitigation Incorporated.*

#### CONSTRUCTION

Both the EPA and the US Department of Transportation (DOT) regulate the transport of hazardous waste and material, including transport via highway. The EPA administers permitting, tracking, reporting, and operations requirements established by the Resource Conservation and Recovery Act. The DOT regulates the transportation of hazardous materials through enforcement of the Hazardous Materials Transportation Act. This act includes requirements for container design and labeling, as well as for driver training. The established regulations are intended to track and manage the safe interstate transportation of hazardous materials and waste. Additionally, State and local agencies enforce the application of these acts, and coordinate safety and mitigation responses in case accidents involving hazardous materials occur.

Project construction activities may include refueling and minor maintenance of construction equipment on site, which could lead to minor fuel and oil spills. The use and handling of hazardous materials during construction would occur in accordance with applicable federal, State, and local laws, including Cal/OSHA requirements. The project would be subject to the National Pollutant Discharge Elimination System (NPDES) permit process that requires the preparation of an SWPPP, which would be reviewed and approved by the San Francisco Regional Water Quality Control Board.

Demolition and rehabilitation activities could potentially expose construction workers and the public to hazardous conditions through disturbance of hazardous building materials, because all of the structures on the project site are of an age when use of hazardous building materials such as ACM and LBP was common. If ACMs or LBP are present, and disturbed during demolition or rehabilitation activities, they could expose workers and the public to potentially hazardous airborne asbestos fibers or lead dust.

Potential exposure to hazardous building materials could be reduced through appropriate identification, removal, and disposal according to applicable regulations. Both OSHA and Cal-OSHA regulate worker exposure during construction activities that disturb LBP. The Interim Final Rule, found in 29 Code of Federal Regulations (CFR) 1926.62, covers construction work that may expose employees to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. OSHA-specified compliance includes respiratory protection, protective clothing, housekeeping, special high-efficiency filtered vacuums, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.

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

Demolition, Renovation, and Manufacturing) is intended to limit asbestos emissions from demolition or renovation of structures, and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses national emissions standards for asbestos and requires that BAAQMD be notified 10 days in advance of any proposed demolition or abatement work on structures with ACMs. All ACM found on the site must be removed before the start of demolition or renovation activity in accordance with the rule, which contains specific requirements for surveying, notification, removal, and disposal of materials containing asbestos. Mitigation Measure HAZ-2 requires that a survey for hazardous building materials be undertaken at the site, and that any hazardous building materials (if present) be properly removed and disposed of by a certified contractor prior to demolition activities.

Implementation of Mitigation Measures **MM HAZ-1** and **MM HAZ- 2**, and compliance with applicable local, State, and federal regulations, would ensure hazardous building materials are appropriately handled, transported, and disposed of, and that adequate precautions to prevent potential exposure to workers or the public will be taken. This would reduce construction impacts related to hazardous building materials to less than significant with mitigation.

## **PROJECT OPERATION**

Project operation could result in minor use, storage, and disposal of hazardous materials, including but not limited to art supplies (e.g., paints, photographic chemicals), pesticides and fertilizers, and maintenance supplies and equipment (e.g., drain cleaners, floor stripping products, paints, oils, fuels) (U.S. Environmental Protection Agency [EPA], 2006). Hazardous wastes must be disposed of in accordance with the EPA's Resource Conservation and Recovery Act and other applicable State and local requirements (EPA 2006, 2018a). Project impacts would be less than significant.

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

*Less than Significant with Mitigation Incorporated.* See item a.

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

*Less than Significant.* The project site is in an urbanized area. According to the Phase I ESA and a recent Geotracker and Envirostor search, there are no facilities that emit or handle hazardous materials within one-quarter mile. The project site is surrounded by a park and residential development, which do not handle or emit significant amounts of hazardous materials. Additionally, the project must comply with the California Education Code (including Section 17521, requiring the governing board of the school district to adopt a resolution in connection with consideration of proposal for occupancy of a building to be constructed on its property, and to conduct a public meeting). Therefore, this impact is less than significant.

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

*Less than Significant with Mitigation.* The project site is not included on the list of hazardous waste sites (Cortese List) compiled by the Department of Toxic Substances Control (DTSC) pursuant to Government Code Section 65962.5. Therefore, the project would not create a significant hazard to the public or environment. Nonetheless, there is potential for discovery of unknown contaminated soils. If not handled properly this impact would be potentially significant, and mitigation measure **MM HAZ-1** will be required. With implementation of **MM HAZ-1**, project impacts would be less than significant.

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

*No impact.* The project site is not located within 2 miles of a public airport, nor in the vicinity of a private airstrip. As a result, there are no airport land use plans that could affect or be affected by the proposed project. The project would have no impact related to creating a safety hazard or excessive noise for people residing or working in the project area.

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

*No Impact.* The project would not encroach on or obstruct any existing evacuation routes, because there are none in the project area. The project would not change the existing driveways and emergency access and would comply with existing State and County fire codes. As discussed in Section 3.17, Transportation, the project would not impair traffic conditions in the County; therefore, police and emergency services would not be adversely affected by project traffic. No public roads would be closed during project construction. The project would not impede or conflict with any adopted emergency response or evacuation plans; therefore, there is no impact.

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

*No Impact.* The project site is located in an urbanized area and is not in a State Responsibility Area or a Very High Fire Hazard Severity Zone. CAL FIRE identifies the project site as a Non-Very High Fire Hazard Severity Zone. Therefore, the project would not expose people or structures to a substantial risk of loss, injury, or death involving wildland fires. There would be no impact.

## **MITIGATION MEASURES**

### **Mitigation Measure HAZ-1: Discovery of Unknown Hazardous Materials**

If hazardous materials are encountered during construction or accidentally released as a result of construction activities, WCCUSD and/or its contractor shall implement the following procedures:

- Stop all work in the vicinity of any discovered contamination or release.

- Identify the scope and immediacy of the problem.
- Coordinate with responsible agencies, including the DTSC, the San Francisco Bay Regional Water Quality Control Board, or the EPA.
- Conduct the necessary investigation and remediation activities to resolve the situation before continuing construction work.

**Mitigation Measure HAZ-2: Hazardous Building Materials Survey and Abatement**

Prior to building permit issuance for demolition or renovation activities of any structures, Caliber Schools shall retain a certified hazardous waste contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos and LBP. If such substances are found, the contractor shall properly remove and dispose of these hazardous materials in accordance with federal and State law. The survey is required to comply with the asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61, Subpart M) and Cal/OSHA regulations found in 8 California Code of Regulations (CCR) 1529. Lead work practices should be performed in compliance with 8 CCR 1532.1, with waste handling compliance in accordance with the DTSC. All removal activities shall be completed prior to permit issuance for demolition activities. Following completion of removal activities, the applicant shall submit documentation to the BAAQMD and the County verifying that all hazardous materials were properly removed and disposed.

### 3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>X. Hydrology and Water Quality. Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.10.1 ENVIRONMENTAL SETTING

##### SURFACE WATER HYDROLOGY

The hydrology of the project area is dominated by its proximity to San Francisco Bay and the upstream Delta. Surface waters in the western, urbanized portion of Contra Costa County discharge into San Pablo or San Francisco Bays. The project area is in the Rheem and Garrity Creek Watershed (Contra Costa County Watershed Atlas, 2004). The combined watershed covers approximately 5,600 acres. Garrity Creek is the closest surface water to the project site, located 730 feet west of the project. The watershed is approximately 4 miles long, and largely channelized (Contra Costa County Watershed Atlas, 2004).

Surface water and stormwater in the project area follow the topography of the area, and generally flow to the west. Stormwater is collected in local storm drains and eventually discharged to San Pablo Bay.

## GROUNDWATER

Shallow groundwater aquifers are closely linked to the local surface waters. As surface water runoff flows from the East Bay Hills toward the San Francisco Bay, it percolates through permeable alluvial soil into underlying shallow groundwater systems. Deeper groundwater aquifers are also present, separated in areas from shallow groundwater by low-permeability soil layers. Groundwater use is limited within the East Bay due to existing high salts in shallow San Francisco Bay margin groundwater, the potential for saltwater intrusion, and the availability of high-quality imported surface water. Shallow groundwater use is limited in the artificial fill and shallow bay-margin deposits in the area because these units are largely saturated by brackish Bay water.

The project site is not in a mapped groundwater basin, and therefore is assumed not to be underlain by a substantial groundwater aquifer (DWR, 2019). Shallow groundwater would be expected to flow to the southwest or west, towards San Pablo Bay, based on surface topography.

## FLOODING

Flood-prone areas in Contra Costa County are generally located in topographically low areas, and in areas close to shorelines and creeks. The most recent Federal Emergency Management Agency (FEMA) Flood Insurance Study Flood Insurance Rate Map indicates that the project site is in Flood Zone X (FEMA, 2009). Areas identified as FEMA Flood Zone X are areas of minimal flood hazard that are outside of the 500-year floodplain. In addition, the County's General Plan identifies the project site as outside of the 100-year floodplain area (Contra Costa County, 2005).

### 3.10.2 DISCUSSION

#### a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

*Less than Significant.* Although the project site is level, there would be potential for erosion to occur during and after construction activities, particularly during the rainy season. Construction activities associated with the project, including grading, staging, trenching, and excavation, would expose soils to erosive forces. Intense rainfall and associated stormwater runoff could result in short periods of sheet erosion in areas of exposed or stockpiled soils. If uncontrolled, these soil materials could cause sedimentation and blockage of drainage channels.

Non-stormwater discharges could result from activities such as discharge or accidental spills of hazardous substances such as fuels, oils, petroleum hydrocarbons, concrete, paints, solvents, cleaners, or other construction materials. Erosion and construction-related wastes have the potential to temporarily degrade existing water quality and beneficial uses by altering the dissolved oxygen content, temperature, pH, suspended sediment and turbidity levels, or nutrient content, or by causing toxic effects in the aquatic environment. Therefore, if uncontrolled, project-related construction activities could violate water quality standards.

Construction activities that are implemented without stormwater BMPs could violate water quality standards or cause direct harm to aquatic organisms. Nonetheless, the project would implement BMPs as outlined in the project-specific SWPPP. The SWPPP would contain BMPs specifically designed to prevent erosion and protect water quality. These plans are required by law to specify and implement water quality control measures pursuant to the State Regional Water Quality Control Board's NPDES permit for construction activity (Order 2009-0009-

DWQ). In addition, Contra Costa County Ordinance 96-21, Title 1014, Stormwater Management and Discharge Control, requires erosion control and stormwater treatment measures. With implementation of existing regulations, along with compliance with the NPDES, the project would prevent adverse impacts to water quality, and therefore, the impact to water quality or waste discharge requirements from project construction would be less than significant.

Project operation would also generate additional wastewater. Nonetheless, wastewater generated by the school would be similar to the surrounding residences and existing school facility. The proposed cafeteria might result in new, different loads, but would not be atypical of other schools located in the District. The project would connect to existing wastewater infrastructure; therefore, all wastewater produced at the site would be required to meet discharge standards. Therefore, project impacts from project operation would be less than significant.

**b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

*Less than Significant.* There are no new wells proposed as part of the project that would affect groundwater recharge, and the project site is in a mapped groundwater basin (DWR, 2018). Potable water supplies would be provided to the project site by East Bay Municipal Utility District (EBMUD). Project development would include two additional buildings on already impervious surfaces. The project would increase recharge opportunities at the project site by decreasing impervious surfaces at the project site through installation of landscaping and other pervious surfaces like sports fields. Therefore, the project would not substantially interfere with groundwater supplies or recharge, and the impact would be less than significant.

**c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

**(i) Result in substantial erosion or siltation on- or off-site?**

*Less than Significant.* The project would not alter the course of a stream or river, because none are located on the project site. The project would remove the existing portables, renovate the existing school facility, and add two additional one-story buildings in the existing impervious asphalt surfaces at the project site. Because the project would result in alteration of more than 1 acre, it is required to comply with the Contra Costa Clean Water Program (CCCWP) by designing a Stormwater Control Plan using low-impact design (Contra Costa Clean Water Program, 2017).

An SWPPP provides a schedule for the implementation and maintenance of erosion control measures, and a description of site-specific erosion control practices, such as appropriate design details and a time schedule. The SWPPP would consider the full range of erosion control BMPs and would be required to be submitted prior to issuance of a grading permit from the County. Examples of construction BMPs to reduce erosion include the use of temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; performing clearing and earth-moving activities only during dry weather; and limiting construction access routes and stabilizing designated access points. With implementation of existing regulations and preparation of an SWPPP, project impacts would be less than significant.

**(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?**

*Less than Significant Impact.* The project would increase the amount of pervious surfaces compared to existing conditions, because it proposes additional landscaped areas. Landscaped areas and sports fields would be undeveloped and would provide infiltration of stormwater and reduce the volume of stormwater flowing off-site. The project would also comply with the CCCWP Stormwater C.3 Guidebook to implement an SWPPP. The C.3 requirements would further create opportunities to minimize surface runoff. Because the project would connect to existing stormwater infrastructure, and because it would increase filtration opportunities on the project site, the project would not substantially increase the potential for on-site and off-site flooding by increasing the amount of surface runoff through the addition of impervious surfaces. Therefore, the project would have a less-than-significant impact.

**(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

*Less than Significant Impact.* See item (i). The project would connect to existing stormwater facilities. As mentioned above, the project would be required to implement appropriate low-impact design measures, and comply with the CCCWP Stormwater C.3 Guidebook to implement an SWPPP to address any increases in runoff flows. The project would not create substantial amounts of runoff water that would exceed the capacity of the stormwater drainage system. The impact would be less than significant.

**(iv) Impede or redirect flood flows?**

*No Impact.* The project is not located within a 100-year and 500-year floodplain. Therefore, runoff flows from the project site would not impede or redirect flood flows. There would be no impact.

**d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

*No impact.* The project site is approximately 1.2 miles inland from the San Francisco Bay shoreline and has an average elevation of approximately 127 feet above mean sea level. Because of the distance and elevation difference between the project site and the closest water bodies, the site would not be affected by flooding hazards, including tsunami, extreme high tides, or sea-level rise. There are no surface water bodies in the vicinity of the project site that could generate damaging seiches (i.e., sloshing of water in an enclosed or restricted water body). The project would have no impact.

**e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

*No Impact.* See items (a) and (b) above. The project would not interfere with the recharge of any groundwater sources, because a groundwater basin is not identified at the project site, and it would increase permeable surfaces at the site. Therefore, it would not interfere with the Contra Costa County Sustainable Groundwater Management Plan, and the project would have no impact.

## **MITIGATION MEASURES**

None required.

### 3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XI. Land Use and Planning. Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.11.1 ENVIRONMENTAL SETTING

Per the Contra Costa County General Plan (2005), the project site is designated Public and Semi-Public, and is currently developed as a school that is surrounded by Single-Family Residential – High-Density areas. The Public and Semi-Public designation provides for public buildings/uses and infrastructure such as libraries, fire stations, schools, and other public institutions. The project site is located in the R-6 zoning designation.

#### 3.11.2 DISCUSSION

##### a) Physically divide an established community?

**No impact.** The project would not change the use of the current land, but rather upgrade the existing school building, and construct two, new one-story buildings. The project would not include any linear features, such as new roadways, or barriers that could divide the surrounding Tara Hills community or impede interaction among residents, businesses, and education / recreational / social / cultural institutions in the community. Therefore, the project would not divide an established community. The project would have no impact.

##### b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**No impact.** The project site is designated as Public and Semi-Public per the Contra Costa County General Plan (2005). The project would remove the existing portables, renovate the existing school facility, and construct two new buildings. Based on the current and proposed use, the project would be consistent with the General Plan land use designation. The project would reuse the existing school site and would intensify the use at the project site by increasing the number of staff and students at the project site. However, as outlined in this document, the project would not result in any environmental impacts, and would comply with regulations aimed at avoiding or mitigating environmental impacts.

#### MITIGATION MEASURES

None required.

### 3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII. Mineral Resources. Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.12.1 ENVIRONMENTAL SETTING

The Contra Costa County General Plan (2005) identifies three important mineral resources mined in the County: crushed rock, shale, and sand and sandstone. These protected minerals are designated in areas north of Mt. Diablo in eastern Contra Costa County. The project area is not near an area where mineral deposits are mined or located in a significant mineral resource area per the Contra Costa County General Plan (2005). In addition, the project site is currently developed as a public school, which classifies it as a categorical Social Exclusion from the Mineral Resource Zones (Perea, 2010).

#### 3.12.2 DISCUSSION

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

*No Impact.* As described above, the project site is not in an area known to contain significant mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resource of value to the region or state; nor would it 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. The project would have no impact.

- 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?**

*No Impact.* The project site does not lie in an area designated as a locally important mineral resource recovery site. Therefore, there would be no impact.

#### MITIGATION MEASURES

None required.

### 3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII. Noise. Would the project result in:</b>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.13.1 ENVIRONMENTAL SETTING

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. Noise-sensitive land uses in the vicinity of the project site include residences on adjacent properties surrounding the project site.

The existing noise environment in the project area is primarily influenced by surface-transportation noise emanating from vehicular traffic along residential roadways surrounding the project site. Other noise sources in the project vicinity include stationary noise sources such as parking lot activity and recreational activity at the existing project site, and intermittent noises from outdoor activities at the surrounding residences (e.g., people talking, operation of landscaping equipment, car doors slamming, and dogs barking).

The Contra Costa County General Plan Noise Element establishes acceptable noise levels for a variety of land use categories. Noise levels are expressed in A-weighted decibels (dBA) using the  $L_{dn}$  noise level descriptors.  $L_{dn}$  is based on the average hourly A-weighted sound level over a 24-hour period, with a +10 decibel weighting added to nighttime (10:00 p.m. to 7:00 a.m.). Environments with ambient noise levels of up to 70 dBA  $L_{dn}$  are considered “normally acceptable” for new school development (Contra Costa County, 2005). However, environments with ambient noise levels between 60 dBA and 70 dBA  $L_{dn}$  are considered “conditionally acceptable” for new school development, and new development should be undertaken only after a detailed noise analysis is performed and needed noise reduction features are included in the design. Therefore, depending on the proposed use, the surrounding uses, and the ambient noise levels, new school development could either be normally acceptable or conditionally acceptable. The project would be developed at an existing school site surrounded by residential development that experiences noise levels between 60 dBA and 70 dBA  $L_{dn}$ .

Policy 11-2 states the outdoor noise level standard in residential areas is 60 dB L<sub>dn</sub>. The Contra Costa County Ordinance Code does not include a specific noise ordinance, but does include Grading Ordinance Section 716-8.1008, which states “operations shall be controlled to prevent nuisances to public and private ownerships because of dust, drainage, removal of natural support of land and structures, encroachment, noise, and/or vibration” (Contra Costa County, 2018). Additionally, Policy 11-8 states that construction activities shall be concentrated during the hours of the day that are not noise-sensitive for adjacent land uses and should be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

Although the project site is located in unincorporated Contra Costa County, the project would be approximately 1,200 feet from City of Richmond residences. Therefore, the City of Richmond noise regulations are included for informational purposes only. The City of Richmond General Plan also establishes acceptable noise levels for a variety of land uses, including school development, that are consistent with the Contra Costa County General Plan (City of San Richmond, 2016). Ambient noise levels up to 70 dBA L<sub>dn</sub> are considered “normally acceptable” for schools. Ambient noise levels between 60dBA and 70 dBA L<sub>dn</sub> are considered “conditionally acceptable,” and should be undertaken only after detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. In addition, Section 15.04.605 of the Richmond Zoning Ordinance limits general construction noise to weekdays from 7:00 a.m. to 6:00 p.m., and pile driving and similar loud activities to weekdays from 8:00 a.m. to 5:00 p.m. Noise from mobile construction equipment in single-family residential areas is not to exceed 75dBA on weekdays from 7:00 a.m. to 7:00 p.m., and 60 dBA on weekends from 9:00 a.m. to 8:00 p.m. Noise from stationary construction equipment in single-family residential areas is not to exceed 60 dBA on weekdays, and 55dBA on the weekends.

Section 9.52 of the City of Richmond Municipal Code also establishes maximum dBA noise levels by zoning district. In single-family residential zones, maximum dBA noise levels shall not exceed 60 dBA for more than 30 minutes in any hour, measured at property line or district boundary.

### 3.13.2 DISCUSSION

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

*Less than Significant with Mitigation Incorporated.*

#### CONSTRUCTION ACTIVITIES

Project construction would include demolition of the existing portables and construction of two additional one-story structures. Construction noise would be short-term and temporary; and operation of heavy-duty construction equipment would be intermittent throughout the day during construction. Consistent with the City of Richmond’s Zoning Ordinance, general construction activities are required to be limited between the hours of 7:00 a.m. to 6:00 p.m. on weekdays, and pile driving and similar loud activities limited to weekdays from 8:00 a.m. to 5:00 p.m. Heavy earthmoving equipment can generate maximum noise levels of 85 to 90 dBA at a distance of 50 feet from the source. The closest existing dwellings are approximately 200 feet from the nearest grading activity at the project site. The nearest residences in the City of Richmond are approximately 1,200 feet away and are separated by Richmond Parkway—a main thoroughfare with heavy traffic. Maximum typical construction-related noise levels measured at 100 feet from the project site would be reduced by approximately 6 dBA to approximately

80 dBA and would likely occur during excavation and external finishing work for the project. Therefore, noise at the nearest sensitive receptor would be below 70 dBA for short periods of equipment operations.

As stated above, Policy 11-2 states the outdoor noise level standard in residential areas is 60 dB  $L_{dn}$  in Contra Costa County. During certain construction phases, this threshold would not be met, and project impacts would be potentially significant. Therefore, mitigation measure **MM NOI-1** would be required. As outlined below, the mitigation measure would require the incorporation of noise attenuation techniques. Incorporation of mitigation measure **MM NOI-1** would reduce impacts to a less-than-significant level.

## **OPERATION**

Caliber Schools anticipates the project would serve approximately 900 students at full enrollment and have 90 staff members. Permanent increases in the ambient noise level in the project vicinity would result from vehicle noise associated with school traffic, noise made by children at play in outdoor areas, and maintenance activities. Noise associated with vocalizations would be intermittent and infrequent. This noise level is not expected to constitute a significant impact, because the facilities would only be used during the daytime, when the ambient noise level in the area is higher, and because sensitivity to noise is lower during the day. The playing fields would only be used during the day. This and other noises associated with the operation of the school and with after-school events would be intermittent. The routine operational use of the project site would not result in substantial changes to noise levels for existing sensitive uses.

Mowers, blowers, weed cutters, and tractors can produce noise levels of up to 80 dBA at a distance of 100 feet, but newer equipment typically has mufflers that reduce the noise output to approximately 65 dB(A) at 50 feet. Project landscaping would occur intermittently throughout the lifetime of the project and would not impact sensitive noise receptors at 200 feet from the project site, because intermittent landscaping sounds are typical of an urban environment, such as the project area.

The project would also increase average daily traffic volumes on the roadways in the project vicinity when school is in operation. Typically, traffic volumes have to double before the associated increase in noise levels is noticeable (3 dBA  $L_{dn}$ ) (Caltrans 2013a). As discussed in Section 3.17, Transportation, the addition of proposed project traffic would not result in a doubling of existing volumes. Consequently, the proposed project would not result in a noticeable change in the traffic noise for area residents.

With implementation of Mitigation Measure NOI-1 and Mitigation Measure NOI-2, construction and operation of the project would comply with the Contra Costa County and City of Richmond noise standards and would not result in substantial temporary or periodic increase in noise levels above ambient conditions. Construction and operational noise impacts associated with project development would therefore be less than significant with mitigation.

### **b) Generation of excessive vibration or groundborne noise levels?**

***Less than Significant.*** Vibration from construction equipment and activities might be perceptible to people in the immediate vicinity of construction activities. Construction-related groundborne vibration would result from the use of heavy earthmoving equipment, excavation, compaction, grading, and paving that could result in temporary annoyance to people within 50 feet of construction activities. Project construction would produce a vibration level of approximately 87 vibration decibels (VdB; 0.089 inch per second peak particle velocity) at a distance of 25 feet (FTA, 2006; Caltrans, 2013). At the nearest residential receptor, 200 feet away, the vibration levels from

construction would be reduced to 60 VdB, assuming vibration dissipates at 9 VdB with each doubling of distance. This vibration level would be a vibration threshold of 80 VdB for human perception in residences (FTA, 2006). Operation of the project would not include significant vibration sources, and short-term construction would not result in the exposure of persons or structures to generation of excessive vibration or groundborne noise levels. Therefore, the project would have a less-than-significant impact.

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

*No impact.* There are no public or private airports within 2 miles of the project, and the project site is not within an airport land use plan. Therefore, the project would not expose people residing or working in the project area to excessive noise levels. There would be no impact.

## **Mitigation Measures**

### **Mitigation Measure NOI-1: Project Construction**

The following measures shall be incorporated into the construction contract specifications, and implemented by the contractor during project construction:

- All heavy construction equipment and all stationary noise sources, such as diesel generators, shall have manufacturer-installed mufflers.
- Equipment warm-up areas, water tanks, and equipment storage areas shall be located as far away from existing residences as feasible.
- Construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m. on weekdays.

### 3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV. Population and Housing. Would the project:</b>				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.14.1 ENVIRONMENTAL SETTING

The DOF estimates that Contra Costa County’s total population increased from 1,049,025 in 2010 to 1,149,363 in 2018, or a 9 percent increase over the 8-year period (DOF, 2018). Approximately 15 percent (172,513 persons) resided in the unincorporated areas of the county, and 85 percent (976,850 persons) resided in the incorporated cities (DOF, 2018). In 2014, as part of the Contra Costa County General Plan Housing Element update, Contra Costa County developed population projections for the county through 2030, and anticipated the population to be 1,224,400, a 16.7 percent increase from 2010.

#### 3.14.2 DISCUSSION

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

*No impact.* The project does not include the construction of dwellings or an increase in the resident population of the surrounding area. The project would renovate the existing school facility and construct two new buildings that would accommodate the existing local population. Construction of the project would occur over 14 months and would employ a maximum of 100 construction workers at peak construction. Construction worker numbers would vary during different construction stages. Although the precise location of the construction workers is not fully known at this time, based on the work force composition, it is likely that workers would likely come from the local labor pool, and not relocate from other areas.

The school would have capacity for up to 900 students in kindergarten through 8th grade. The school’s student population would include students residing in existing communities in Contra Costa County. A portion of the school’s approximately 90 teachers and staff could move from outside the local area, although the positions would likely be filled by existing residents.

Similar to the above discussion on direct impacts of the project on unplanned growth, the project would likewise have no indirect impacts on growth. Such indirect impacts could occur when a road extends through an undeveloped area, and development may be induced because of the new accessibility afforded by the road. The

proposed project is an infill project, surrounded by existing urban uses. It would not increase infrastructure capacity, and it would not require new roads that could open areas to new development. The project would not require extensions of Dolan Way or other existing roadways in the vicinity of the project site. Therefore, the project would not induce substantial population growth, either directly or indirectly. The project would have no impact.

**b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

*No impact.* The project would remove the existing portables, renovate the existing school facility, and add two new buildings. The project would not remove or displace existing housing and would not necessitate the construction of replacement housing elsewhere. The project would have no impact.

**MITIGATION MEASURES**

None required.

### 3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XV. Public Services. Would the project:</b>				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.15.1 ENVIRONMENTAL SETTING

##### FIRE SERVICES

In Contra Costa County, cities, autonomous fire districts, and County-governed fire districts provide fire protection and suppression services. All fire agencies in the County have signed mutual aid agreement to provide assistance to neighboring agencies (Contra Costa County, 2005). In collaboration with the Contra Costa County Fire District, the City of Pinole Fire Department provides fire protection and rescue services to the project site. There are 14 firefighting personnel who have been sworn-in, including the fire chief and civilian positions. In 2017, the City of Pinole Fire Department responded to more than 2,500 service calls (City of Pinole). The closest station to the project site is Station 73, at 880 Tennent Avenue in Pinole, approximately 2.4 miles to the northeast.

##### POLICE SERVICES

The Contra Costa County Sheriff’s Department provides police protection services for all unincorporated areas in the County. The Bay Station, approximately 2.6 miles west in the Richmond area, provides law enforcement services to the project site. The Bay Station is staffed by 1 Lieutenant, 5 sergeants, 25 deputies, and 1 community service officer. The Sheriff’s Department also sponsors a number of programs such as Neighborhood Watch programs, which have resulted in reduced rates of theft and other types of crime in neighborhoods throughout Contra Costa County (Contra Costa County, 2005).

##### SCHOOLS

There are 18 school districts and one community college district in Contra Costa County (Contra Costa County, 2005). WCCUSD operates 54 schools with more than 30,000 students and 3,000 employees. Although the project

site is in the WCCUSD, the project would be operated by Caliber Schools. Caliber Schools currently provides educational services through two charter schools in Richmond and Vallejo.

## **PARKS**

The primary agencies administering major parks in Contra Costa County are the Contra Costa County Public Works Department, State Department of Parks and Recreation, and the East Bay Regional Park District. There are also numerous local parks: Hilltop Lake Park is the closest community park, approximately 1.5 miles southwest of the project site, and features 36 acres of natural area, trails, and picnic area (David Gates & Associates, 2010). The State owns three parks in Contra Costa County that are in the central and eastern part of the county. East Bay Regional Park District maintains numerous parks and internal trail systems, in addition to Regional Trail, that are fully or partially within the County.

### **3.15.2 DISCUSSION**

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

#### **Fire protection**

*Less than Significant.* The project would renovate an existing school building and construct two new ones; it would not induce population growth that could increase calls for fire protection services that would result in new or altered fire stations or fire suppression facilities.

The project would incorporate California Fire Code requirements into project designs. These standards address access road length, dimensions, and finished surfaces for firefighting equipment; fire hydrant placement; fire flow availability and requirements; and plan submittal requirements. The California Fire Code requires that every public or private school building with an occupancy rate of 50 or more students, or more than one classroom, have an automatic fire alarm system, using the California Fire Code Signal outlined in the California Education Code (Sections 32000–32004). Furthermore, the California Education Code requires new schools to install an automatic fire sprinkler system (Section 17074.52).

The project site is currently in use as an adult education school and District offices. The current uses are similar to the proposed educational uses. With incorporation of all California Fire Code requirements, and because the uses on site would not substantially change, the project would not affect the Pinole Fire District’s response times or other performance objectives and would require the construction of new or expansion of existing fire protection facilities that could result in environmental effects. The project would have a less-than-significant impact.

#### **Police protection**

*Less than Significant.* The Contra Costa County Sheriff’s Department already serves the project area and would continue to serve the project site. The project site would be lit at night for security purposes to discourage crime. Because the project would not substantially change the use at the project site or the size of the parking lots, the project would not substantially increase the Sheriff’s Department calls for service or affect the Sheriff’s

Department's performance objectives. There may be occasional calls to respond to property damage or theft, because of the greater population and facilities at the site, but they would be infrequent, and would not be expected to increase the demand for staff or resources that would require the construction of new or expanded Sheriff facilities. As a result, the project would not require new or altered law enforcement facilities that could result in a significant environmental impact. There would be a less-than-significant impact.

### **Schools**

*No impact.* The project would not increase the demand for or cause a shortfall of school services or facilities. Rather, the project would serve the existing and future educational needs in Contra Costa County. The project also would not include new housing that would generate greater student enrollment but increase the availability of schools for students in the WCCUSD service area. The project would have no impact.

### **Parks**

*No impact.* The project would not increase the population in the project area as a result of new housing or employment opportunities. Once school operation begins, the class schedule would not interfere with the Tara Hills Baseball schedule; therefore, there would be no displacement of recreational facilities. Additionally, the project would include recreational areas for the students. The project would not affect the existing neighborhood or community parks or require construction of new parks to meet the County's parkland standard. The project would have no impact.

### **Other public facilities**

*No impact.* The project would not increase the population in the project area as a result of new housing or employment opportunities. Therefore, project operation would not increase demand for other public facilities. The project would have no impact.

### **MITIGATION MEASURES**

None required.

### 3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVI. Recreation. Would the project:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.16.1 ENVIRONMENTAL SETTING

Contra Costa County has a variety of parks and recreational open spaces that include woods, mountains, lakes, streams, wetlands, and agricultural land (Contra Costa County, 2005). The project site is on the former Kerry Hills Elementary School that currently serves various community functions, including a basketball court and the baseball fields that are actively used by Tara Hills Baseball (Millennium Consulting Associates, 2018a). Contra Costa County manages over 1,200 acres of hiking trails, including dozens of parks. Hilltop Lake Park is the closest community park, approximately 1.5 miles southwest of the project, and features 36 acres of natural area, trails, and picnic area (David Gates & Associates, 2010).

#### 3.16.2 DISCUSSION

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

*No impact.* The project would not increase the population as a result of new housing or employment opportunities. The project would include recreational fields for students and faculty on site, including play areas, a soccer field, and hardcourt areas. In addition, once school operation begins, the school schedule would not conflict with the existing Tara Hills Baseball schedule. Therefore, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that a physical deterioration of those facilities would occur or be accelerated. The project would have no impact.

- b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

*Less than Significant.* The project includes construction of up to four new outdoor play areas, an outdoor learning center, a soccer field, and relocation of the existing hardcourt to the northeastern portion of the project site. These recreational areas would accommodate students of the renovated school facility. Construction of these facilities would result in the potentially significant physical environmental impacts identified in other subsections of this Initial Study. These impacts are addressed in relevant subsections throughout this IS/MND, and include air

quality, biological resource, cultural resources, geology, noise, and transportation. Mitigation measures are identified for potentially significant impacts to reduce them to a less-than-significant level. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this IS/MND.

In addition, the project site already contains playing fields that are currently used by the local Tara Hills baseball team. The project would not result in substantial increase in the use of existing public parks and recreational facilities to the extent that physical deterioration would be accelerated, because recreational opportunities for students would be provided on site. Physical effects associated with construction of the outdoor play areas, outdoor learning center, and relocated hardcourt would be less than significant with incorporation of mitigation throughout this IS/MND.

### **MITIGATION MEASURES**

None required.

### 3.17 TRANSPORTATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVI. Transportation. Would the project:</b>				
a) Conflict with a program plan, ordinance, or policy the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.17.1 ENVIRONMENTAL SETTING

##### CIRCULATION SYSTEM

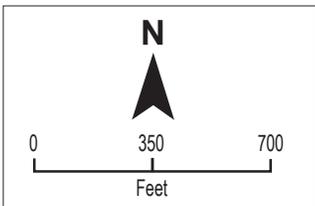
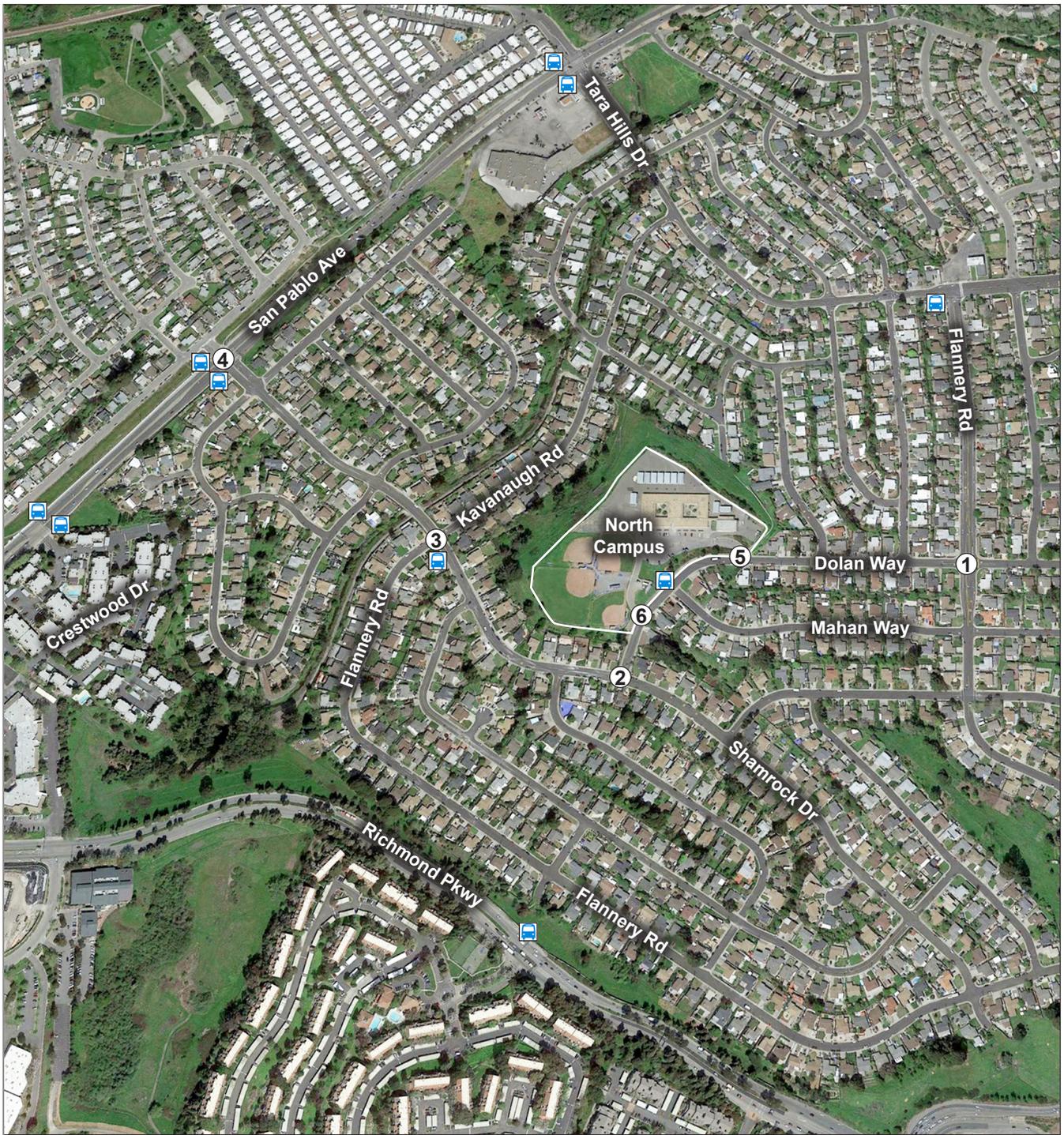
The project site is in the Tara Hills Community, unincorporated Contra Costa County, at 2465 Dolan Way, near the intersection with Shamrock Drive. The project site is bounded by Dolan Way to the south and Shamrock Drive to the west. Regional access to the project site is via San Pablo Avenue and Richmond Parkway. San Pablo Avenue is northwest of the project site, connecting to Richmond Parkway to the west. The study area is shown in Figure 3.15-1.

San Pablo Avenue extends for roughly 19 miles and runs parallel with I-80 between the unincorporated community of Rodeo in Contra Costa County to the north, and downtown Oakland in Alameda County to the south, through the East Bay cities of Hercules, Pinole, San Pablo, Richmond, El Cerrito, Albany, and Berkeley. It is designated as State Route 123 between its junction with I-80 in Richmond and I-580 in Oakland. The posted speed limit is 45 miles per hour (mph) north of River Street, and 35 mph in the rest of the city. The 2-mile-long arterial is divided with a center median with left-turn pockets. It is characterized by many intersecting streets forming T-intersections with minor roadways.

Dolan Way is an east-west, two-way roadway with one lane in each direction, extending from Tara Hills Elementary School to the east to Shamrock Drive to the west. Shamrock Drive is a north-south, two-way roadway with one lane in each direction, extending from San Pablo Avenue to the north to Flannery Road to the south.

##### BICYCLE AND PEDESTRIAN FACILITIES

The Contra Costa Countywide Bicycle and Pedestrian Plan identifies existing and proposed bike facilities in the project study area (Contra Costa County, 2009).



**LEGEND**

-  Bus Stop
-  Intersection ID

60586485 SAC GFX 002 - San Pablo North Campus Traffic Map.indd - VMG 05/13/2019

Source: AECOM, 2019.



There are currently no bicycle facilities in the project area. Existing pedestrian facilities in the area are composed of sidewalks and pedestrian crosswalks. Pedestrian sidewalks are available on all streets in the project area. The project site can be accessed by sidewalks from the adjacent roadways. The school site is also connected to Dundee Road to the west and Kavanaugh Road to the north by on-site pedestrian trails.

Based on the pedestrian/bicycle counts at all project study intersections, pedestrian/bicycle crossing volumes in the project area are considered “light” during the peak-hour crossing period. The pedestrian flow is mainly children and young adults (or parents) walking to the area schools, parks, and other residential area commutes.

## **PUBLIC TRANSPORTATION**

The closest bus station to the project site, as shown in Figure 3.15-1, is the WestCat (Western Contra Costa) 18 line bus station at Dolan Way and Mahan Way.<sup>4</sup> The 18 bus line (Richmond Parkway Transit Center) has 11 stops; departing from San Pablo Avenue and Tara Hills Drive northbound and ending at Richmond Parkway Transit Center. The 18 bus line starts operating at 5:59 a.m., and ends at 5:37 p.m., operating weekdays. No commuter rail services are in the project area.

## **VEHICLE MILES TRAVELED**

SB 743 directed the Governor’s Office of Planning and Research to develop guidelines for assessing transportation-related impacts that “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses” (Public Resource Code Section 21099[b][1]). These guidelines replace automobile delay, as described through level of service (LOS), with more appropriate criteria and metrics based on travel demand, such as “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated” (Public Resources Code Section 21099[b][1]). The State CEQA Guidelines were amended in 2019 to include guidance and thresholds for measuring travel demand. Although some California jurisdictions have already begun implementing SB 743 at a local level, Contra Costa County has not yet adopted formal changes to its thresholds and guidelines. Therefore, the analysis presented in this section continues to use the earlier State CEQA Guidelines thresholds and related local thresholds in determining the significance of potential project impacts.

## **LEVEL OF SERVICE**

The Transportation & Circulation Element of the Contra Costa County General Plan contains the following relevant policies:

- ▶ 5-4: Development shall be allowed only when transportation performance criteria are met and necessary facilities and/or programs are in place or committed to be developed within a specific period of time.
- ▶ 5-8: Direct frontage and access points on arterials and collectors shall be minimized.
- ▶ 5-13: Physical conflicts between vehicular traffic, bicyclists, and pedestrians shall be minimized.
- ▶ 5-15: Curbs and sidewalks shall be provided in appropriate areas.

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<sup>4</sup> Tara Hills – Richmond Parkway Transit Center Hilltop Mall: [https://moovitapp.com/index/en/public\\_transit-line-18-SF\\_Bay\\_Area\\_CA-22-904378-488977-0](https://moovitapp.com/index/en/public_transit-line-18-SF_Bay_Area_CA-22-904378-488977-0)

- ▶ 5-25: Planning and provision for a system of safe and convenient pedestrian ways, bikeways and regional hiking trails shall be continued as a mean of connecting community facilities, residential areas, and business districts, as well as points of interest outside the communities utilizing existing public and semi-public right-of-way.

The operation of a local roadway network is commonly measured and described using a grading system called Level of Service (LOS). The LOS grading system qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic (expressed as a volume-to-capacity ratio (V/C) and/or vehicle delay in seconds), ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long queues and delays). This LOS grading system applies to both signalized and unsignalized intersections. At unsignalized intersections, stated intersection LOS usually refers to the minor street or stop-sign controlled driveway movement. LOS A, B, and C are generally considered satisfactory service levels, while the influence of congestion becomes more noticeable (although still considered acceptable) at LOS D. LOS E and F are generally considered to be unacceptable.

Contra Costa Transportation Authority (CCTA) sets LOS thresholds under which a significant impact would occur if:

- ▶ The project causes a signalized intersection's LOS to degrade from an acceptable level (LOS D or better, v/c ratio of 0.85 or lower) to an unacceptable level (LOS D, v/c ratio greater than 0.85); or
- ▶ The project causes the v/c ratio at a signalized intersection operating at an unacceptable LOS without the Project to increase by 0.05 or more.

No LOS thresholds have been established by the CCTA or the County for unsignalized intersections. Based on accepted standards, the following LOS threshold has been applied to all unsignalized intersections for determining project impacts:

- ▶ A significant impact would occur if an unsignalized intersection LOS degrades from an acceptable level-of-service (LOS D or better) to an unacceptable level (LOS E-F).

The study intersections for the proposed project (Figure 3.15-1) include signalized and unsignalized intersections.

### **SIGNALIZED INTERSECTIONS**

Operations of the signalized study intersections were evaluated using the Contra Costa Transportation Authority Level of Service (CCTALOS) method. The CCTALOS method uses various intersection characteristics (such as traffic volumes, lane geometry, and signal phasing) to estimate an intersection's V/C ratio. Table 3.15-1 summarizes the relationship between the V/C ratio and LOS for signalized intersections.

### **UNSIGNALIZED INTERSECTIONS**

For unsignalized (all-way stop-controlled and side-street stop-controlled) intersections, the 2000 Highway Capacity Manual (HCM) Special Report 209, Chapter 17 method was used. With this method, operations are also defined by the average control delay per vehicle, based on the delay associated with the stop signs. For side-street stop-controlled intersections, the delay is estimated for movements that must yield the right-of-way (includes those turning movements from stopped approaches and left-turns from major thoroughfares). An intersection

average delay is estimated for all-way-stop intersections. Table 3.15-1 summarizes the relationship between delay and LOS for unsignalized intersections.

**Table 3.15-1. Definitions for Intersection Level of Service**

Unsignalized Intersections		Level of Service Grade	Signalized Intersections	
Description	Total Delay		V/C Ratio or Control Delay	Description
No delay for stop-controlled approaches.	≤10.0	A	≤0.60 V/C ≤10.0	Free Flow or Insignificant Delays: Operations with very low delay, when signal progression is extremely favorable and most vehicles arrive during the green light phase. Most vehicles do not stop at all.
Operations with minor delay.	>10.0 and ≤15.0	B	0.61 to 0.70 V/C >10.0 and ≤20.0	Stable Operation or Minimal Delays: Generally occurs with good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average delay. An occasional approach phase is fully utilized.
Operations with moderate delays.	>15.0 and ≤25.0	C	0.71 to 0.80 V/C >20.0 and ≤35.0	Stable Operation or Acceptable Delays: Higher delays resulting from fair signal progression and/or longer cycle lengths. Drivers begin having to wait through more than one red light. Most drivers feel somewhat restricted.
Operations with increasingly unacceptable delays.	>25.0 and ≤35.0	D	0.81 to 0.90 V/C >35.0 and ≤55.0	Approaching Unstable or Tolerable Delays: Influence of congestion becomes more noticeable. Longer delays result from unfavorable signal progression, long cycle lengths, or high V/C ratios. Many vehicles stop. Drivers may have to wait through more than one red light. Queues may develop, but dissipate rapidly, without excessive delays.
Operations with high delays, and long queues.	>35.0 and ≤50.0	E	0.91 to 1.00 V/C >55.0 and ≤80.0	Unstable Operation or Significant Delays: Considered to be the limit of acceptable delay. High delays indicate poor signal progression, long cycle lengths and high V/C ratios. Individual cycle failures are frequent occurrences. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
Operations with extreme congestion, and with very high delays and long queues unacceptable to most drivers.	>50.0	F	>1.00 V/C >80.0	Forced Flow or Excessive Delays: Occurs with oversaturation when flows exceed the intersection capacity. Represents jammed conditions. Many cycle failures. Queues may block upstream intersections.

V/C = volume-to-capacity ratio

Source: Transportation Research Board, *Highway Capacity Manual*, 2000.

## INTERSECTION QUEUING

The county does not have formally adopted guidelines on queuing analysis methodology or criterion that establish thresholds of significance for vehicle queues at intersections. For the purposes of this study, a vehicle queue that overflows the available storage for a turn pocket blocking the adjacent travel lane, or that queues to an upstream

signal blocking through-traffic is considered a potential safety hazard and would be considered a significant impact. Therefore, a significant impact would occur at locations where the project traffic would cause the queue length for a turn pocket to overflow its available storage compared to no project conditions or cause a queue to spillback into an upstream signalized intersection. Further, in cases where the no project queue already overflows the queue storage, and the project would contribute 5 percent of the total traffic for the movement, the impact would be considered significant.

Queues were evaluated at the school driveways using the Synchro 9 software and 95th percentile queue lengths were reported to identify locations where the queues may exceed the available storage capacity (queues may be longer during 5 percent of the peak hour traffic signal cycles). The 95th percentile queue is typically used in traffic engineering as a conservative measure of reporting queuing; and because it only has a 5 percent probability of being exceeded, the average driver would likely experience shorter queue lengths than the reported value. Average queues can be found on the Synchro output sheets provided in Appendix TRA. In addition to assessing queuing with Synchro, queuing along the school driveways was also simulated, as presented further below under the impact discussion.

### **EXISTING LEVEL OF SERVICE**

Existing traffic conditions were analyzed at the following six intersections during the weekday a.m. and p.m. peak hours, which represent the busiest 60-minute periods (i.e., four consecutive 15-minute periods) during the 2-hour weekday a.m. and p.m. peak periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., respectively):

1. Flannery Road & Dolan Way
2. Shamrock Drive & Dolan Way
3. Flannery Road & Shamrock Drive
4. San Pablo Avenue & Shamrock Drive
5. Dolan Way & School Driveway1
6. Dolan Way & School Driveway2

The operations of the six study intersections were evaluated for the following scenarios:

- ▶ *Existing Conditions*—Existing peak-hour volumes at studied intersections.
- ▶ *Existing with Project Conditions*— Existing peak-hour volumes at studied intersections, plus project-generated traffic.

The analysis of intersection LOS was conducted using the Synchro-Simtraffic traffic analysis program. The results of the analysis indicate that all six intersections currently operate at an acceptable LOS C or better. Table 3.15-2 presents the Existing Conditions traffic volumes for each study intersection.

Table 3.15-2 shows the correlation between average stopped delay and LOS for unsignalized intersections, and V/C and LOS for signalized intersection. All study intersections are operating at LOS D or better during both the AM and PM peak hours, except the intersection of San Pablo Avenue and Shamrock Drive during the PM peak hour, which is operating at LOS F. Although some vehicle queuing was observed at the San Pablo Boulevard / Shamrock Drive intersection, the majority of vehicle queues were observed to clear within the allotted green signal time at all intersections. All unsignalized intersections operate acceptably for minor street operations. Figure 3.15-2 presents the Existing and Existing with Project Conditions – AM traffic volumes for each study intersection. Existing and Existing with Project Conditions – PM traffic volumes are illustrated in Figure 3.15-3.

**Table 3.15-2. Existing intersection LOS**

Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
		V/C Ratio/ Delay	LOS	V/C Ratio/ Delay	LOS
Flannery Road & Dolan Way	AWSC	8.9	A	5.6	A
Shamrock Drive & Dolan Way	SSSC	5.6	A	3.9	A
Flannery Road & Shamrock Drive	AWSC	8.4	A	8.2	A
San Pablo Avenue & Shamrock Drive	Signal	*0.68/11.4	B	*1.33/125.6	F
Dolan Way & School Driveway <sup>1</sup>	SSSC	1.7	A	1.7	A
Dolan Way & School Driveway <sup>2</sup>	SSSC	0**	A	0*	A

Notes: V/C = volume-to-capacity ratio; Level of service (LOS) at signalized and all-way stop-controlled (AWSC) intersections represent overall intersection conditions; level of service at side-street stop-control (SSSC) intersections represent the turning movement with the worst condition.

\* Volume-to-capacity ratio and delay

\*\* Exit Only with Stop Control.

Source: Data compiled by AECOM 2019

## EXISTING QUEUES

Queues were assessed at the study intersections under existing conditions. Table 3.15-3 shows the queue lengths in feet. As shown in the table, the 95th Queue lengths along both driveways do not exceed the available distance under existing conditions.

**Table 3.15-3. Existing Queues at Project Site Driveways**

Movement		Dolan Way & East Driveway		Dolan Way & West Driveway
		EB	SB	SE
Directions Served		LT	LR	R
Existing AM	95th Queue (ft)	15	33	31
	Link Distance (ft)	438	387	250
Existing PM	95th Queue (ft)	0*	34	30
	Link Distance (ft)	0	387	250

\*No queues during the PM peak hour, because the existing PM peak hour traffic volumes are low.

Source: Data compiled by AECOM 2019

## PROJECT TRAVEL DEMAND

Travel demand represents the estimated trips in each relevant travel mode (e.g., automobile, transit, biking, walking) that would be generated by the project; the origins, and destinations of those trips; and the way in which they are assigned to the available transportation facilities.

## Trip Generation

As described in the Project Description, the proposed school capacity would be 900 students, with anticipated full enrollment at the school opening in the fall of 2021. The school would also include a total of approximately 90 staff, including instruction, administration, and maintenance staff. Projected enrollments for the proposed new school are shown in Table 3.15-4. The schedule of classes is shown in Table 3.15-5: grades TK to 5 would be in session from 8:05 a.m. to 3:15 p.m., and grades 6 to 8 would run from 8:00 a.m. to 3:30 p.m. Students would start

arriving as early as 7:30 a.m. (all grades) for breakfast. Minimum days would be on Friday, with grades TK to 5 scheduled from 8:05 a.m. to 12:25 p.m., and grades 6 to 8 from 8:00 a.m. to 12:30 p.m.

**Table 3.15-4. Projected Enrollment**

<b>Grade</b>	<b># of Students</b>
TK	15-24
K	100
1	100
2	100
3	100
4	100
5	100
6	90
7	90
8	90
<b>TOTAL</b>	<b>Up to 900</b>
<b>TK-5</b>	<b>624</b>
<b>6-8</b>	<b>270</b>

Source: Data compiled by AECOM 2019.

School-related events (such as after-school nights and festivals) would have as many as 60 participants per school-night events. These events would mainly occur during the afternoons, and would only take place several times a year. During special events most parents would arrive at the project site during the normal pick up time and depart during the PM peak hour. Larger events, like graduations would take place during the weekends, where traffic overall on surrounding streets would be lower. Parking for events would be on school grounds only. Additionally, after-school programs would have as many as 150 students on regular school days, with dismissal around 6:00 p.m. These 150 students are a sub-set of the 900 total students already on campus, with the same arrival time and a later departure time.

The project’s trip generation was based on school capacity. Traffic volumes were estimated based on the number of anticipated students and staff, and trip generation rates for schools published in the Institute of Transportation Engineers (ITE) *Trip Generation, 9<sup>th</sup> Edition*. Trip generation estimates from the proposed school expansion are summarized in Table 3.15-5. For school-related events it was assumed that most participants would arrive prior to the afternoon peak hour, as they would arrive during the school pick up hour. We assumed a small subset of participants, approximately 33%, would arrive at a later time that would coincide with afternoon peak hour.

**Table 3.15-5. Trip Generation**

Land Use	Size	Morning Peak Hour			Afternoon Peak Hour		
		Rate	In	Out	Rate	In	Out
Elementary School <sup>a</sup>	624 Students	0.45	154	126	0.15	46	48
Middle School <sup>b</sup>	270 Students	0.54	80	66	0.16	21	22
Elementary School *	60 Employees		60				60
Middle School *	30 Employees		30				30
School-Related Events*	200 Participants					20	60
<b>Total</b>			<b>324</b>	<b>192</b>		<b>87</b>	<b>220</b>

<sup>a</sup> & <sup>b</sup> Code 520 (Elementary School), <sup>b</sup> Code 522 (Middle/High School) in *ITE Trip Generation Manual*, 9<sup>th</sup> Edition.

\* Assumed conservative number of vehicles, because no specific rates are available.

Note: Afternoon peak-hour trips are not available in the ITE Trip Generation Manual.

Source: Data compiled by AECOM 2019

### Trip Distribution

The trip distribution represents the paths that traffic would use to travel to and from a project site. The directions of approach and departure for trips that would be generated by the project were estimated based on the regional distribution of existing developed areas surrounding the study area and considering the best route choices to access the school from the surrounding areas.

Trip distribution for this project was estimated based on the school access locations, as well as the residential areas for students. The project would maintain the existing ingress and egress points from Dolan Way. Main campus access would be from Dolan Way (referred to as East Driveway in Table 3.15-6), with a secondary exit only from Dolan Way just west of the main ingress point (West Driveway in Table 3.15-6). The main parking lot off Dolan Way and the second smaller lot to the east of the campus would be retained as part of the project. The parking lots would be restriped and resurfaced. A total of 90 parking spaces would be available to staff, parents, and visitors to the site, with 90 percent anticipated to be used by staff, and the remainder for visitors.

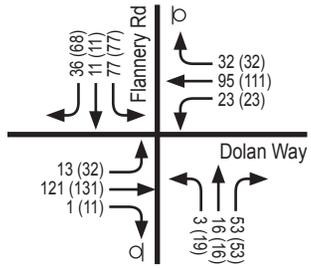
The trip assignment is the product of the project trip generation and the trip distribution percentages at each intersection. The result of the trip assignment process is a full accounting of project trips, by direction and turning movement at the study intersections. Based on prevailing traffic patterns, roadway capacity, and consultation with District staff, the trip distribution assumes the assignment/circulation patterns shown in Table 3.15-6.

**Table 3.15-6. Proposed Project Trip Distribution Assumptions (Students and Employees)**

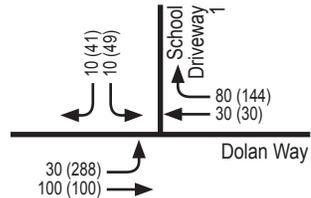
Daily Trips	AM Peak-Hour Trips	Direction (to and from)	Percentage of Total Traffic (%)		Traffic Volume (AM Trips)		
			To	From	To	From	
<b>Morning Trips</b>							
<b>East Driveway (Entrance &amp; Exit)</b>							
900 Students and 90 Staff	324	Dolan Way east of Flannery Road	5	5	16	10	
		Flannery Road north of Dolan Way	10	10	32	19	
		Flannery Road south of Dolan Way	5	5	16	10	
		Shamrock Drive east of Dolan Way	5	1	16	2	
		Flannery Road south of Shamrock Drive	5	1	16	2	
		Flannery Road north of Shamrock Drive	10	2	32	4	
		San Pablo Avenue north of Shamrock Drive	20	4	65	8	
		Shamrock Drive west of San Pablo Avenue	5	1	16	2	
		San Pablo Avenue south of Shamrock Drive	35	7	113	13	
	<b>West Driveway (Exit Only)</b>						
	194	Shamrock Drive east of Dolan Way	---	4	---	8	
		Flannery Road south of Shamrock Drive	---	4	---	8	
		Flannery Road north of Shamrock Drive	---	8	---	15	
		San Pablo Avenue north of Shamrock Drive	---	16	---	31	
		Shamrock Drive west of San Pablo Avenue	---	4	---	8	
San Pablo Avenue south of Shamrock Drive		---	28	---	54		
<b>Afternoon Trips</b>							
<b>East Driveway (Entrance &amp; Exit)</b>							
Events and After School Programs	87	Dolan Way East of Flannery Road	5	5	4	11	
		Flannery Road north of Dolan Way	10	10	9	22	
		Flannery Road south of Dolan Way	5	5	4	11	
		Shamrock Drive east of Dolan Way	5	1	4	2	
		Flannery Road south of Shamrock Drive	5	1	4	2	
		Flannery Road north of Shamrock Drive	10	2	9	4	
		San Pablo Avenue north of Shamrock Drive	20	4	17	9	
		Shamrock Drive west of San Pablo Avenue	5	1	4	2	
		San Pablo Avenue south of Shamrock Drive	35	7	30	15	
	<b>West Driveway (Exit Only)</b>						
	320	Shamrock Drive east of Dolan Way	---	4	---	9	
		Flannery Road south of Shamrock Drive	---	4	---	9	
		Flannery Road north of Shamrock Drive	---	8	---	18	
		San Pablo Avenue north of Shamrock Drive	---	16	---	35	
		Shamrock Drive west of San Pablo Avenue	---	4	---	9	
San Pablo Avenue south of Shamrock Drive		---	28	---	62		

Source: Data compiled by AECOM 2019

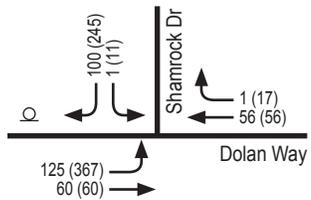
① Flannery Rd / Dolan Way



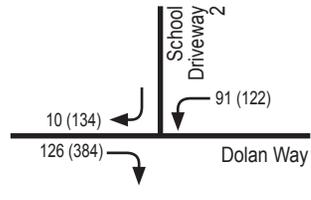
⑤ Dolan Way / School Driveway 1



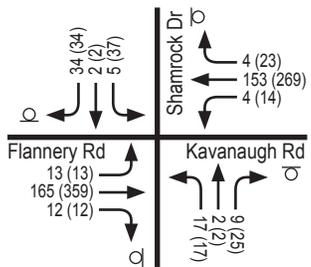
② Dolan Way / Shamrock Dr



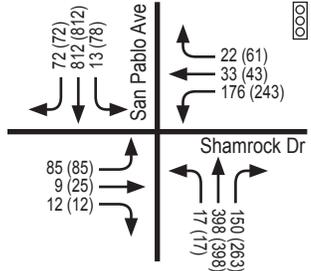
⑥ Dolan Way / School Driveway 2



③ Flannery Rd / Shamrock Dr



④ San Pablo Ave / Shamrock Dr



**Legend**

- XX Existing AM Volumes
- (XX) Future AM Volumes
- ⊘ Stop Sign
- Ⓜ Signalized Intersection
- ① Intersection ID

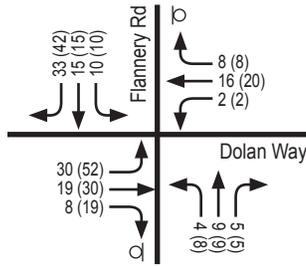


60586485 SAC GFX 001 - San Pablo North Campus Traffic Map AM.indd - VMG 05/13/2019

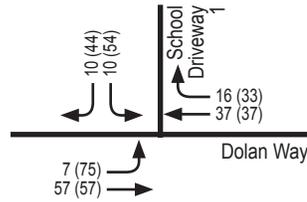
Source: AECOM, 2019.

**FIGURE 3.15-2**  
 Existing and Existing with Project - AM Turning Movement Volumes

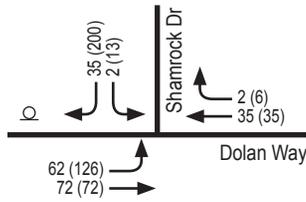
① Flannery Rd / Dolan Way



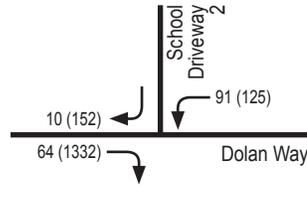
⑤ Dolan Way / School Driveway 1



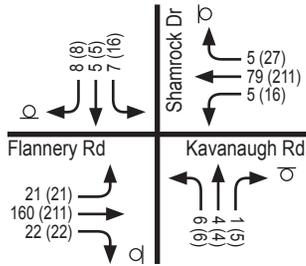
② Dolan Way / Shamrock Dr



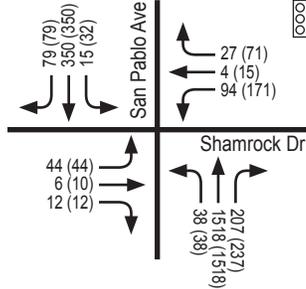
⑥ Dolan Way / School Driveway 2



③ Flannery Rd / Shamrock Dr



④ San Pablo Ave / Shamrock Dr



**Legend**

- XX Existing PM Volumes
- (XX) Future PM Volumes
- ⊘ Stop Sign
- ⊞ Signalized Intersection
- ① Intersection ID



60586485 SAC GFX 003 - San Pablo North Campus Traffic Map PM.indd - VMG 05/13/2019

Source: AECOM, 2019.

**FIGURE 3.15-3**  
 Existing and Existing with Project - PM Turning Movement Volumes

### 3.17.2 DISCUSSION

**a) Conflict with a program plan, ordinance, or policy the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

*Less than Significant.* The project would add vehicular traffic on roadways in the immediate vicinity and on streets leading to the school. As shown in Table 3.15-5, most traffic would occur during drop-off and pick-up of students, and staff commutes to and from the site via personal vehicles at 8:00 a.m., and 3:00 p.m. each school day. However, as shown in Table 3.15-7, traffic increase associated with morning trips to and from the school would be more than the afternoon trips. Also, typically, CCTA requires that traffic impact analyses be prepared for any project in the County that generates 100 or more PM peak-hour trips, which the proposed project would generate, as shown in Table 3.15-7. Therefore, to be conservative, both the morning and the afternoon school trips (associated with school events and after-school programs during the PM peak hour) were evaluated.

LOS levels during the AM and PM peak hours for the intersections near the proposed project site (see Figure 3.15-1, above) are shown in Table 3.15-7 and Table 3.15-8. All study intersections are operating at LOS D or better during both the AM and PM peak hours, except the intersection of San Pablo Avenue and Shamrock Drive, which is operating at LOS F during the PM peak hour under Existing and Existing with Project. The intersection already operates at LOS F and the school operations would contribute a very small percentage to the existing traffic during the afternoon peak. The project traffic would cause the intersection delay to increase by less than 1 second from 125.6 sec to 126.1 sec. As stated above, Contra Costa Transportation Authority (CCTA) sets LOS thresholds under which a significant impact would occur if the project causes the v/c ratio at a signalized intersection operating at an unacceptable LOS without the Project to increase by 0.05 or more. The project would only increase the volume to capacity ratio by 0.02 from 1.33 to 1.35, as shown in Table 3.15-8. Therefore, this impact is **less than significant**. Additionally, these increases would only be during special events, which as described above would take place several times a year. During those times, most students would leave the campus before PM peak-hour traffic, with only a slight overlap. During normal operational hours, project traffic impacts would be lower than what is presented in the tables below. Because the project would contribute a small percentage of the overall traffic on four to six occasions a year, the project impacts would be less than significant, and the project would not conflict with any programs, plans, or policies aimed at regulating the circulation system.

**Table 3.15-7. Existing with Project Intersection LOS (AM)**

Intersection	Traffic Control	Existing Peak Hour		Existing with Project Peak Hour	
		V/C Ratio/ Delay	LOS	V/C Ratio/ Delay	LOS
Flannery Road & Dolan Way	AWSC	8.9	A	9.8	A
Shamrock Drive & Dolan Way	SSSC	5.6	A	7.9	A
Flannery Road & Shamrock Drive	AWSC	8.4	A	12.0	B
San Pablo Avenue & Shamrock Drive	Signal	*0.68/11.4	B	*0.68/11.1	B
Dolan Way & School Driveway1	SSSC	1.7	A	6.4	A
Dolan Way & School Driveway2	SSSC	0**	A	0*	A

Notes: Level of service (LOS) at signalized and all-way stop-controlled (AWSC) intersections represent overall intersection conditions; LOS at side-street stop-control (SSSC) intersections represent the turning movement with the worst condition.

\* Volume-to-capacity ratio and delay\*\* Exit Only with Stop Control.

Source: Data compiled by AECOM 2019

**Table 3.15-8. Existing with Project Intersection LOS (PM)**

Intersection	Traffic Control	Existing Peak Hour		Existing with Project Peak Hour	
		V/C Ratio/ Delay	LOS	V/C Ratio/ Delay	LOS
Flannery Road & Dolan Way	AWSC	5.6	A	6.5	A
Shamrock Drive & Dolan Way	SSSC	3.9	A	6.8	A
Flannery Road & Shamrock Drive	AWSC	8.2	A	9.3	A
San Pablo Avenue & Shamrock Drive	Signal	*1.33/125.6	F	*1.35/126.1	F
Dolan Way & School Driveway1	SSSC	1.7	A	5.3	A
Dolan Way & School Driveway2	SSSC	0**	A	0*	A

Notes: Level of service (LOS) at signalized and all-way stop-controlled (AWSC) intersections represent overall intersection conditions; LOS at side-street stop-control (SSSC) intersections represent the turning movement with the worst condition.

\* Volume-to-capacity ratio and delay

\*\* Exit Only with Stop Control.

Source: Data compiled by AECOM 2019

The project would also add pedestrian and bicycle traffic on roadways in the immediate vicinity, and on streets leading to the school. However, existing north-south pedestrian crosswalks are located both to the east and west of the school driveways, along McMorro Road and Shamrock Drive, respectively. Existing sidewalks along Dolan Way and on-site pedestrian trails would safely accommodate the pedestrian and bicycle traffic, based on the existing low usage. Furthermore, typical safety measures during students drop-off and pick-up times would be in place under the project operation to improve and enhance pedestrian and bicycle circulation and safety. The project impact is less than significant.

As discussed in the project setting above, the project site is served by bus line 18, with a bus stop on Dolan Way and Mahan Way. The project would not change the availability of that transit service, nor would it interrupt service during construction. Therefore, the project’s effects on public transit would be less than significant, because current transit service would be maintained, and bus stops would remain accessible.

Queues were assessed at the two drop-off/pick-up locations at the school campus. Table 3.15-9 below shows the queue lengths in feet. As shown in the table, the 95th Queue lengths along both driveways do not exceed the available distance under existing with project conditions and the project would have a less than significant impact.

**Table 3.15-9. Existing with Project Intersection Queues at Project Site Driveways**

Movement		Dolan Way & East Driveway		Dolan Way & West Driveway
		EB	SB	SE
Directions Served		LT	LR	R
Existing AM + Project	95th Queue (ft)	45	60	53
	Link Distance (ft)	438	387	250
Existing PM + Project	95th Queue (ft)	14	40	56
	Link Distance (ft)	438	387	250

Source: Data compiled by AECOM 2019

**b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

*Less than significant.* project would not change the existing land use designation. Operations following project completion would change compared to existing conditions. Estimation of project-related VMT would require the assessment of project trip length based on future project-related students/employees locations, which are not available. However, it is anticipated that VMT under the proposed project would be less than the existing VMT, because the project would draw from nearby population. Therefore, this impact would be less than significant.

**c) Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

*Less than Significant.* The project would not change the existing design features of roads and highways in the project vicinity. As described in Section 2.0, Project Information, the project would maintain the existing ingress and egress points from Dolan Way. Main campus access would be from Dolan Way, with a secondary exit only from Dolan Way just west of the main ingress point. During construction activities, heavy truck vehicles, such as haul trucks or flatbed trailers, would access the project site via Dolan Way and Shamrock Drive.

Slow-moving trucks entering and exiting at this location could pose a hazard to other vehicles traveling on the area roadways. However, construction activities would be temporary, and a clear line of sight is available in both directions, so project construction and operation would not substantially increase hazards due to a design feature or incompatible use. Therefore, the project would have a less-than-significant impact.

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

*Less than Significant.* Adequate emergency access is provided with multiple access points to the project site. Site ingress/egress points would be provided from Dolan Way. Slow-moving trucks entering and exiting the project site from Dolan Way and Shamrock Drive could slightly delay the movement of emergency vehicles. However, the trucks would typically pull to the side of the road when emergency vehicles use their sirens. Additionally, truck traffic would only be necessary during the beginning phases of construction, and therefore would be temporary. Street closures would not be required during construction. Therefore, the project would not result in inadequate emergency access during project construction.

Because the project would contribute a small percentage of the overall traffic, mainly occurring during school pick-up and drop-off times, project operation would not result in inadequate emergency access.

Therefore, project construction and operation would not pose a significant obstacle to emergency response vehicles. The project would have a less-than-significant impact.

**MITIGATION MEASURES**

None required.

### 3.18 TRIBAL CULTURAL RESOURCES

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

#### 3.18.1 ENVIRONMENTAL SETTING

Tribal cultural resources are defined in CEQA as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe, which may include non-unique archaeological resources previously subject to limited review under CEQA.

#### ASSEMBLY BILL 52 NATIVE AMERICAN CONSULTATION

AB 52 requires the lead agency to begin consultation with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification and requests the consultation (Public Resources Code Section 21080.3.1[d]).

No California Native American tribes have requested consultation from the lead agency, WCCUSD, pursuant to AB 52.

### 3.18.2 DISCUSSION

- a) **Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
  - i) **Listed or eligible for listed in the California Register of Historical Resources, or in local register of historical resources as defined in Public Resources Code section 5020.1(k)?**
  - ii) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

*Less than Significant with Mitigation.* As discussed in Section 3.5, Cultural Resources, the project would include construction activities that may disturb previously unknown resources. These resources could include artifacts of importance to local tribes. Also, as noted above, no California Native American tribes solicited consultation from WCCUSD, pursuant to AB 52. Given the level of previous disturbance on the project site, it is not expected that tribal cultural resources remain on site. However, it is possible that previously unknown buried resources could be encountered during ground-disturbing work. In the unlikely event that a tribal cultural resource is discovered, appropriate measures would be implemented to minimize potential impacts. Implementation of Mitigation Measures **MM CUL-1** and **MM CUL-2** would reduce impacts to tribal cultural resources to a less-than-significant level.

#### **MITIGATION MEASURES**

**MM CUL-1: Procedures for Inadvertent Discovery of Cultural Resources.**

**MM CUL-2: Worker Training.**

### 3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIX. Utilities and Service Systems. Would the project:</b>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.19.1 ENVIRONMENTAL SETTING

##### WASTEWATER

The WCWD provides wastewater collection and treatment services to west Contra Costa County (Contra Costa County, 2005). The WCWD serves a population of approximately 93,000, and owns, operates, and maintains a wastewater collection system with 249 miles of gravity sewer pipelines, 17 lift stations, and 6 miles of pressure force mains, as well as a Water Pollution Control Plant (WPCP) with a capacity of 12.5 million gallons per day (mgd), average dry weather flow (WCWD, 2014).

WCWD developed a Master Plan in 2011 that assessed all their assets required to support the operations maintenance, engineering, administrative, and finance departments. One of the capital projects identified in the Master Plan involved improvements to address wet weather capacity in the collection system and reduce infiltration and inflow in areas of the WCWD, including Tara Hills, where the project is located. The proposed improvement, now in its planning phase, would construct a parallel force main for the Tara Hills Lift Station intended to alleviate the risk of sanitary sewer overflows (WCWD, 2014).

## **WATER**

The EBMUD provides water service to western Contra Costa County (Contra Costa County, 2005). EBMUD has water rights that allow for delivery of up to a maximum of 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff, senior water rights of other users, and downstream fishery flow requirements (EBMUD, 2015).

The EBMUD Urban Water Management Plan (UWMP) addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled water use within the EBMUD service area (EBMUD, 2015). The UWMP examines the future reliability of EBMUD's water supply during normal years, single dry years, and the 3-year drought planning sequence with various supply and demand scenarios. The results of this analysis show that under baseline assumptions, EBMUD can meet customer demands to 2040 during normal years and single dry years. Any potential shortfall in supply in dry years may be addressed through programs like the Bayside Groundwater Project, by injecting water during wet years for use during dry years (EBMUD, 2015). During multi-year droughts, however, EBMUD will need to develop supplemental supplies to meet projected customer demands (EBMUD, 2015).

## **SOLID WASTE**

Republic Services provides recycling and garbage collection services to the Tara Hills area. Waste is transported to the Golden Bear Transfer Station and West Contra Costa Sanitary Landfill.

## **ELECTRICITY AND NATURAL GAS**

As discussed in Section 3.6, Energy, electrical delivery service and natural gas are provided to the project site and surrounding area by PG&E. MCE is the primary electricity provider to unincorporated Contra Costa County.

### **3.19.2 DISCUSSION**

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

*Less than Significant.* The project would remove the existing portables, keep the existing school facility, and build two additional one-story school buildings on the existing site of the former Kerry Hills Elementary School, which was built in 1964 with a capacity of 676 students. The project site is currently in use as an adult school and District office. The new and renovated school facility would have capacity for approximately 900 students and would include modern water-efficient plumbing fixtures.

As described in Section 3.10, Hydrology and Water Quality, the project would connect to the existing stormwater facilities. On-site stormwater drainage facilities would convey stormwater runoff through the project site before being discharged into the off-site drainage systems adjacent to the project site. In addition, the project site currently has sufficient capacity with existing electric power, natural gas, and telecommunications infrastructure.

The proposed project would include construction of on-site water and wastewater connections, to serve the new buildings. New infrastructure would be designed in accordance with the Contra Costa County Improvement Standards. Construction of on-site water and wastewater infrastructure would result in the potentially significant

environmental impacts associated with biological resources, cultural resources, hazards and hazardous materials, and tribal resources. These impacts are addressed in relevant sections throughout this IS/MND in connection with discussions of the impacts of overall site development. Mitigation measures are identified for potentially significant impacts to reduce them to a less-than-significant level. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this IS/MND.

Although the project would increase the square footage of the school facility, the project would not require or result in the relocation or construction of a new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, because those facilities are currently present at the project site. Therefore, the project would have a less-than-significant impact.

**b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

*Less than Significant.* The project's water supplier, EBMUD, has determined that it will be able to sufficiently supply water to the project during normal years and single dry years, and will develop supplemental supplies in the case of multiple dry years. EBMUD is improving and developing multiple supplemental supply projects and programs as alternative water supplies to meet demands during dry periods. Therefore, EBMUD would have sufficient supplies available to serve the project during normal, dry, and multiple dry years.

Additionally, the project would be required to implement measures described in Chapter 6 of the 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) to reduce indoor demand for potable water and reduce landscape water usage.<sup>5</sup> The project would not result in the need for new or expanded water supply entitlements because sufficient water supplies would be available to meet project demands, and because the project would comply with the CALGreen Code, which reduces water demands. Therefore, the project would have a less-than-significant impact.

**c) Result in a determination by the wastewater treatment provider that 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?**

*Less than Significant.* The WCWD Water Pollution Control Plant has a capacity of 12.5 mgd, average dry weather flow. The WCWD Master Plan indicates there is adequate capacity to serve existing and future development in the County (WCWD, 2014). In addition, the Contra Costa County General Plan states sewer service in West Contra Costa County was planned to also meet existing and future development. The project would increase capacity at the project site over the original design of approximately 670 students. However, as outlined above, the project would implement measures described in Chapter 6 of the 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) to reduce wastewater flows by installing water-efficient faucets and toilets. With implementation of water-efficient features, and because the WCWD has adequate capacity to serve the project's projected demand, the project would have a less-than-significant impact.

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<sup>5</sup> The project would be required to implement measures described in Chapter 6 of the 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations). These measures would reduce indoor demand for potable water by 20 percent, and reduce landscape water usage by 50 percent. It also requires separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects.

**d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

*Less than Significant.* Project construction would involve site preparation and the generation of various construction wastes, including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and nonrecyclable construction-related wastes. The 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by 65 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. In addition, the 2016 CalGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

Project operation would result in increased long-term generation of solid waste. The project would accommodate up to approximately 900 students and 90 staff members. It is estimated that the project would generate 0.2 ton of solid waste.<sup>6</sup> The estimated 0.2 ton per day (tpd) of solid waste generated by the project would be less than 1 percent of the maximum tpd that could be received at the landfill (1,400 tpd). These totals do not account for recycling programs required by the State and County. The County provides recycling programs, such as recycling of paper, plastics, and bottles, to reduce the volume of solid waste transported to landfills. In addition, the project would comply with AB 1826, which requires recycling of organic waste.<sup>7</sup> With implementation of these recycling programs, the actual amount of solid waste generated by the project would be less.

The project would comply with all statutes and regulations related to solid waste. Compliance with the CalGreen Code and AB 1826 would ensure that sufficient landfill capacity would be available to accommodate solid-waste disposal needs for future development. Therefore, the project would have a less-than-significant impact.

**e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

*Less than Significant.* See item d.

**MITIGATION MEASURES**

None required.

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<sup>6</sup> Based on CalRecycle's 2014 waste characterization study, the education sector generated 0.5 ton of solid waste per employee per year, and 3.67 tons of solid waste per 100 students per year (CalRecycle, 2015).

<sup>7</sup> Organic waste refers to food waste, green waste, landscaping and pruning waste, nonhazardous wood waste, and food-soiled paper that is mixed with food waste.

## 3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XX. Wildfire – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</b>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 3.20.1 ENVIRONMENTAL SETTING

The California Department of Forestry and Fire Prevention (CAL FIRE) Fire Hazard Severity Zones Map was developed to guide building standards for new construction; use of natural hazard disclosure at time of sale; include a 100-foot defensible space clearance around buildings; establish property development standards; and provide considerations of fire hazards in city and county general plans. As previously discussed in Section 3.9, Hazards and Hazardous Materials, the project is located in a Non-Hazard Fire Hazard Severity Zone, and is not in or near a State Responsibility Area, or in an area classified as a Very High Fire Hazard Severity Zone (CAL FIRE, 2009).

CAL FIRE requires counties within the State to develop fire protection management plans that address potential threats of wildland fires. The project area is within the boundaries of the Santa Clara Unit. The Santa Clara Unit Strategic Fire Plan governs fire protection activities in Contra Costa County, Alameda County, Santa Clara County, and western portions of Stanislaus County and San Joaquin County. The plan assesses fire potential within the unit and identifies strategies for pre-fire solutions and fire safe planning.

### 3.20.2 DISCUSSION

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

*No Impact.* The project area is in a Non-Hazard Fire Hazard Severity Zone and is not in or near a State Responsibility Area, or an area classified as a Very High Fire Hazard Severity Zone. The project would not alter or impair any existing roadway networks. Therefore, the project would not impede implementation of an adopted emergency response plan or emergency evacuation plan. The project would have no impact.

**b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

*No Impact.* The project site is characterized as generally flat and is located in a developed residential area designated as a Non-Hazard Fire Hazard Severity Zone. Therefore, the project would not exacerbate wildfire risk, or expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. The project would have no impact.

**c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

*No Impact.* The project would connect to the existing utilities and stormwater facilities and would not require the installation or maintenance of additional associated infrastructure. The Contra Costa County Fire Protection District would also review proposed project plans for fire code compliance and access safety concerns, thereby minimizing fire risk. Therefore, the project would not exacerbate fire risk. The project would have no impact.

**d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

*No Impact.* The project area is in a Non-Hazard Fire Hazard Severity Zone, and is not in or near State Responsibility Area, or an area classified as a Very High Fire Hazard Severity Zone. The nearest Fire Hazard Severity zones are in the open space areas approximately 8 miles east of the project area. Because of the project area's urbanized nature and the distance from areas that have a high fire risk, the project would not expose people or structures to significant risks associated with wildfires, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes. The project would have no impact.

### 3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Authority: Public Resources Code Sections 21083 and 21083.05.

Reference: Government Code Section 65088.4; Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

#### 3.21.1 DISCUSSION

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

**Less-than-Significant Impact.** As concluded in the Biological Resources, Cultural Resources, and Tribal Cultural Resources sections, the project would implement mitigation measures **MM BIO-1** through **MM BIO-3**, and **MM CUL-1** and **MM CUL-2** to lessen any potential impacts to these resource areas. With implementation of outlined mitigation measures, the project would result in less-than-significant impacts involving 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 a major period of California history or prehistory. Therefore, impacts would be less than significant.

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

*Less-than-Significant Impact.* The project would comply with all applicable regulations, as outlined in this document. The project would not result in any significant impacts; therefore, the potential for project cumulative effects in combination with other planned or anticipated improvements is low. In general, individual GHG emissions do not have a large impact on climate change. However, once added with all other GHG emissions in the past and present, they combine to create a perceptible change to climate. Because of the extended length of time that GHGs remain in the atmosphere, any amount of GHG emissions can be reasonably expected to contribute to future climate change impacts. The amount of project CO<sub>2</sub> emissions, although measurable, would be minor. On a global scale, the project would contribute a negligible amount to global cumulative effects to climate change. Additionally, as discussed in the Greenhouse Gas Emissions subsection, the project is below BAAQMD established thresholds for GHG emission impacts. Therefore, the project’s contribution to GHG emissions would not be cumulatively considerable.

Additionally, there are no other planned school expansions in the project area that, when taken together with the North Campus project, would result in significantly cumulative impacts.

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

*Less-than-Significant Impact.* Based on background research, site visits, and the analysis herein, project implementation could potentially cause substantial adverse effects on human beings in relation to hazardous materials and noise. As outlined in this document, the project would not have any adverse impacts on human beings with implementation of existing regulations and mitigation measures. The project would potentially impact human beings through the accidental release of hazardous materials. Therefore, Mitigation Measures **MM HAZ-1** and **MM HAZ-2** shall be required. Additionally, the project would implement **MM NOI-1**, which would minimize noise impacts to sensitive receptors from project construction and operation.

With compliance, the project would have a less-than-significant impact or no impact on all resource areas, as outlined in this document. Therefore, the project would not cause a substantial direct or indirect adverse effect on human beings, and the project would have a less–than-significant impact.



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